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This alert highlights some of the key health care conclusions and their implications for practice as published this week in The Cochrane Library, 2007, Issue 3.

To receive a full copy of the Reviews highlighted in this newsletter, or to arrange an interview with an author, contact Jennifer Beal +44 (0)1243 770633 or by email, [jbeal@wiley.co.uk](mailto:jbeal@wiley.co.uk).

**Reviews highlighted in this newsletter:**

- **Asthma: a short course of steroids reduces relapse**  
Giving patients a short course of corticosteroids after they have been discharged from hospital for an asthma attack reduces the chances of a relapse, a Cochrane Systematic Review has found. Giving the steroids also reduces their use of inhalers. The benefit lasts for about three weeks.
- **Implanon, Norplant and Jadelle are all effective contraceptives – but side effects vary**  
A Cochrane Systematic Review that set out to assess the effectiveness and tolerability of subdermal implantable contraceptives compared to other reversible methods of contraception found that they were all good at preventing pregnancy. No one subdermal implant was found to be any more or less effective than the others in preventing unwanted pregnancies.
- **Losing weight after pregnancy – diet + exercise better than diet alone**  
Preliminary evidence suggests that a combination of dieting and exercise is a more effective way of losing weight after pregnancy than dieting alone, concludes a Cochrane Systematic Review.
- **Chronic rhinosinusitis – washing nasal passages with saline can help**  
Spraying salty water (saline) into your nose can help reduce the symptoms of pain and congestion that accompany long-term infections of the nasal passages, a Cochrane Systematic Review has concluded.
- **Colposcopy – playing music is one technique that helps women relax during the examination that follows a positive cervical smear**  
If a cervical smear test reveals abnormal cells the woman will be offered colposcopy, a technique that involves a doctor studying the cervix with a

special microscope. Many women find the whole procedure highly stressful and have particularly high levels of anxiety before and during colposcopy.

- **Orthodontic treatment – No better in childhood than during adolescence**

Having prominent front teeth is a potentially harmful problem. If it occurs at a young age (7 to 11 years old) then the orthodontist has to decide whether to treat immediately and then again when the child is older (12 to 16 years old), or wait until the child is a teenager and perform the treatment in one phase. By analysing data from eight trials involving a total of 592 patients, a group of Cochrane Researchers concluded that the two-stage therapy that starts early does not appear to have any advantages over one phase treatment.

- **Stroke in non-vascular atrial fibrillation – anticoagulants better than anti-platelet therapy**

People with atrial fibrillation (AF) have irregular heart beats and have a tendency to form blood clots in the upper chambers (atria) of their hearts. The results of this Cochrane Systematic Review showed that anticoagulants were more successful than anti-platelet therapies at reducing stroke. They reduced the risk of a stroke in people with AF by about 33% compared with anti-platelet therapies. The anti-platelet therapies did, however, still have an effect, reducing the risk by 20% when compared to people who were given no treatment (controls).

### **Asthma: a short course of steroids reduces relapse**

Giving patients a short course of corticosteroids after they have been discharged from hospital for an asthma attack reduces the chances of a relapse, a Cochrane Systematic Review has found. Giving the steroids also reduces their use of inhalers. The benefit lasts for about three weeks.

This updated finding was drawn after reviewing data in six trials that together involved 374 people.

Between 12% and 16% of people who are discharged from hospital after having an asthma attack have a relapse within two weeks. "There is considerable debate about the best way of treating people who have asthma attacks, including the dose, method of delivery and timing of delivery of corticosteroids. Our research found clear evidence that people who arrived at a hospital with acute asthma and were well enough to be discharged benefited from the addition of corticosteroid therapy," says lead author Professor Brian Rowe, who works at the University of Alberta, in Edmonton, Canada.

"Our systematic review strongly supports the use of systemic corticosteroids for treatment of outpatients who leave hospital after an asthma attack," says colleague Carol Spooner.

The review, however, was not able to identify enough data to show whether there was any difference between oral or intramuscular routes of administration. This topic is the subject of a future Cochrane Systematic Review.

Rowe BH, Spooner CH, Ducharme FM, Bretzlaff JA, Bota GW. Corticosteroids for preventing relapse following acute exacerbations of asthma. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD000195. DOI: 10.1002/14651858.CD000195.pub2.

### **Implanon, Norplant and Jadelle are all effective contraceptives – but side effects vary**

A Cochrane Systematic Review that set out to assess the effectiveness and tolerability of subdermal implantable contraceptives compared to other reversible methods of contraception found that they were all good at preventing pregnancy. No one subdermal implant was found to be any more or less effective than the others in preventing unwanted pregnancies.

The most common side effect with all the implants was changes in bleeding pattern. Rates of amenorrhoea after two years use were significantly higher in women using Implanon than Norplant. Implanon was also quicker to implant and remove than Norplant, and Jadelle was quicker to remove than Norplant.

“One way of judging the acceptability of a contraceptive is to see whether women are able to use them over a long period of time, there are indications of good tolerability in that over 80% of women in the studies continued to use their contraceptive implants for two or more years,” says lead researcher Jo Power, who works at the Margaret Pyke Centre in London, UK.

The data also showed that women in developing countries were more likely to continue using them than were women from developed countries.

“Menstrual disturbances are common however, and these side effects should be explained to women before the implant is inserted so that women can make an informed choice about their contraceptive strategy,” says Power.

Power J, French R, Cowan F. Subdermal implantable contraceptives versus other forms of reversible contraceptives or other implants as effective methods of preventing pregnancy. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD001326. DOI: 10.1002/14651858.CD001326.pub2.

### **Losing weight after pregnancy - diet + exercise better than diet alone**

Preliminary evidence suggests that a combination of dieting and exercise is a more effective way of losing weight after pregnancy than dieting alone, concludes a Cochrane Systematic Review.

Women naturally gain weight during pregnancy and many gradually lose it afterwards, but some women find it difficult to lose this additional weight. This retained body weight may be one factor that contributes to obesity among women. Many women are keen to find ways of returning to, and maintaining, pre-pregnant weights, and there is plenty of competing advice on offer.

By studying data from six different trials that involved a total of 245 women, a group of Cochrane Researchers found that women who did exercise did not lose significantly more than women who have a standard post-natal lifestyle. However,

women who combined exercise and dieting did lose more weight than those with normal care.

Returning to body weight gradually after giving birth seems to be important, because women who regain their pre-pregnancy weight within six months have a lower risk of being overweight ten years later.

“As well as helping reduce body weight, exercise has the added advantage of improving the women’s cardiovascular fitness and preserves fat-free mass – dieting alone reduces fat-free mass,” says Amanda Amorim, an epidemiologist working in Rio de Janeiro, Brazil.

Amorim AR, Linne YM, Lourenco PMC. Diet or exercise, or both, for weight reduction in women after childbirth. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD005627. DOI: 10.1002/14651858.CD005627.pub2.

### **Chronic rhinosinusitis – washing nasal passages with saline can help**

Spraying salty water (saline) into your nose can help reduce the symptoms of pain and congestion that accompany long-term infections of the nasal passages, a Cochrane Systematic Review has concluded.

Between 5% and 15% of people experience persistent infection of the nasal passages (chronic rhinosinusitis). Many homoeopathic and yogic forms of healthcare recommend spraying saline into the nose to relieve symptoms, and it is now often recommended as part of a programme of treatment in conventional medicine.

A team of Cochrane Researchers considered the data presented in eight separate randomised trials and 16 other studies, involving a total of 1659 patients, that examined the potential benefits of saline irrigation.

“While there is no evidence that saline is a replacement for standard therapies, spraying or irrigating saline into the nose is likely to improve symptoms for people with persistent infections,” says lead researcher Dr Richard Harvey who works at the University of Oxford and Royal National Throat Nose and Ear Hospital in London.

No one is really sure why saline reduces symptoms, but it could be because it softens mucus, making it easier to remove. The tiny hair-like process (cilia) that cover the surfaces of cells in the nose often fail to function properly and can’t beat to remove mucus, so the saline may help these cilia to work more efficiently. In addition, saline may simply help wash bacteria, viruses and allergic materials out of the nose.

“Doctors should consider recommending saline therapy as an adjunct for managing the symptoms of chronic rhinosinusitis,” says Harvey.

Harvey R, Hannan SA, Badia L, Scadding G. Nasal saline irrigations for the symptoms of chronic rhinosinusitis. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD006394. DOI: 10.1002/14651858.CD006394.pub2.

## **Erectile dysfunction - Group psychotherapy can help**

Taking part in group psychotherapy can help men who have erectile dysfunction to overcome their problem, and adding sildenafil to group therapy was more effective than sildenafil alone. In addition, group psychotherapy was more effective than taking sildenafil on its own, a Cochrane Systematic Review has found.

Normal sexual function relies on the coordination of psychological, endocrine, vascular and neurological factors. Recent research has increased attention on the role of psychological issues. In particular, depression, low self-esteem, anxiety and other psychosocial stresses can play a large role in erectile dysfunction.

A team of Cochrane Researchers drew data from nine randomised trials and two quasi-randomised trials. These involved 398 men with erectile dysfunction who had been given psychotherapy, medication, psychotherapy plus medication or vacuum devices. A further 59 were in non-treatment control groups.

“We found that 95% of men in the psychosocial therapy group benefited from the treatment, while there was no change in over the same period of time in the controls,” says Professor Tamara Melnik, a psychiatrist working at the Universidade de São Paulo in Brazil.

“We now need some large randomised trials with longer follow-up periods in order to measure exactly how effective psychosocial therapy can be. This research will need to group the men carefully, and also consider different forms of psychosocial treatment,” says Melnik.

“One problem with psychosocial therapy is that we are still uncertain which patients are most likely to benefit from it and if effectiveness depends upon personality factors, psychiatric co-morbid diagnosis, length of therapy time,” says Melnik.

Melnik T, Soares BGO, Nasselo AG. Psychosocial interventions for erectile dysfunction. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD004825. DOI: 10.1002/14651858.CD004825.pub2.

## **Colposcopy – playing music is one technique that helps women relax during the examination that follows a positive cervical smear**

If a cervical smear test reveals abnormal cells the woman will be offered colposcopy, a technique that involves a doctor studying the cervix with a special microscope. Many women find the whole procedure highly stressful and have particularly high levels of anxiety before and during colposcopy.

Researchers working for The Cochrane Collaboration studied data from eleven trials that involved a total of 1441 women and assessed four different methods of attempting to reduce anxiety. They concluded that listening to music during colposcopy produced a significant reduction in anxiety levels, but pre-test counselling, information leaflets and video information all had no effect.

In addition they found that combining an information video and leaflets was more effective at reducing anxiety than leaflets alone. Finally the research showed that using video colposcopy, which allows the woman to watch the procedure on a TV

monitor and consequently understand the process more fully, is another way of helping the woman remain calm.

“Cervical cancer is a very serious disease and it is important that we encourage women to take part in screening tests. Using the best ways of helping women relax during the process makes it less unpleasant and could consequently help increase the numbers of women who take up the offer of screening,” says lead researcher Dr Khadra Galaal who works at the Northern Gynaecological Centre, Gateshead, UK.

Galaal KA, Deane K, Sangal S, Lopes AD. Interventions for reducing anxiety in women undergoing colposcopy. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD006013. DOI: 10.1002/14651858.CD006013.pub2.

### **Orthodontic treatment – No better in childhood than during adolescence**

Having prominent front teeth is a potentially harmful problem. If it occurs at a young age (7 to 11 years old) then the orthodontist has to decide whether to treat immediately and then again when the child is older (12 to 16 years old), or wait until the child is a teenager and perform the treatment in one phase.

By analysing data from eight trials involving a total of 592 patients, a group of Cochrane Researchers concluded that the two-stage therapy that starts early does not appear to have any advantages over one phase treatment.

“Prominent upper front teeth may be due to many different combinations of jaw, tooth and lip positions. Without treatment the teeth can become damaged over time, but it appears that there is no harm done in waiting for early adolescence before starting treatment,” say lead authors Dr Jayne Harrison, a consultant orthodontist who works at Liverpool University Dental Hospital, UK and Professor Kevin O’Brien from the University of Manchester.

Harrison JE, O'Brien KD, Worthington HV. Orthodontic treatment for prominent upper front teeth in children. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD003452. DOI: 10.1002/14651858.CD003452.pub2.

### **Stroke in non-vascular atrial fibrillation – anticoagulants better than anti-platelet therapy**

People with atrial fibrillation (AF) have irregular heart beats and have a tendency to form blood clots in the upper chambers (atria) of their hearts. These clots can then travel to the brain, block vessels and cause a stroke. One way of reducing the risk of this occurring is to give drugs that limit the blood's ability to create clots. Two commonly used options are anticoagulants that inhibit the clotting process (e.g. warfarin), and drugs such as aspirin that make blood platelets less likely to bind together and trigger a clot.

In standard medical practice, anticoagulants are often given to people with AF who are at high risk of strokes, while anti-platelet treatments are offered to people at lower risk.

A team of Cochrane Researchers set out to compare the relative benefits of these two treatments. After searching the medical literature, they drew on data found in eight trials that together involved a total of 9598 people who had AF but had not suffered strokes so far.

The results showed that anticoagulants were more successful than anti-platelet therapies at reducing stroke. They reduced the risk of a stroke in people with AF by about 33% compared with anti-platelet therapies. The anti-platelet therapies did, however, still have an effect, reducing the risk by 20% when compared to people who were given no treatment (controls).

“Adjusted-dose warfarin offers larger, more predictable reductions in stroke for AF patients who can receive it,” says lead researcher Maria Aguilar, who works in the department of Neurology at the Mayo Clinic Scottsdale, Arizona, USA.

While it is clear that both drugs can bring benefit, it is unclear at what point a person should start to take them.

“The threshold of benefit that would warrant anticoagulation remains controversial and depends on patient preferences and availability of optimal anticoagulation monitoring,” says Aguilar.

Aguilar MI, Hart R, Pearce LA. Oral anticoagulants versus antiplatelet therapy for preventing stroke in patients with non-valvular atrial fibrillation and no history of stroke or transient ischemic attacks. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD006186. DOI: 10.1002/14651858.CD006186.pub2.e

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## **Extracts from a selection of other Cochrane Systematic Reviews**

This section contains extracts from 20 selected new or updated reviews also publishing in The Cochrane Library 2007, Issue 3. These extracts have been divided into headings of

**Family / Parenting / Children**

**Disease / Illness / Infection**

**Cancer**

**Macular Degeneration**

**Pain Relief**

To receive a full copy of the results from this selection, or to arrange an interview with an author, contact Jennifer Beal on +44 (0)1243 770633 or by email, [jbeal@wiley.co.uk](mailto:jbeal@wiley.co.uk).

### **Family / Parenting / Children**

**“Early skin-to-skin contact for mothers and their healthy newborn infants”**

(CD003519) by ER Moore, GC Anderson, N Bergman

#### **Background**

Mother-infant separation postbirth is common in Western culture. Early skin-to-skin contact (SSC) begins ideally at birth and involves placing the naked baby, covered across the back with a warm blanket, prone on the mother's bare chest. According to mammalian neuroscience, the intimate contact inherent in this place (habitat) evokes neurobehaviors

ensuring fulfillment of basic biological needs. This time may represent a psychophysiological 'sensitive period' for programming future behaviour.

**Extract from the Implications for Practice findings**

The main results of the meta-analysis, and from the single studies, indicate that skin-to-skin contact (SSC) may have a positive effect on long-term breastfeeding and on infant temperature.

**“Home-based support for disadvantaged adult mothers”**

(CD003759) by C Bennett, GM Macdonald, J Dennis, E Coren, J Patterson, M Astin, J Abbott

**Background**

Babies born to socio-economically disadvantaged mothers are at higher risk of a range of problems in infancy. Home visiting programs are thought to improve outcomes, both for mothers and children, largely through advice and support.

**Extract from the Implications for Practice findings**

On the basis of the present review, there is no evidence to suggest that home visiting programmes of the kind described in this review can impact positively on the quality of parenting or child development outcomes in disadvantaged families.

**“Continuous support for women during childbirth”**

(CD003766) by ED Hodnett, S Gates, GJ Hofmeyr, C Sakala

**Background**

Historically, women have been attended and supported by other women during labour. However, in recent decades in hospitals worldwide, continuous support during labour has become the exception rather than the routine. Concerns about the consequent dehumanization of women's birth experiences have led to calls for a return to continuous support by women for women during labour.

**Extract from the Implications for Practice findings**

Continuous support during labour should be the norm, rather than the exception. All women should be allowed and encouraged to have support people with them continuously during labour. In general, continuous support from a caregiver during labour appears to confer the greatest benefits when the provider is not an employee of the institution, when epidural analgesia is not routinely used, and when support begins in early labour.

**“Psychological and educational interventions for atopic eczema in children”**

(CD004054) by SJ Ersser, S Latter, A Sibley, PA Satherley, S Welbourne

**Background**

Psychological and educational interventions have been used as an adjunct to conventional therapy for children with atopic eczema to enhance the effectiveness of topical therapy. There have been no relevant systematic reviews applicable to children.

**Extract from the Implications for Practice findings**

This review draws on evidence from five trials. It is interesting that the studies focused on interventions directed at the parent rather than the child. In some countries, such as the UK, nurse-led clinics provide an opportunity for focused intervention. In countries such as Germany, the eczema school multidisciplinary model is more established. There is scope to debate the relative merits of these different service delivery models that both employ different professional groups who are suitably qualified to deliver psychological and educational interventions, their educational activity and how these most effectively integrate with the resource efficient provision of conventional dermatological therapy.

**“Prostaglandins for preventing postpartum haemorrhage”**

(CD000494) by AM Gülmezoglu, F Forna, J Villar, GJ Hofmeyr

**Background**

Prostaglandins have mainly been used for postpartum haemorrhage (PPH) when other measures fail. Misoprostol, a new and inexpensive prostaglandin E1 analogue, has been suggested as an alternative for routine management of the third stage of labour.

**Extract from the Implications for Practice findings**

The uterotonic of choice in settings where active management is practiced is oxytocin 10 IU administered intravenously or intramuscularly. Getting oxytocin used as widely as possible should be the primary aim for deliveries occurring outside hospitals at peripheral levels of the healthcare system or at home.

### **“School-based education programmes for the prevention of child sexual abuse”**

(CD004380) by KJ Zwi, SR Woolfenden, DM Wheeler, TA O'Brien, P Tait, KW Williams

#### **Background**

Child sexual abuse is a significant problem that requires an effective means of prevention.

#### **Extract from the Implications for Practice findings**

Currently schools implement a variety of interventions aimed at preventing child sexual assault. The studies evaluated in this review report significant improvements in knowledge measures as well as improvements in protective behaviours in simulated at risk situations. However these studies also report harms, and illustrate the need to monitor and address the impact of these interventions.

### **“Recombinant growth hormone for idiopathic short stature in children and adolescents”**

(CD004440) by J Bryant, L Baxter, CB Cave, R Milne

#### **Background**

Idiopathic short stature (ISS) refers to children who are very short compared with their peers for unknown or hereditary reasons. Recombinant human growth hormone (GH) has been used to increase growth and final height in children with ISS.

#### **Extract from the Implications for Practice findings**

The reported results suggest that growth hormone does improve growth and final height in idiopathic short stature. Although treated individuals may be taller than non-treated individuals, they are still relatively short compared with peers of normal height. Therefore whether the small expected gain in height is substantial enough to merit frequent or daily injections for a number of years in children who do not have a disease is not clear.

### **“Selective serotonin reuptake inhibitors (SSRIs) for depressive disorders in children and adolescents”**

(CD004851) by S Hetrick, S Merry, J McKenzie, P Sindahl, M Proctor

#### **Background**

Depressive disorders are common in young people and are associated with significant negative impacts. Selective serotonin reuptake inhibitors (SSRIs) are often used, however, evidence of their effectiveness in children and adolescents is not clear. Furthermore, there have been warnings against their use in this population due to concerns about increased risk of suicidal ideation and behaviour.

#### **Extract from the Implications for Practice findings**

The evidence for effectiveness of SSRIs compared with placebo in the treatment of depressive disorder in children and adolescents is far from compelling. The limitations in the trials carried out thus far mean that there are no definitive answers for those working with children and adolescents with depressive disorder.

### **“Traditional birth attendant training for improving health behaviours and pregnancy outcomes”**

(CD005460) by LM Sibley, TA Sipe, CM Brown, MM Diallo, K McNatt, N Habarta

#### **Background**

Between the 1970s and 1990s, the World Health Organization promoted traditional birth attendant (TBA) training as one strategy to reduce maternal and neonatal mortality. To date, evidence in support of TBA training remains limited and conflicting.

#### **Extract from the Implications for Practice findings**

The potential of traditional birth attendant (TBA) training to reduce perinatal mortality is promising when combined with improved health services. However, the number of studies in this review that meet the criteria of rigorous evaluation design is insufficient to provide the necessary evidence for TBA training effectiveness.

## **Disease / Illness / Infection**

### **“Interventions for treating scabies”**

(CD000320) by M Strong, PW Johnstone

#### **Background**

Scabies is an intensely itchy parasitic infection of the skin caused by the *Sarcoptes scabiei* mite. It is a common public health problem with an estimated global prevalence of 300 million cases. Serious adverse effects have been reported for some drugs used to treat scabies.

#### **Extract from the Implications for Practice findings**

On the basis of the available evidence from randomized controlled trials, topical permethrin appears to be the most effective treatment for scabies. Ivermectin appears to be an effective oral treatment, but in many countries it is not licensed for this indication.

### **“Vitamin C for preventing and treating the common cold”**

(CD000980) by RM Douglas, H Hemilä, E Chalker, B Treacy

#### **Background**

The role of vitamin C (ascorbic acid) in the prevention and treatment of the common cold has been a subject of controversy for 60 years, but is widely sold and used as both a preventive and therapeutic agent.

#### **Extract from the Implications for Practice findings**

The lack of effect of prophylactic vitamin C supplementation on the incidence of the common cold in normal populations throws doubt on the utility of this wide practice. In special circumstances, where people are engaged in extreme physical exertion or exposed to significant cold stress or both the current evidence indicates that vitamin C supplementation may have a considerable beneficial effect, but caution should be exercised in generalising this finding that is mainly based on marathon runners.

### **“Topical treatments for fungal infections of the skin and nails of the foot”**

(CD001434) by F Crawford, S Hollis

#### **Background**

Fungal infections of the feet normally occur in the outermost layer of the skin (epidermis). The skin between the toes is a frequent site of infection which can cause pain and itchiness. Fungal infections of the nail (onychomycosis) can affect the entire nail plate.

#### **Extract from the Implications for Practice findings**

All antifungal compounds demonstrated some success in curing athlete's foot. The best results were observed with the use of allylamines and there is a small amount of evidence that butenafine may be similarly good. Azoles are also very effective and participants should be advised that although all azoles appear to be similarly effective, using an azole cream for 4 weeks is likely to produce better results than using it for one week.

### **“Vaccines for preventing Japanese encephalitis”**

(CD004263) by KL Schiøler, M Samuel, KL Wai

#### **Background**

Vaccination is recognized as the only practical measure for preventing Japanese encephalitis. Production shortage, costs, and issues of licensure impair vaccination programmes in many affected countries. Concerns over vaccine effectiveness and safety also have a negative impact on acceptance and uptake.

#### **Extract from the Implications for Practice findings**

It is not possible to compare the effectiveness of currently used vaccines in preventing clinical disease as only one of three vaccines have been directly investigated for effectiveness in a

RCT. Available evidence shows that two doses of the currently used inactivated Nakayama vaccine is over 95% protective for the first year with subsequent decline in the second year. Protection after two years has not been investigated.

### **“Antibiotics for whooping cough (pertussis)”**

(CD004404) by S Altunaiji, R Kukuruzovic, N Curtis, J Massie

#### **Background**

Whooping cough is a highly contagious disease. Infants are at highest risk of severe disease and death. Erythromycin for 14 days is currently recommended for treatment and contact prophylaxis, but is of uncertain benefit.

#### **Extract from the Implications for Practice findings**

The findings of this review suggest that administration of antibiotics for the treatment of whooping cough is effective in eliminating *B. pertussis* from patients with the disease to render them non-infectious but does not alter the subsequent clinical course of the illness.

### **“Vaccines for preventing smallpox”**

(CD004913) by W Metzger, BG Mordmueller

#### **Background**

Smallpox was eradicated by 1980, but its possible use as a bioweapon has rekindled interest in the development of protective vaccines. Therefore, stockpiled calf lymph-derived vaccines and recently developed cell-cultured vaccines have been investigated to contribute information to smallpox emergency response plans, while newer (non-replication competent) vaccines are developed.

#### **Extract from the Implications for Practice findings**

First- and second-generation vaccines diluted up to at least 1:10 are as effective as undiluted vaccine in terms of clinical success rate and immunogenicity. Dilutions did not reduce the frequency of adverse events. Success rate and immunogenicity were similar in naive and previously vaccinated persons, but adverse events were lower in previously vaccinated persons.

## **Cancer**

### **“Cryotherapy for localised prostate cancer”**

(CD005010) by M Shelley, TJ Wilt, B Coles, MD Mason

#### **Background**

Prostate cancer is a common cancer in elderly men and in some will prove fatal. Standard treatments for localised disease include surgery (radical prostatectomy), radiotherapy and active monitoring. New emerging therapies are being evaluated with the aim of reducing the complication rate associated with standard therapies, as well as developing an effective treatment. One such modality is cryotherapy, a procedure that introduces probes directly into the prostate tumour and kills the malignant cells by a freezing process.

#### **Extract from the Implications for Practice findings**

The available data on PSA response and the number of prostate cancer patients with a negative biopsy following cryotherapy, indicate that this modality has potential benefits for these patients. In addition, although a high percentage of men will experience erectile dysfunction after cryotherapy, the overall complication rate and quality of life may be no worse than that following radical prostatectomy or radiotherapy. However, until properly designed randomised are conducted, it will be difficult to assess the relative merits of cryotherapy in the treatment of localised prostate cancer.

### **“Parenteral anticoagulation for prolonging survival in patients with cancer who have no other indication for anticoagulation”**

(CD006652) by EA Akl, FF Doormaal, M Barba, G Kamath, SY Kim, S Kuipers, S Middeldorp, V Yosucio, HO Dickinson, HJ Schünemann

#### **Background**

Basic research and clinical studies have generated the hypothesis that anticoagulation may improve survival in patients with cancer through an antitumour effect in addition to the antithrombotic effect.

**Extract from the Implications for Practice findings**

This systematic review supports a survival benefit from heparin therapy in cancer patients in general, and in patients with limited SCLC in particular. It also suggests a higher benefit in patients with limited cancer or a longer life expectancy.

## **Macular Degeneration**

### **“Photodynamic therapy for neovascular age-related macular degeneration”**

(CD002030) by R Wormald, J Evans, L Smeeth, K Henshaw

**Background**

In neovascular age-related macular degeneration (AMD) new vessels grow under the retina distorting vision and leading to scarring. This is exacerbated if the blood vessels leak. Photodynamic therapy (PDT) has been investigated as a way to treat the neovascular membranes without affecting the retina.

**Extract from the Implications for Practice findings**

This review provides evidence that photodynamic therapy (PDT) in people with classic and occult choroidal neovascularisation due to age-related macular degeneration is probably effective in preventing visual loss though the size of the effect remains in doubt.

### **“Laser photocoagulation for neovascular age-related macular degeneration”**

(CD004763) by G Virgili, A Bini

**Background**

Laser photocoagulation was the first treatment introduced to try to halt the progression of neovascular age-related macular degeneration (AMD), in which newly formed vessels or choroidal neovascularisation (CNV) grow under the macula leading to the occurrence of a scotoma or blind spot in the central visual field.

**Extract from the Implications for Practice findings**

Laser photocoagulation of extrafoveal CNV is an effective and economical method to try to halt visual loss in patients with extrafoveal well-defined CNV in AMD. The benefits of photocoagulation are limited or delayed for juxtafoveal and subfoveal lesions.

## **Pain Relief**

### **“Paracetamol for pain relief after surgical removal of lower wisdom teeth”**

(CD004487) by K Weil, L Hooper, Z Afzal, M Esposito, HV Worthington, AJ Wijk, P Coulthard

**Background**

Paracetamol has been commonly used for the relief of postoperative pain following oral surgery. In this review we investigated the optimal dose of paracetamol and the optimal time for drug administration to provide pain relief, taking into account the side effects of different doses of the drug. This will inform dentists and their patients of the best strategy for pain relief after the surgical removal of wisdom teeth.

**Extract from the Implications for Practice findings**

Paracetamol (acetaminophen) is an effective drug to use for postoperative pain following oral surgery, and the reporting of adverse events shows it to be a safe drug (number needed to treat (to benefit) (NNT) is 3 for 1000 mg of paracetamol at 6 hours, number needed to treat to harm (NNTH) 33). It is most effective at 1000 mg dose, and can be taken at six hourly intervals without compromising safety.

## Notes for editors

1. The Cochrane Library contains high quality health care information, including Systematic Reviews from The Cochrane Collaboration. These Reviews bring together research on the effects of health care and are considered the gold standard for determining the relative effectiveness of different interventions. The Cochrane Collaboration (<http://www.cochrane.org>) is a UK registered international charity and the world's leading producer of systematic Reviews. It has been demonstrated that Cochrane Systematic Reviews are of comparable or better quality and are updated more often than the Reviews published in print journals<sup>a</sup>.
2. The Cochrane Library can be accessed at <http://www.thecochranelibrary.com>. Guest users may access abstracts for all Reviews in the database, and members of the media may request full access to the contents of the Library. For further information, see contact details below.

A number of countries have national provisions by which some or all of their residents are able to access The Cochrane Library for free. These include:

Australia	<a href="http://www.nicsl.com.au/Cochrane">http://www.nicsl.com.au/Cochrane</a>
England	<a href="http://www.library.nhs.uk">http://www.library.nhs.uk</a>
Finland	<a href="http://www.terveysportti.fi">http://www.terveysportti.fi</a>
India	<a href="http://www.icmr.nic.in/">http://www.icmr.nic.in/</a>
Ireland	<a href="http://www.thecochranelibrary.com">http://www.thecochranelibrary.com</a>
Latin and Central America and Caribbean	<a href="http://cochrane.bireme.br">http://cochrane.bireme.br</a>
New Zealand	<a href="http://www.moh.govt.nz/cochranelibrary">http://www.moh.govt.nz/cochranelibrary</a> or <a href="http://www.nzgg.org.nz/">http://www.nzgg.org.nz/</a> or <a href="http://www.cochrane.org.nz/">http://www.cochrane.org.nz/</a>
Norway	<a href="http://www.cochrane.no">http://www.cochrane.no</a>
Poland	<a href="http://www.aotm.gov.pl">http://www.aotm.gov.pl</a>
Scotland	<a href="http://www.nes.scot.nhs.uk">http://www.nes.scot.nhs.uk</a>
Spain	<a href="http://www.update-software.com/Clibplus/ClibPlus.asp">http://www.update-software.com/Clibplus/ClibPlus.asp</a>
South Africa	<a href="http://www.sahealthinfo.org/evidence/databases.htm">http://www.sahealthinfo.org/evidence/databases.htm</a>
Sweden	<a href="http://www.sbu.se">http://www.sbu.se</a>
Wales	<a href="http://www.thecochranelibrary.com">http://www.thecochranelibrary.com</a>
The Canadian Province of New Brunswick	<a href="http://www.gnb.ca/0003">http://www.gnb.ca/0003</a>
The Canadian Northwest Territories, Nunavut, Yukon	<a href="http://www.thecochranelibrary.com">http://www.thecochranelibrary.com</a>
The Canadian Province of Saskatchewan	<a href="http://www.thecochranelibrary.com">http://www.thecochranelibrary.com</a>
The Canadian Province of Nova Scotia	<a href="http://www.library.dal.ca/kellogg/ahkp/cochrane.htm">http://www.library.dal.ca/kellogg/ahkp/cochrane.htm</a>
The US State of Wyoming	<a href="http://wyld.state.wy.us/dbloginform.html">http://wyld.state.wy.us/dbloginform.html</a>

3. There are also several programmes, such as the Health InterNetwork Access to Research Initiative (HINARI) that provide access in developing countries. To find out whether your country is included in any of these programmes/provisions, or to learn how to get access if you don't already have it, please visit: <http://www.thecochranelibrary.com>.

If you would like to see a full list of Reviews published in the new issue of The Cochrane Library, or would like to request full access to the contents of The Library, please contact:

**Contact:** Jennifer Beal  
**Tel:** +44 (0)1243 770633  
**Email:** [jbeal@wiley.co.uk](mailto:jbeal@wiley.co.uk)

<sup>a</sup> Jadad AR, Cook DJ, Jones A, Klassen TP, Tugwell P, Moher M, et al. Methodology and reports of systematic Reviews and meta-analyses: a comparison of Cochrane Reviews with articles published in paper-based journal.