Journal Review Service

Continuing Medical Education in General Practice from the Goodfellow Unit

Journals Reviewed in this Issue

Am J Sports Med*
Aust Fam Physician*
BMJ*
Br J Sports Med*
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Drug Alcohol Rev*
Evidence-Based Medicine*
Homeopathy*
Intern Med J*
J Fam Pract*
J Neuroimmunol *
J Pain*
JAMA*
Lancet*
Neurosci Lett*
Obes Res*
Postgrad Med*
Prim Care*
Sci Am*
*Journals indexed in Medline

Acupuncture

25–176 Ketamine enhances the efficacy to and delays the development of tolerance to electroacupuncture–induced antinociception in rats.

Huang C, Long H, Shi Y-S, et al. Neurosci Lett. 28 February 2005. Vol.375. No.2. p.138-42.

Reviewed by Dr Alex Chan

Review: Tolerance can develop after prolonged use of electroacupuncture (EA). This study examined the effect of Ketamine, a non-competitive NMDA receptor antagonist, on the antinociceptive effects of 100 Hz EA in rats. It was shown that intraperitoneal Ketamine at a dosage of 5 mg/Kg not only enhanced the antinociceptive effects of, but also delayed the development of tolerance to, 100 Hz EA in rats.

Comment: The use of Ketamine can be limited because of its side effects, but the study indicated that NMDA receptors could be implicated in the development of tolerance to EA. Keep an eye on future generations of NMDA antagonists with better side effects profile.

25–177 A controlled trial of placebo versus real acupuncture.

Goddard G, Shen Y, Steele B, et al. J Pain. April 2005. Vol.6. No.4. p.237-42.

Reviewed by Dr Alex Chan

Review: The authors tried to test the efficacy of a new form of 'placebo' acupuncture in a single blind, randomised, controlled clinical trial. Twenty-four subjects received real acupuncture at the acupoint LI-4 with the needle passing through a foam pad and then penetrated the skin to a depth of 10–20 mm. Twenty-five subjects received 'placebo' acupuncture with a blunted acupuncture needle which also passed through a foam pad at the same acupoint. The blunted needle touched but did not penetrate the skin. This was followed by a simple questionnaire asking whether the subject believed they received real or placebo acupuncture. There was no significant difference between the two groups. The authors came to conclude that this new method would be a valid form of 'placebo' acupuncture in acupuncture research.

Comment: This new method of 'placebo' acupuncture is unlikely to be useful because it is bound to produce some clinical effect. This type of stimulation has already been used in traditional Japanese acupuncture. Therefore, clinical trials using this method are more than likely to result in conclusions indicating lack of difference between the effects of real

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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.

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Dennis Kerins, Goodfellow Unit
Faculty of Medical & Health Sciences
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Auckland, New Zealand

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acupuncture and 'placebo' acupuncture. Remember, even 'touching' has therapeutic effects!

25–178 Suppression of IgE production and modulation of Th1/Th2 cell response by electroacupuncture in DNP-KLH immunized mice.

Park M-B, Ko E, Ahn C, et al. J Neuroimmunol. June 2004. Vol.151. No.1-2. p.40-4.

Reviewed by Dr Alex Chan

Review: The effects of electroacupuncture (EA) on Th1/Th2 cell response at the acupoints ST-36 were investigated in mice immunised with a foreign protein. The mice were divided into three groups, i.e. non-immunised, immunised, and immunised plus EA groups. EA at 1 Hz was given for 20 minutes daily on 21 consecutive days. Results showed that there was a significant initial enhancement of both serum antigen-specific IgE and total IgE at seven days but a significant reduction at 14 and 21 days in the acupuncture group comparing with controls. IL-4 and IL-13 which are linked to the Th2 antibody producing cell lineage tended to be suppressed in the EA group. However, IFN-gamma associated with Th1 cell mediated immunity was not altered by EA.

Comment: More than seven days of EA treatments was necessary to bring on anti-allergic response in mice. It is possible that similar time-span may be required in human. This can only be confirmed in future human studies.

25–179 Acupuncture as a complementary therapy to the pharmacological treatment of osetoarthritis of the knee: randomised controlled trial.

Vas J, Mendez C, Perea-Milla E, et al. BMJ. 20 November 2004. Vol.329. No.7476. p.1216 (5 pages)

Reviewed by Dr Alex Chan

Review: The effects of acupuncture plus diclofenac versus placebo acupuncture plus diclofenac in the treatment of knee osteoarthritis were studied in 97 patients. The clinical variables measured included intensity of pain; pain, stiffness and physical function; dosage of diclofenac and changes in the quality of life. The trial was randomised, controlled, single-blinded with blinded evaluation and statistical analysis of results. The group treated by acupuncture plus diclofenac had significantly more symptomatic relief than the group treated with placebo acupuncture and diclofenac.

Comment: Placebo acupuncture was performed using retractable needles which went into small adhesive cylinders as described by Streitberger et al in the Lancet, 1998. There are now more and more higher quality clinical acupuncture studies being published confirming positive effects from this form of treatment in various conditions. Conclusions of future meta-analysis of acupuncture effects might be quite different from what have been reported in the past. In actual fact, a recent meta-analysis published in the *Annals of Internal Medicine* (19.4.2005, p.651-663) confirmed that acupuncture was effective in relieving chronic low back pain.

Adolescent Health

25–180 Teen pregnancy: A program for awareness and health education.

McCormack B, Sim MG. Aust Fam Physician. January/February 2005. Vol.34. No.1/2. p.17-20.

Reviewed by Dr Rachel Monk

Review: Interesting article on using 'simulated infants' to help educate youngsters about what parenting a baby involves. The aim of the programme was to change attitudes and hopefully delay pregnancy.

Comment: Though participants found the programme helpful there was no data on whether or not it was beneficial. Perhaps this will come down the track.

Alcohol and Substance Abuse

25–181 Emerging patterns of cannabis and other substance use in Aboriginal communities in Arnhem Land, Northern Territory: a study of two communities.

Clough AR, d'Abbs P, Cairney S, et al. Drug Alcohol Rev. December 2004. Vol.23. No.4. p.381-90.

Reviewed by Dr Helen Moriarty

Review: The importance of this Australian-centric paper for NZ lies in the methodology for ethnicity-related research. To gain adequate numbers for study, two contiguous populations were used. Multiple approaches gave verification of drug use, in addition to participant self-report, proxy assessments by health workers were gained (by interview) and documentary evidence obtained from health records. Quantification of cannabis intake is always a problem due to variations in quality, quantity and cost. This study has documented intake of cannabis by: frequency (days/wk), cones/wk, purchases/wk, and proportion of cannabis rolled with tobacco, in addition to concurrent use of alcohol, petrol sniffing and kava.

25–182 General practitioners' role in preventive medicine: scenario analysis using alcohol as a case study.

Doran CM, Shakeshaft AP, Fawcett JE. Drug Alcohol Rev. December 2004. Vol.23. No.4. p.399-404.

Reviewed by Dr Helen Moriarty

Review: An ambitious study which developed a model for GP intervention in at risk drinking, and considered cost implications. Research shows that brief intervention is effective, but there is little evidence that GPs (in Australia) use this tool. A simple cost analysis (based on GP consultation and prescription costs) and scenario cost effectiveness analysis (assuming 5%, 10%, or 100% detection rate and intervention rates and effectiveness respectively) confirms that GPs can bring about big changes for little health care cost.

Comment: The unanswered question is 'Why don't we?' Why alcohol and other drug issues are prioritised down the list of screening problems at each

consultations with the GP is a very interesting question in itself.

25-183 Models of co-occurring substance misuse and psychosis: are personality traits the missing link?

Hides L, Lubman DI, Dawe S. Drug Alcohol Rev. December 2004. Vol.23. No.4. p.425-32.
Reviewed by Dr Helen Moriarty

Review: This short discussion paper outlines different philosophical models for thinking about co-morbidity. Patients themselves sometimes allude to these models, which helps us to become client-focussed in the therapeutic approach.

Comment: A paper recommended to GPs who deal with mental health and/or substance abuse issues – as food for thought!

25-184 Cannabis use and psychotic disorders: an update.

Hall W, Degenhardt L, Teesson M. Drug Alcohol Rev. December 2004. Vol.23. No.4. p.433-43.
Reviewed by Dr Helen Moriarty

Review: This very interesting paper summarises the findings of major studies, to try to tease out the possible cause-and-effect relationship of cannabis use and psychosis. One of these studies is the Christchurch Health and Development study, and another the Dunedin birth cohort study.

Comment: Important considerations are: age of onset of psychosis, or unusual experiences and thought in relation to age of onset of cannabis, patterns of disease fluctuation in relation to heavy use or abstinence periods, and family drug use and mental health factors.

25-185 Reasons for cannabis use in men with and without psychosis.

Green B, Kavanagh DJ, Young RM. Drug Alcohol Rev. December 2004. Vol.23. No.4. p.445-53.
Reviewed by Dr Helen Moriarty

Review: This is the first published paper to compare reasons for use between control participants without psychosis and mental health patients. The only significant difference was relaxation as a reason – given most often by the control group. Most participants (regardless of mental health status) took cannabis for mood effects.

Comment: This study had many limitations, including a high refusal rate by potential participants. However, it suggests that mood effects are an important driver for cannabis use – regardless of any other mental health issues.

25-186 General practitioners' detection and management of patients with a dual diagnosis: Implications for education and training.

Marshall KL, Deane FP. Drug Alcohol Rev. December 2004. Vol.23. No.4. p.455-62.
Reviewed by Dr Helen Moriarty

Review: GP division-wide surveys were held in Wollongong district before planning an educational resource. This was followed by a focus group. Although an Australian survey, findings are applicable here. That ongoing targeted interventions are needed to keep dual diagnosis on the GP radar; screening, counselling, patient management and referral of dual diagnosis patients is so challenging in general practice, that it does not happen without active management.

25-187 Clonidine is more effective than placebo for long term smoking cessation, but has side effects.

Bentz CJ. Evidence-Based Medicine. February 2005. Vol.10. No.1. p.19.
Reviewed by Dr Bruce Arroll

Review: Clonidine was studied as part of a systematic review. Six studies pooled showed an absolute risk reduction of 9% which translates to a numbers needed to treat of 12. The doses of clonidine ranged from 0.15 to 0.45 mg/day or transdermally 0.1-0.3 mg/day. There were side-effects of dry mouth and sedation. (Original article reviewed: Cochrane Database Syst Rev 2004; (3): CD000058)

Comment: The commentator made the point that this adds to nicotine replacement, zyban (buproprion) and nortriptyline in our armamentarium against smoking. He felt that the best use was in those who use multiple drugs such as opiates, benzodiazepines and alcohol. Care is needed in the elderly and the dose should be tapered to avoid rebound. It is particularly useful in those with anxiety.

Cardiovascular System

25-188 Clinical decision-making and myocardial viability: current perspectives.

Nelson C, Marwick TH. Intern Med J. February 2005. Vol.35. No.2. p.118-25.
Reviewed by Dr Helen Moriarty

Review: A very timely paper which challenges some conventional wisdom about myocardial damage after MI. Myocardial damage has implications for future CHF and life expectancy. A number of tests are now

available to determine the viability of myocardium post MI and to assist in clinical decision-making with patients who have had MI.
Comment: Well written, easy to understand, interesting images and it ends with an algorithm that summarises the approach.

25-189 Carvedilol reduced mortality and hospital admission in severe chronic heart failure, regardless of pretreatment systolic BP.

Hernandez AF. Evidence-Based Medicine. February 2004. Vol.10. No.1. p.9.
Reviewed by Dr Bruce Arroll
Review: This was a retrospective analysis of the data from the carvedilol prospective randomised cumulative survival study (Copernicus), looking at patients with a systolic blood pressure > 85 mm Hg and congestive heart failure. Those in the carvedilol group were significantly less likely to experience an adverse event compared with those on placebo. The benefits increased as pre-treatment SBP decreased. (Original article reviewed: J Am Coll Cardiol 2004; 43: 1423-9).
Comment: The commentator made the point that the terribly sick were not admitted to this study (i.e. those requiring ionotropic support). He does suggest that it is safe to initiate outpatient use of beta blockers with relative hypotension. This medication is available in NZ for those with an ejection fraction <25% and those that cannot tolerate metoprolol. It is indicated for NYHA III and IV and is the only beta-blocker recommended for NYHA IV (breathless at rest) in New Zealand.

25-190 Treatment of deep vein thrombosis: What factors determine appropriate treatment?

Douketis JD. Can Fam Physician Med Fam Can. February 2005. Vol.51. p.217-23.
Reviewed by Dr Mike Lyons
Review: Many DVT patients can be managed at home by GPs using low molecular weight heparin daily followed by warfarin with appropriate INR monitoring. Four criteria suggest in-patient treatment more appropriate – massive DVT, symptomatic pulmonary embolism, high risk of bleeding with anticoagulation therapy and comorbid or social conditions that merit hospitalisation.
Comment: Succinct article to keep on file to retrieve the next time your radiologist phones to inform re an ultrasound confirming a suspected DVT.

25-191 Early intensive simvastatin may reduce CVD morbidity and mortality.

J Fam Pract. December 2005. Vol.53. No.12. p.954-5.
Reviewed by Dr Bruce Adlam
Review: Early initiation of an intensive statin regimen using simvastatin (Zocor) may reduce the risk of a secondary adverse cardiovascular outcome following an acute coronary syndrome event. The benefit began only after four months of treatment, and there was no overall reduction in all-cause mortality (LOE=1b). The investigators randomised 4497 patients with acute coronary syndrome in a double-blind fashion (concealed allocation assignment) to receive 40mg simvastatin per day for one month followed by 80 mg/d thereafter, or placebo for four months followed by 20 mg/d of simvastatin. (Original article reviewed: JAMA 2004; 292:1307-16).
Comment: Significant myopathy occurred in 0.4% receiving simvastatin 80 mg/d.

Contraception and Family Planning

25-192 Benefits and challenges brought by improved results from in vitro fertilization.

Jansen RP. Intern Med J. February 2005. Vol.35. No.2. p.108-17.
Reviewed by Dr Helen Moriarty
Review: The chance of live birth from one IVF cycle in women under 35 years is now over 50%, with a 20% twin rate! This article briefly explains further innovations: blastocyst culture, single embryo transfer and residual disturbance of reproductive function, such as causes for miscarriage and subclinical miscarriage (very early miscarriages are now a challenge to achieve greater gains).
Comment: A very interesting paper, recommended to doctors who have patients with fertility problems.

Dermatology

25-193 Managing infected ingrown toenails: Longitudinal band method.

Ogur R, Tekbas OF, Hasde M. Can Fam Physician Med Fam Can. February 2005. Vol.51. p.207-8.
Reviewed by Dr Mike Lyons
Review: Two page article in Practice Tips series from the Gulhane Military Medical Academy in Ankara, Turkey. The authors state the surgical procedure is easy to perform, does not require specialised equipment, can be done despite concomitant infection, recurrence rate is low and post op. pain and limitation of daily function is minimal.
Comment: Sounds too good to be true – perhaps Turkish soldiers may provide a different outcome to Kiwi kids!

Diagnosis

25-194 Cost effectiveness of adding magnetic resonance imaging to the usual management of suspected scaphoid fractures.

Brooks S, Cicuttini FM, Lim S, et al. Br J Sports Med. 1 February 2005. Vol.39. No.2. p.75-9.
Reviewed by Dr Chris Milne
Review: MRI scans are a sensitive means of detecting scaphoid fractures. They become positive at two days post injury, so can save time in a plaster if no fracture is present. In this Melbourne study, the median cost of health care in the MRI group was $594 compared with $428 in the control group.
Comment: There are certain patients who would be well prepared to pay the extra costs for an earlier diagnosis (e.g. those travelling overseas on a business trip a few days post injury). To my mind, isotope scans

would give the same information more cheaply than MRI scans.

Ear, Nose and Throat

25–195 Steroid is effective for vestibular neuritis, valacyclovir is not.

J Fam Pract. November 2004. Vol.53. No.11. p.864, 7.

Reviewed by Dr Bruce Adlam

Review: Vestibular neuritis is characterised by sustained rotatory vertigo; positive Romberg's sign falling toward the affected ear, horizontal nystagmus toward the unaffected ear, and nausea. Because vestibular neuritis is thought to be a virally triggered inflammatory condition, it makes sense that antiviral drugs or steroids may be helpful. In this small RCT, Methylprednisolone, starting at 100 mg/d and tapering to 10 mg over three weeks, was found to be an effective treatment for vestibular neuritis. (Original article reviewed: N Eng J Med 2004; 351: 354-61).

Comment: Valacyclovir was not effective. (Level of evidence [LOE]: 1b)

Education

25–196 Improving the learning needs survey by using four approaches.

Allan JA, Schaefer D, Stocks N. Aust Fam Physician. January/February 2005. Vol.34. No.1/2. p.84-6.

Reviewed by Dr Rachel Monk

Review: Continuing medical education is important and more valuable if it is focused on a specific need. This 'need' can be difficult to pin point. Have a read about this approach to assessing learning needs and see what you think.

Endocrinology

25–197 How should thyroid replacement be initiated?

Landis SE, Collins LJ. J Fam Pract. November 2004. Vol.53. No.11. p.925-6.

Reviewed by Dr Bruce Adlam

Review: Levothyroxine (LT4) should be used alone as initial replacement for patients with hypothyroidism (SOR: A). The optimal initial dose is 1.6 µg/kg/d for healthy people aged 60 years. Patients over 60 may require less levothyroxine to achieve therapeutic serum thyroid hormone replacement, so initial replacement should be decreased to 25 to 50 µg daily (SOR: C). Since patients with known heart disease may develop dysrhythmias, angina, and myocardial infarctions when started on full replacement doses, experts recommend starting 12.5 to 25 µg daily for this population.

Ethics

25–198 Ethical and social issues of embryonic stem cell technology.

Cregan K. Intern Med J. February 2005. Vol.35. No.2. p.126-7.

Reviewed by Dr Helen Moriarty

Review: A short discussion paper, coming from the Globalism Institute of RMIT University, Melbourne. If cloning was used to cure world diseases, where would the genetic material come from? Would this create a new exploitation industry? What are the implications of removing ourselves bodily from the context and labour of human reproduction? Does individual right outweigh societal cost?

Comment: Interesting issues for wider debate – what does your peer group think of this issue?

Family Practice

25–199 Placing principle before expediency: the Shipman inquiry.

Baker R. Lancet. 12 March 2005. Vol.365. No.9463. p.919-21.

Reviewed by Dr Tony Hanne

Review: Harold Shipman, the UK GP who murdered around 250 of his patients, shook not only public confidence in general practice but also the confidence of the medical profession in its ability to regulate itself. The subsequent long running inquiry has not just asked why and how Dr Shipman did it but how he went undetected for so long. Inevitably the spotlight has turned on to the UK General Medical Council which was considered to be responsible for preventing serial medical executions. The theme of this article is the tension within a body which on the one hand represents doctors and is partly elected by them, but at the same time represents and protects the public. Too often, suggests the report of the inquiry, the principle that the doctor's first concern is the care of the patient has been sacrificed because validating doctor competence is too difficult or intrusive.

Comment: While New Zealand has not had a Dr Shipman, the same questions are echoed in the debate about who defines competence in our medical profession. Can we be trusted to do this ourselves as we have historically done or should we be regulated by pressure groups who claim to represent our patients? This article should stimulate constructive, principled solutions that are for the good of all of us.

Gastroenterology

25–200 Omeprazole 20 mg equal to 40 mg for primary care acid-related dyspepsia.

J Fam Pract. November 2004. Vol.53. No.11. p.873.

Reviewed by Dr Bruce Adlam

Review: Omeprazole 20 mg is highly effective for the treatment of acid-related dyspepsia. There was no advantage to higher doses, and relapse following the initial two-week treatment period was common in this double blind RCT trial. (Original article reviewed: Am J Gastroenterol 2004; 99: 1050-8).

25–201 An endangered species in the stomach.

Blaser MJ. Sci Am. February 2005. Vol.292. No.2. p.24-31.

Reviewed by Dr Ron Vautier

Review: The prevalence of H. pylori in the developed world is becoming

very low, which is good news for peptic ulcer and cancer of the stomach, but bad news of oesophageal acid reflux conditions, including adenocarcinoma. This article examines the mechanisms involved, and the wider implications for understanding the human ecosystem.
Comment: The details are interestingly conveyed, while the general issues raised deserve at least passing consideration.

25-202 Effect of estrogen therapy on gallbladder disease.
Cirillo DJ, Wallace RB, Rodabough RJ, et al. JAMA. 19 January 2005. Vol.293. No.3. p.330-9.
Reviewed by Dr Raina Elley
Review: Oestrogen therapy increases the risk of cholelithiasis, cholecystitis, and cholecystectomy. The hazard ratio for any gallbladder disease or surgery with conjugated oestrogen therapy was 1.67 (95% CI 1.35-2.06) and for oestrogen plus progestin was 1.59 (95% CI 1.28-1.97). These results were from two RCTs including 22 579 post-menopausal women followed for 7.1 and 5.6 years respectively.
Comment: Yet another 'RCT' using data from the Women's Health Initiative multi-centre trial. One wonders about the statistical appropriateness of so many analyses and clinical outcomes from the same trial. The more outcomes measures, the more likely there will be some 'significant' findings found by chance, or type 1 errors.

General

25-203 Embryos and ensoulment: when does life begin?
Neuberger J. Lancet. 5-11 March 2005. Vol.365. No.9462. p.937-8.
Reviewed by Dr Tony Hanne
Review: The author reviews a new book by David Jones, *'The Soul of the Embryo'* which looks historically at the development of Western, and therefore inevitably Christian and Jewish, thought on the vexed question of when human life begins in the embryo. There has always been a wide diversity between day one and full term in the answers to the book's question. What has, however, been almost universally agreed until the last 30 years is the value of each human life whether in utero or after birth.
Comment: This book has a valuable contribution to make to the bitter debate about abortion and stem cell research on the embryo. It proposes a useful starting point in the search by the undecided for a personal answer.

Genetics

25-204 Current and future applications of genetics in primary care medicine.
Acheson LS, Wiesner GL. Prim Care. September 2004. Vol.31. No.3. p.449-60.
Reviewed by Dr M Hewitt
Review: A wide ranging discussion of the applications of new knowledge and advancing technology in the field of genetics. Primary care physicians will be heavily involved with regard to diagnosis and management, both of practical instigations and dealing with the psycho-social sequelae.
Comment: Look what's coming our way!

25-205 Basic genetics.
Korf BR. Prim Care. September 2004. Vol.31. No.3. p.461-78.
Reviewed by Dr M Hewitt
Review: As the article implies, a good description of the basic principles, along with helpful definitions.
Comment: A good start for material that many of us will have forgotten.

25-206 The family medical history.
Bennett RL. Prim Care. September 2004. Vol.31. No.3. p.479-95.
Reviewed by Dr M Hewitt
Review: Back to basics, with the history being the most important diagnostic tool. The author provides a useful template to collect the necessary and important details of a family history.
Comment: As always, the essential diagnostic tool is the history.

25-207 Genetic red flags: Clues to thinking genetically in primary care practice.
Whelan AJ, Ball S, Best L, et al. Prim Care. September 2004. Vol.31. No.3. p.497-508.
Reviewed by Dr M Hewitt
Review: The large number of authors of this article have pooled their knowledge and expertise to compile a list of warnings and examples of the ways primary care physicians should be thinking 'genetically'. They also have a very useful mnemonic GENES, as an aide-memoire.

25-208 Genetic counseling in primary care: longitudinal, psychosocial issues in genetic diagnosis and counseling.
Martin JR, Wilikofsky AS. Prim Care. September 2004. Vol.31. No.3. p.509-24.
Reviewed by Dr M Hewitt
Review: The article looks at one of the major strengths of primary care and its application to genetic disorders. The key being continuity of care within a 'holistic' environment. Family doctors do not have the luxury of non-directive counselling but rather have to be actively involved, both with the individual and the wider family. All this, over a long period of time.
Comment: Continuity of care is the strength of good primary care, especially in the context of genetic disorders in families.

25-209 Pharmacogenetics.
David SP. Prim Care. September 2004. Vol.31. No.3. p.543-59.
Reviewed by Dr M Hewitt
Review: An overview of what is currently the situation in this field of medical endeavour. The author gives examples of the practical implications of genetic testing, the information which can be obtained, and informing the patient and predicting the likely future outcomes. He critiques current research and the need for strong ethical considerations at all stages of the research process.
Comment: Progress with consent, and information that benefits the patient at all times, must be considered and considerate.

Geriatrics

25-210 Which older patients are competent to drive? Approaches to office-based assessment.

Hogan DB. Can Fam Physician Med Fam Can. March 2005. Vol.51. p.362-8.
Reviewed by Dr Mike Lyons

Review: Broad review of literature of the subject. Admits evidence is based on opinion and can be conflicting. While vision and motor function are easily tested in the surgery, cognition testing is contentious. Even quadrant finger counting for visual fields lacks sensitivity.

Comment: May provide more debate than answers. Includes a table of red flags for medically impaired driving – very broad as would alert me for most of my elderly drivers. The patient handout *'Am I a safe driver?'* has 20 questions that may elicit some mirth but possibly a less than truthful patient response e.g. *'Other drivers drive too fast'* and *'People no longer accept rides from me'*. (See also 25-211.)

25-211 In-office evaluation of medical fitness to drive: Practical approaches for assessing older people.

Molnar FJ, Byszewski AM, Marshall SC, et al. Can Fam Physician Med Fam Can. March 2005. Vol.51. p.372-9.
Reviewed by Dr Mike Lyons

Review: Canadian slant on driving ability assessment where doctors can lose a lawsuit if they fail to report an unsafe driver who subsequently is involved in a crash. While admitting driving abilities fluctuate, medical events alter function and all drivers are at some baseline risk of a crash. The authors stress doctors mostly concentrate on operational skills assessment and rarely test tactical decisions or strategic approaches that determine whether older patients can appropriately compensate for early or minimal loss of operating abilities. States specialised driver assessment (OT and neuropsychological office based testing) does not replace GP assessment, and on road testing is too expensive with too few assessors to have other than a limited place. While stating *'physicians need better screening and assessment tools'* the article admits that the present SAFE DRIVE and CanDRIVE programmes used in Canada are based on weak level 111 evidence. (See also 25-210.)

Comment: Interesting debate but may not change our approach to the next 80-year-old who consults reluctantly for his 'warranty of fitness'.

25-212 The use of therapeutic flags to assist GPs prescribing for older persons.

Bonner CJ. Aust Fam Physician. January/February 2005. Vol.34. No.1/2. p.87-90.
Reviewed by Dr Rachel Monk

Review: Prescribing for the elderly can be challenging for a number of reasons. This article suggests trying therapeutic flags (prompts) to assist in this process.

Gynaecology

25-213 Abnormal vaginal discharge: What does and does not work in treating underlying causes.

French L, Horton J, Matousek M. J Fam Pract. November 2004. Vol.53. No.11. p.890-4.
Reviewed by Dr Bruce Adlam

Review: Practice recommendations are: (i) treat bacterial vaginosis with oral or intravaginal metronidazole or with clindamycin (SOR: A), recurrences are common (SOR: C); (ii) oral and intravaginal imidazoles are equally effective in the treatment of candidiasis (SOR: A), alternate therapies for resistant cases have been little studied: (iii) oral metronidazole is the standard therapy for trichomoniasis (SOR: A) (iv) oral tinidazole, newly available in the US in 2004, should be used in resistant cases (SOR: B).

Comment: Good well written review.

25-214 Lactobacillus does not prevent post-antibiotic vaginitis.

J Fam Pract. December 2004. Vol.53. No.12. p.952.
Reviewed by Dr Bruce Adlam

Review: In this outpatient primary care setting, Lactobacillus, whether given orally, vaginally, or both, had no effect on the development of culture-proven vaginal candidiasis. Lactobacillus probiotics have been shown effective, however, in decreasing antibiotic-associated diarrhoea (Aliment Pharmacol Ther 2002; 16:1461-7). (Level of evidence = 1b). (Original article reviewed: BMJ 2004; 329:548-51).

25-215 How useful is ultrasound to evaluate patients with post-menopausal bleeding?

Langlois JP, Nashelsky J. J Fam Pract. December 2004. Vol.53. No.12. p.1005-6.
Reviewed by Dr Bruce Adlam

Review: This is a summary of two large meta-analyses. Using a threshold of 5mm, transvaginal ultrasound (TVUS) can be used to identify those patients with postmenopausal bleeding who are at low risk for endometrial cancer, polyps, or atypical hyperplasia at a sensitivity comparable with that of endometrial biopsy and dilatation and curettage (D&C) (SOR:B).

Health Services

25-216 'Yarning for better health': Improving the health of an Aboriginal and Torres Strait Islander population.

Begley L, Harald P. Aust Fam Physician. January/February 2005. Vol.34. No.1/2. p.27-9.
Reviewed by Dr Rachel Monk

Review: A programme in South Brisbane to address the health needs for indigenous people.

Comment: What could we as NZ GPs take from this to use in Maori and Pacific Island communities to improve the health inequalities we face here in NZ?

Homeopathy

25-217 Homeopathically prepared dilution of Rana catesbeiana thyroid glands modifies its rate of metamorphosis.

Guedes JR, Ferreira CM, Guimaraes HM, et al. Homeopathy. July 2004. Vol.93. No.3. p.132-7.
Reviewed by Dr Mimi Irwin

Review: This study is an important attempt to confirm that tadpole morphosis is a reliable model for demonstrating that ultra dilutions of substances are measurably active. The tadpole stage of Rana catebeiana were exposed to a succussed ultra dilution of thyroid gland and their metamorphosis from the no-legged to four-legged stage monitored. The study was controlled and the assessors of the tadpole development were blind as to whether the animals were receiving the diluted thyroid gland or not. Both groups had a large number of animals at 180 each. The rate of metamorphosis to the four-legged stage was slower in the treated group, however, more animals in this group began metamorphosis than in the control group.

Comment: This kind of study may seem rather arcane. It is, however, important for homeopathy to have a reliable animal model for demonstrating that indeed homeopathic preparations have a measurable and statistically significant effect on a living system. This study also reproduces findings from previous similar work and this is an unusual feature in the homeopathic literature.

25-218 Permanent physico-chemical properties of extremely diluted aqueous solutions of homeopathic medicines.

Elia V, Baiano S, Duro I, et al. Homeopathy. July 2004. Vol.93. No.3. p.144-50.
Reviewed by Dr Mimi Irwin

Review: The purpose of this Italian study is to demonstrate that there is a measurable difference between extremely diluted solutions (EDS) and solvents. Dilutions of chemicals were made, these ultra dilutions were vigorously shaken in between successive dilution just as homeopathic medication is manufactured. There was no chemical difference between the EDS and the controls. There was, however, a difference in how these solutions behaved. Higher conductivity measures were found in EDS than in control solutions. Successive dilution and succussion (shaking between each dilution) permanently changed the physico-chemical properties of the solvents. In fact with time the conductivity actually increased in the EDS.

Comment: The researchers found the extremely diluted solutions had higher electrical conductivity values when compared with the measurement of the control solutions. Unsuccessful dilutions appeared to behave in the same manner as the control solutions. It is thought that succussed dilutions have more structuring of their solvents than do unsuccessed solutions. Molecular aggregated are thought to form and these have an effect on the electrical conductivity of these solutions. How these phenomena interface with living organisms is not answered in this intriguing paper.

Immunology and Allergy

25-219 Managing childhood food allergies and anaphylaxis.

Hu W, Kemp A. Aust Fam Physician. January/February 2005. Vol.34. No.1/2. p.35-9.
Reviewed by Dr Rachel Monk

Review: This article doesn't focus on acute management of anaphylaxis but a more general approach to severe food allergy, particularly in school age children. What is the GP's role? Read to find out more.

Comment: The instructions on how to use an Epipen on page 39 are a useful education resource.

25-220 Anaphylaxis: A patient perspective.

Warmington E. Aust Fam Physician. January/February 2005. Vol.34. No.1/2. p.72.
Reviewed by Dr Rachel Monk

Review: Always interesting to look at something from a patient's point of view!

25-221 Taming lupus.

Zouali M. Sci Am. March 2005. Vol.292. No.3. p.58-65.
Reviewed by Dr Ron Vautier

Review: In SLE B-lymphocytes produce antibodies that bind to various normal and abnormal components of cells, apparently from deranged signalling internally and with T-cells. Some new lines of evidence are presented, plus new drugs being trialled.

Comment: The puzzle clearly is far from complete, but at least in this article we can read up on progress at a non-specialist level.

Information Systems

25-222 Effects of computerized clinical decision support systems on practitioner performance and patient outcomes: A systematic review.

Garg AX, Adhikari JK, McDonald H, et al. JAMA. 9 March 2005. Vol.293. No.10. p.1223-38.
Reviewed by Dr Raina Elley

Review: This systematic review assessed 100 controlled trials evaluating the effectiveness of Electronic Decision Support (EDS) in health care. While most trials showed an improvement in practitioner performance (64%), only 7/52 (13%) trials that assessed patient outcomes showed improvements compared with usual care. This systematic review also found that EDS systems with automatic prompts were more likely to improve practitioner performance compared with systems that needed to be activated (73% vs 47%, p=0.02). Systems that had been developed by the authors of the trials were more likely to be effective than those evaluated independently (74% vs 28%, p=0.001). Where outcomes were improved, the differences were sometimes impressive. For example, one EDS improved blood pressure control (70% of patients controlled vs 52%, p<0.05) and EDS helped reduce urinary incontinence in nursing home residents over 10 weeks (23% incontinent vs 69%, p<0.01). EDS is sometimes attributed with improved care and outcomes. However, there is still not a lot of evidence to demonstrate improved patient outcomes.

Comment: Many of the studies were apparently not powered adequately to detect differences in patient outcomes as statistically significant, so the low rate of improved outcomes may be an underestimate. In addition, this systematic review involved controlled trials as well as RCTs so the compared groups may have varied in more ways than just the intervention, which can cause an over-estimation or underestimation of effect sizes. Furthermore, it is not possible to tell whether it was the EDS system or the content of the advice, or practitioner uptake that limited the effectiveness of some of the EDS systems. Even so, more examination of the content, uptake, implementation, effectiveness, and cost-effectiveness of EDS systems in terms of patient outcomes would be useful, particularly with systems like PREDICT cardiovascular and diabetes EDS developing in New Zealand primary care. (See also 25-223 and 25-224).

25-223 Role of computerized physician order entry systems in facilitating medication errors.

Koppel R, Metlay JP, Cohen A, et al. JAMA. 9 March 2005. Vol.293. No.10. p.1197-203.
Reviewed by Dr Raina Elley
Review: See 25-222 and 25-224.

25-224 Computer technology and clinical work: Still waiting for Godot.

Wears RL, Berg M. JAMA. 9 March 2005. Vol.293. No.10. p.1261-3.
Reviewed by Dr Raina Elley
Review: See 25-222 and 25-223.

Law and Medicine

25-225 Can children and adolescents consent to their own medical treatment?

Bird S. Aust Fam Physician. January/February 2005. Vol.34. No.1/2. p.73-4.
Reviewed by Dr Rachel Monk
Review: Another one of those grey areas in medicine. Discussion based around a 15-year-old girl wanting the oral contraceptive pill without her parents knowing.
Comment: Sound familiar?

Metabolic Diseases

25-226 Fluoxetine, orlistat, and sibutramine modestly reduce weight in type 2 diabetes.

Byrne CD, Wild S. Evidence-Based Medicine. February 2005. Vol.10. No.1. p.12-3.
Reviewed by Dr Bruce Arroll
Review: This was a systematic review of fluoxetine, orlistat and ibumetrine. The reduction in HBA1C was 1%, 0.4%, and 0.7% at 30 weeks, 57 weeks and 26 weeks respectively. The weight loss was (maximum) 5.1 kg, 2.6 kg and 4.5 kg. (Original article reviewed: Arch Intern Med 2004; 164: 1394-404)
Comment: The commentator made the point that there had been a recent study on orlistat (not included in the meta-analysis) 120 mg TDS and this reduced the incidence of diabetes by 37%. All three drugs seem to be able to reduce weight so issues of adverse effects and preferences are worth considering.

Musculoskeletal System

25-227 Reliability of stress radiography for evaluation of posterior knee laxity.

Schulz MS, Russe K, Lampakis G, et al. Am J Sports Med. April 2005. Vol.33. No.4. p.502-6.
Reviewed by Dr C Hanna
Review: 787 patients with suspected PCL deficiency were tested using plain film stress views to assess the intra- and inter-tester reliability of stress testing. Ranges of reliability were found to be 'useful', but reproducibility was found to be influenced by multiple variables.
Comment: This sounded like an interesting paper initially, but the use of a specific stress applying device (the Telos device), and the lack of clinical direction when laxity is found reduce its clinical usefulness in most settings except post-PCL reconstruction stability assessment.

25-228 Topical ketoprofen patch (100 mg) for the treatment of ankle sprain: A randomized, double-blind, placebo-controlled study.

Mazieres B, Rouanet S, Velicy J, et al. Am J Sports Med. April 2005. Vol.33. No.4. p.515-23.
Reviewed by Dr C Hanna
Review: The authors randomised 163 patients with acute (less than two days) ankle sprains to receive either ketoprofen or placebo skin patches. Pain reduction was much better with the patch, than placebo. No unexpected adverse events occurred – most (31%) were local skin reactions, and were twice as likely in the ketoprofen group as the placebo group.
Comment: This paper shows that topical non-steroidals can help reduce post-sprain ankle pain, and suggests that this may be a good option to reduce the risks of oral NSAIDs – it does not, however, compare efficacy with oral NSAIDs.

25-229 Percutaneous drilling of symptomatic accessory navicular in young athletes.

Nakayama S, Sugimoto K, Takakura Y, et al. Am J Sports Med. April 2005. Vol.33. No.4. p.531-5.
Reviewed by Dr C Hanna
Review: In this paper the percutaneous drilling of symptomatic type 2 accessory navicular was used as a treatment. Thirty out of 31 feet reported good or excellent results and bony union occurred in 80% of patients with an open growth plate of the proximal phalanx of the great toe, compared to less than 20% in those with closed growth plates.
Comment: On the surface this paper suggests that drilling of symptomatic accessory navicular promotes bony union in the skeletally immature. Unfortunately this cannot be concluded without a control group of skeletally immature patients, as a percentage of these will unite their

accessory ossification centres with skeletal maturity.

25-230 Treatment update on spondyloarthropathy: From NSAIDs and DMARDs to anti-TNF-alpha agents.

Anandarajah AP, Ritchlin CT. Postgrad Med. November 2004. Vol.116. No.5. p.31-40.

Reviewed by Dr Chris Milne

Review: Spondyloarthropathies are treated initially with NSAIDs. However, in axial disease, anti-tumour necrosis factor has been shown to slow disease progression and improve overall function as well as providing symptom relief. For peripheral arthritis, use of intra-articular corticosteroid injections may be worthwhile.

Comment: Useful update on an important set of rheumatic disorders.

Neurology

25-231 Making memories stick.

Fields RD. Sci Am. February 2005. Vol.292. No.2. p.59-65.

Reviewed by Dr Ron Vautier

Review: Memory formation and brain development appear to involve a similar process in which strong signalling at a synapse activates certain genes which translate in to synapse-strengthening proteins.

Comment: If you can spare half an hour to indulge your curiosity this will be a rewarding read.

Nutrition

25-232 Obesity: a preventable risk factor for large joint osteoarthritis which may act through biomechanical factors.

Powell A, Teichtahl AJ, Wluka AE, et al. Br J Sports Med. 1 January 2005. Vol.39. No.1. p.4-5.

Reviewed by Dr Chris Milne

Review: Obesity is a major preventable risk factor for osteoarthritis. In addition to the increased mechanical loading, obesity may also increase subchondral bone stiffness. This in turn increases the vulnerability of the overlying articular cartilage to degenerative change.

Comment: As we are experiencing an epidemic of obesity, this article is relevant to all of us.

25-233 Diet and physical activity behaviors among Americans trying to lose weight: 2000 Behavioral Risk Factor Surveillance System.

Bish CL, Blanck HM, Serdula MK, et al. Obes Res. March 2005. Vol.13. No.3. p.596-607.

Reviewed by Dr Anne-Thea McGill

Review: In this US study of the 62 000 people who answered a telephone survey on behavioural health risk issues, the prevalence of trying to lose weight was 46% (women) and 33% (men). They used the same strategies; 19% of women and 22% of men reported using fewer calories and 150 min/wk, or more, leisure-time physical activity, although still not using the minimum recommended weight loss strategies (NHLBI). Women reported trying to lose weight at a lower BMI than did men; 60% of overweight women were trying to lose weight, but men did not reach this level until they were obese. If their doctor advised weight loss patients had a higher likelihood of trying to lose weight (81% women and 77% men vs 41% women and 28% men, respectively).

Comment: As the study notes, people report lower weight and greater height so in those trying to lose weight in the BMI = or > 25 may have in reality been heavier. Advising the overweight and obese to lose weight does help them try, but enabling them to actually do it is obviously the main goal.

Oncology

25-234 Cancer in Australia: an update for GPs.

McAvoy B, Elwood M, Staples M. Aust Fam Physician. January/February 2005. Vol.34. No.1/2. p.41-5.

Reviewed by Dr Rachel Monk

Review: A look into the current statistics of cancer in Australia. Comment is made on the influence of breast and cervical screening programmes on incidence and mortality. It is reiterated that at this stage population screening for prostate cancer using PSA is not recommended in Australia.

Comment: Though looking at the Australian population there are probably many parallels with NZ.

25-235 Multiple superficial basal cell carcinomata: Topical imiquimod versus curette and cryotherapy.

Dixon AJ. Aust Fam Physician. January/February 2005. Vol.34. No.1/2. p.49-52.

Reviewed by Dr Rachel Monk

Review: Comparison between the two treatment regimes in a 52 year old man with multiple BCCs on his torso. Pictures included to show the changes during treatment. Both treatments achieved clearance, however, patient preference was curette and cryotherapy.

Comment: Table comparing the three main treatment options for BCCs on page 50.

25-236 Clinical diagnosis and management of suspicious pigmented skin lesions: A survey of GPs.

Baade PD, Del Mar CB, Lowe JB, et al. Aust Fam Physician. January/February 2005. Vol.34. No.1/2. p.79-83.

Reviewed by Dr Rachel Monk

Review: This survey found that GPs were reasonably accurate in distinguishing benign and malignant skin lesions.

Comment: The pictures are included in the article – how do you fare?

Orthopaedics

25-237 Management of ankle sprains: a randomised controlled trial of the treatment of inversion injuries using an elastic support bandage or an Aircast ankle brace.

Boyce SH, Quigley MA, Campbell S. Br J Sports Med. 1 February 2005. Vol.39. No.2. p.91-6.
Reviewed by Dr Chris Milne
Review: Fifty consecutive patients presenting to two Scottish Hospital A&E Departments were randomised to treatment with an elastic support bandage (tubigrip type) or an Aircast ankle brace. Assessment using a Karlsson score showed improved ankle joint function at 10 days and one month post injury in the Aircast group.
Comment: Useful study. To my mind, the selective use of a lace-up Suedo type brace in those people with a positive anterior drawer sign (indicative of anterior talofibular ligament rupture) would probably be more cost effective.

Paediatrics

25-238 What is the best way to evaluate and manage diarrhea in the febrile infant?

Banks JB, Sullo EJ. J Fam Pract. December 2004. Vol.53. No.12. p.996-9.
Reviewed by Dr Bruce Adlam
Review: Routine infant diarrhoea requires no lab work or cultures (SOR:C). The degree of dehydration can be determined reliably by per cent body weight change (SOR: B). Bicarbonate and U&E may be useful in evaluating complicated diarrhoea with severe dehydration. Stool cultures are indicated for bloody or prolonged diarrhoea, suspected food poisoning, or recent travel abroad (SOR: C).
Comment: Oral rehydrating solution is adequate fluid replacement for diarrhoea associated with mild to moderate dehydration, followed by prompt re-feeding with an age-appropriate diet (SOR: A); intravenous fluids are recommended for severe dehydration (SOR: C). Probiotics have been shown to safely reduce the duration and frequency of diarrhoea (SOR: A).

25-239 What is the diagnostic approach to a one-year-old with chronic cough?

Pearson M, Triezenberg D, Helmen J. J Fam Pract. December 2004. Vol.53. No.12. p.1001-3.
Reviewed by Dr Bruce Adlam
Review: Very few studies examine the evaluation of chronic cough among young children. Based on expert opinion, investigation of chronic cough should begin with a detailed history, physical examination, and chest radiograph (SOR:C). Before pursuing additional studies, remove potential irritants from the patient's environment, consider congenital anomalies, and then be directed toward common causes such as postnasal drip syndrome, gastroesophageal reflux disease (GERD), and asthma (SOR: C).
Comment: Surprisingly low levels of evidence for such a common problem.

Prescribing

25-240 Prescribing herbal medications appropriately.

Ernst E. J Fam Pract. December 2004. Vol.53. No.12. p.985-8.
Reviewed by Dr Bruce Adlam
Review: We have no idea how many of our patients are taking herbal preparations and it's probably greater than we think. Between 1990 and 1997, the US population increased its use of herbal medicines by 380%. This article provides guidelines for prescribing herbal medicines based on efficacy, safety, quality and cost.

Primary Health Care

25-241 Does continuity of care improve patient outcomes?

Cabana MD, Jee SH. J Fam Pract. December 2004. Vol.53. No.12. p.974-80.
Reviewed by Dr Bruce Adlam
Review: Sustained continuity of care improves quality of care, by decreasing hospitalisations, decreasing emergency department use, and improving receipt of preventive services. In addition it has been consistently documented to improve quality of care for patients with chronic conditions such as asthma and diabetes (SOR: B).
Comment: Major systematic review which will be of considerable interest to many.

Psychiatry and Psychology

25-242 The promise of atypical antipsychotics: Fewer side effects means enhanced compliance and improved functioning.

Citrome L, Volavka J. Postgrad Med. October 2004. Vol.116. No.4. p.49-63.
Reviewed by Dr Chris Milne
Review: This article describes several newer antipsychotic agents including clozapine, risperidone and quetiapine which are all in use in NZ. These agents have a lower tendency to cause extrapyramidal side effects and less risk of tardive dyskinesia. Therefore they are better tolerated and compliance is improved.
Comment: Useful article, particularly for those doctors who have only the occasional patient on these drugs, and want to know more about them.

25-243 Vascular dementia: Stroke risk and sequelae define therapeutic approaches.

Black SE. Postgrad Med. January 2005. Vol.117. No.1. p.15-25.
Reviewed by Dr Chris Milne
Review: Vascular dementia is the second most common cause of cognitive loss (after Alzheimer's disease). Compared with Alzheimer's, there tends to be a stepwise progression, as each new infarct occurs. There is also a greater impairment of executive function and better preservation of recognition memory in vascular dementia.
Comment: This article is a good summary of an important topic, with useful tables of diagnostic criteria, plus risk factors and strategies for prevention of vascular dementia (otherwise called multi-infarct dementia).

25-244 Effectiveness of a quality improvement intervention for

adolescent depression in primary care clinics: A randomized controlled trial.

Asarnow JR, Jaycox LH, Duan N, et al. JAMA. 19 January 2005. Vol.293. No.3. p.311-9.

Reviewed by Dr Raina Elley

Review: This trial assessed the effectiveness of a co-ordinated care initiative implemented in a number of primary care practices involving expert leader teams, psychotherapist care managers trained in cognitive behavioural therapy (CBT) and easy access to their family physician (no cost) for choice of referral for CBT plus/or antidepressant medication (or neither). This intervention improved measures of depression, quality of life and satisfaction with mental health treatment over six months in 13–21-year-olds with depression compared with 'usual care'. There was also a trend toward fewer suicide and self-harm attempts.

Comment: It was interesting to note that this intervention did not lead to any increase in the prescribing of antidepressants (12.5%) compared with 'usual care' (16.2%), but did increase the referral for CBT. It would be difficult to attribute the improvement to the extra CBT or the greater contact with study and health professionals over the six months. As this study was conducted between 1999 and 2003, it did not take into account the more recent warnings about using anti-depressants in adolescents. In New Zealand primary health care, affordable CBT is rarely available for such adolescents in a timely fashion. Perhaps this is a good area for PHOs to consider allocating resources.

Public Health

25–245 Social determinants of health inequalities.

Marmot M. Lancet. 19-25 March 2005. Vol.365. No.9464. p.1099-104.

Reviewed by Dr Tony Hanne

Review: There are huge variations in life expectancy around the world between countries, varying from 34 years in Sierra Leone to 81.9 in Japan. Much of this is about poverty or wealth but there are some surprises. Greece has a slightly better life expectancy than the USA with only half the GNP per head. Some Eastern European countries have had a declining life expectancy. Under five mortality can vary from over 300 per 1000 in Sierra Leone to three per 1000 in Iceland. Equally striking, however, is the steep gradient in health statistics according to income within a country. Australian Aborigines have a life expectancy of 20 years less than other Australians, not because of a big difference in childhood mortality but in the 15–60 age group.

Comment: We in NZ have been commanded by government in recent years to reduce the health gap between Maori and non-Maori. The implications of this article are that achieving this is far more about social policy, particularly in relation to the social gradient, stress, early life, social exclusion, work, unemployment, social support, addiction, food and transport, than it is about what doctors can fix.

25–246 Excess deaths associated with underweight, overweight, and obesity.

Flegal KM, Graubard BI, Williamson DF, et al. JAMA. 20 April 2005. Vol.293. No.15. p.1861-7.

Reviewed by Dr Raina Elley

Review: This cohort study examined the excess mortality associated with different body weights from three cohorts from the US NHANES surveys spanning 1971–1994. They found that compared with normal weight (BMI 18.5-25), there was a slightly lower mortality rate in the overweight category (BMI 25–30) (-86 094 deaths; 95% CI, -161 223 to -10 966). Those with BMIs of 30 or greater (obese) had higher mortality rates with 111 909 excess deaths (95% CI, 53 754–170 064) and underweight had 33 746 excess deaths (95% CI, 15 726–51 766). These analyses were adjusted for some confounding factors, such as gender, educational level, smoking and alcohol consumption. Those who were overweight in the 1990s had better outcomes than those that were overweight in the 1970s. This may be due to improved cardiovascular risk management, which tends to be better for those overweight or obese compared to normal weight individuals (see the review below, 25-247, as well). The study did not examine cardiovascular mortality, however. Most of the excess mortality due to obesity was amongst those under 70 years of age. Much of the mortality due to underweight was probably accounted for by existing co-morbidity or disease, although the analysis could not control specifically for all of these and other potential confounding variables. The authors make the point that other studies have already documented the U-shaped curve of mortality and BMI with the lowest point at 25. This may help to explain why the overweight category appears to have lower mortality than the 18.5–25 BMI category.

Comment: These are very interesting studies, as it has always puzzled me how overweight and obesity continues to increase in the US, yet cardiovascular and other mortality continues to decrease. (see also 25-247 and 25-248).

25–247 Secular trends in cardiovascular disease risk factors according to body mass index in US adults.

Gregg EW, Cheng YJ, Cadwell BL, et al. JAMA. 20 April 2005. Vol.293. No.15. p.1868-74.

Reviewed by Dr Raina Elley

Review: This study analysed five cross-sectional surveys from the US NHANES series between 1960 and 2002. Apart from the prevalence of diabetes, all other cardiovascular risk factors decreased over the 40 years, particularly amongst overweight and obese individuals. These trends are despite an increase in obesity amongst all age groups, genders and

ethnicities. Amongst obese individuals, the proportion with hypercholesterolaemia decreased from 39% to 18% over the 40 years. The prevalence of raised blood pressure reduced from 42% to 24% and smoking prevalence reduced from 32% to 20%. Much of the reduction in risk was due to medication use.
Comment: These studies reinforce, amongst other things, how important cardiovascular risk management in primary care is, in improving outcomes and mortality. (see also 25-246 and 25-248)

25-248 Deaths attributable to obesity.
Mark DH. JAMA. 20 April 2005. Vol.293. No.15. p.1918-9.
Reviewed by Dr Raina Elley
Review: See 25-246 and 25-247.

Research Design and Methodology

25-249 Estimating mortality reduction by comparing survival curves.
Nordling MK. J Fam Pract. November 2004. Vol.53. No.11. p.929-30.
Reviewed by Dr Bruce Adlam
Review: Good brief item for those interested in biostats and modeling.

25-250 Forest plots: Data summaries at a glance.
Yeh J, D'Amico F. J Fam Pract. December 2004. Vol.53. No.12. p.1007.
Reviewed by Dr Bruce Adlam
Review: A forest plot, which most commonly appears in meta-analyses, summarises results of individual studies and includes a combined or 'pooled' estimate of the overall result. This is another useful JFP guides to statistical methods.

Respiratory System

25-251 How should we diagnose and treat obstructive sleep apnea?
Holten KB. J Fam Pract. November 2004. Vol.53. No.11. p.902-3.
Reviewed by Dr Bruce Adlam
Review: This article is a summary of clinical practice guidelines and addresses the risk factors, diagnostic testing and management for obstructive sleep apnoea (OSA). The recommendations are listed in descending order of evidence.
Comment: The guideline can be accessed through the (US) National Guideline Clearinghouse – www.guideline.gov/

25-252 Long-term cardiovascular outcomes in men with obstructive sleep apnoea–hypopnoea with or without treatment with continuous positive airway pressure: an observational study.
Marin JM, Carrizo SJ, Vicente E, et al. Lancet. 19-25 March 2005. Vol.365. No.9464. p.1046-53.
Reviewed by Dr Tony Hanne
Review: It has long been assumed that those with severe sleep apnoea were at much greater risk of cardiovascular events, and that the use of CPAP reduced that risk, but the evidence was of poor quality. This 10 year prospective study in which apnoea was graded, and treated and untreated apnoeic patients were matched with equivalent controls in terms of age and BMI, provides solid evidence that the assumptions were correct. Severe sleep apnoea was associated with a roughly threefold increase in fatal and non-fatal events when compared with mild apnoea, snorers and non-snorers. The use of CPAP reduced the risk almost to normal.
Comment: Severe apnoea was defined as more than 30 episodes per hour of apnoea-hypopnoea measured on a polysomnographic study. CPAP had to be used for at least four hours per night. General lifestyle advice was given to all participants. Severe sleep apnoea is not just a cause of marital discord, it is a life-threatening condition which can be effectively treated.

Rheumatic Diseases

25-253 Intra-articular corticosteroid injections are better than placebo for improving symptoms of knee osteoarthritis.
Shoor S. Evidence-Based Medicine. February 2005. Vol.10. No.1. p.23.
Reviewed by Dr Bruce Arroll
Review: This was a systematic review of 10 studies. The NNT for benefit at two weeks was four and for 16–24 weeks it was five. Higher dose (i.e. 120 mg of triamcinolone) may be more effective than the usual 40 mg. (Original article reviewed: BMJ 2004; 328: 869)
Comment: The safety at one year for 40 mg has been reported for four injections per year. The safety of 120 mg is not well defined. (Editor's note: The reviewer is also one of the authors of the original BMJ article.)

Smoking

25-254 Bupropion plus nicotine replacement no better than replacement alone.
J Fam Pract. December 2005. Vol.53. No.12. p.953-4.
Reviewed by Dr Bruce Adlam
Review: The addition of bupropion (Zyban) does not further increase long-term quit rates in those who receive nicotine replacement and cognitive-behavioral counseling. In this study, biochemically confirmed quit rates at one year were not statistically different between the two groups (22% and 28%) (LOE=1b). (Original article reviewed: Arch Intern Med 2004; 164:1797-803).

Sports and Sports Medicine

25-255 Does oral contraceptive use affect maximum force production in women?
Elliott KJ, Cable NT, Reilly T. Br J Sports Med. 1 January 2005. Vol.39. No.1. p.15-9.
Reviewed by Dr Chris Milne
Review: In a word, no. We can assure our female athletes that the OC pill will not make them either stronger or weaker. This is the first study to measure levels of endogenous oestradiol and progesterone

and directly relate them to muscle strength and OC use.
Comment: Some good news about the OC, for a change!

25-256 Complex systems model of fatigue: integrative homoeostatic control of peripheral physiological systems during exercise in humans.

Lambert EV, St Clair Gibson A, Noakes TD. Br J Sports Med. 1 January 2005. Vol.39. No.1. p.52-62.
Reviewed by Dr Chris Milne
Review: Traditional teaching is that fatigue arises from substrate depletion or metabolic accumulation – a reductionist approach. This novel model suggests that a variety of afferent signallers modulate control processes in the brain, which acts as a central governor and slows the pace of exercise, thus preventing catastrophic fatigue.
Comment: The most comprehensive of a series of articles examining this topic, with 57 references. Some innovative ideas from a well respected group of South African researchers including Tim Noakes.

Virus Diseases

25-257 Does acyclovir help herpes simplex virus cold sores if treatment is delayed?

Madigosky WS, Meadows S. J Fam Pract. November 2004. Vol.53. No.11. p.923-4.
Reviewed by Dr Bruce Adlam
Review: When herpes simplex virus (HSV) type 1 lesions are in the papule or vesicle stage, there is no benefit to starting oral acyclovir (SOR: C) However, topical acyclovir 5% cream applied five times a day decreases pain and the duration of hard crust (SOR: B). If started at the onset of symptoms, acyclovir (400 mg five times daily for five days) decreases pain and healing time to loss of crust and valacyclovir (2 g twice daily for one day) reduces the lesion duration and time to healing and may prevent lesion development (SOR: A).

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Editor
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Advertising enquiries:
Colin Gestro ph: 09-419 6723, fax: 09-419 6790, email: colingestro@affinityads.com

All other correspondence to:
Lee Sheppard, Publications Administrator
Royal New Zealand College of General Practitioners
P O Box 10-440, WELLINGTON
Email: nzfp@rnzcgp.org.nz

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