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This alert highlights some of the key health care conclusions and their implications for practice as published in [The Cochrane Library](#), 2008, Issue 3.

To receive a full copy of the reviews highlighted in this newsletter, or to arrange an interview with an author, please contact Jennifer Beal on +44 (0)1243 770633 / +44 (0) 7802 468863 or by email, jbeal@wiley.com.

Reviews highlighted in this newsletter:

- **[Regular salmeterol for asthma: more evidence of long-term problems](#)**
People with asthma who regularly use salmeterol are at a greater risk of non-fatal adverse events than those using placebos. This conclusion was arrived at by a team of Cochrane Researchers who drew together data from 26 trials involving 62,630 patients.
- **[Foot pain: custom-made insoles offer relief](#)**
Custom-made insoles known as foot orthoses can reduce foot pain caused by arthritis, overly prominent big toe joints and highly arched feet, a new systematic review shows.
- **[After ankle surgery: mobilise with care](#)**
People recover faster after surgery for ankle fracture if they are given a cast or splint that can be removed to let them exercise the ankle, than if their foot is placed in an immobilising plaster cast. If the fracture is stable, then encouraging them to walk soon after surgery is also beneficial. However, increased activity does increase the chance of experiencing problems with the surgical wound.
- **[Childhood diarrhoea: treat with zinc over six months of age](#)**
Zinc supplementation benefits children suffering from diarrhoea in developing countries, but only in infants over six months old, Cochrane Researchers have found. Their study supports World Health Organization (WHO) guidelines for treatment of diarrhoea with zinc, although not in the very young.
- **[Combating urinary schistosomiasis: both metrifonate and praziquantel can be used](#)**
In 2000 the World Health Organization (WHO) stopped recommending metrifonate for treating urinary schistosomiasis because the drug did not appear to be as effective as the treatment of choice, praziquantel. Now a systematic

review published in the latest edition of The Cochrane Library indicates that both metrifonate and praziquantel are effective at treating the infection.

- [Type 2 diabetes: culturally tailored education can improve blood sugar control](#)
Using community-based health advocates, delivering information within same-gender groups or adapting dietary and lifestyle advice to fit a particular community's likely diet can help people with type 2 diabetes control their blood sugar levels, certainly for up to six months, following health education.
- [Can diet alone control type 2 diabetes? No evidence yet](#)
Despite strong evidence that type 2 diabetes can be prevented or at least delayed by a combination of lifestyle changes and good dietary advice, a team of Cochrane Researchers found that there is no indication whether dietary advice alone can prevent the disease.
- [Chronic fatigue patients benefit from cognitive behaviour therapy](#)
Cognitive behaviour therapy is effective in treating the symptoms of chronic fatigue syndrome, according to a recent systematic review carried out by Cochrane Researchers.
- [A selection of other new or updated Cochrane Reviews](#)

Regular salmeterol for asthma: more evidence of long-term problems

People with asthma who regularly use salmeterol are at a greater risk of non-fatal serious adverse events than those using placebos. This conclusion was arrived at by a team of Cochrane Researchers who drew together data from 26 trials involving 62,630 patients.

The researchers found that over a four to six month period, for every thousand people treated for asthma there were 45 who suffered a serious adverse event on regular salmeterol, compared to only 40 if a placebo inhaler was given.

Salmeterol is a long-acting beta2-agonist. It is inhaled by people with asthma twice daily, and relieves symptoms for up to 12 hours. It is generally recommended for use along with corticosteroid inhalers (also known as preventer inhalers).

Over the last decade some researchers and practitioners have expressed anxieties that although salmeterol can relieve asthma symptoms, it could cause long-term problems.

"We found that the biggest increase in risk was seen in people with asthma who were not taking inhaled corticosteroids; however, there is no guarantee that inhaled corticosteroids abolish the risk all together," says lead researcher Christopher Cates who works in Community Health Sciences at St George's, London, UK.

The authors recommend that people should follow the manufacturer's advice not to increase the dose of salmeterol during an exacerbation. Furthermore regular salmeterol should not be used as an alternative to inhaled corticosteroids. Benefits and risks both need to be considered before embarking on long term treatment with regular salmeterol.

Work is currently in progress on a similar assessment of formoterol (another long-acting beta2-agonist).

Cates CJ, Cates MJ. Regular treatment with salmeterol for chronic asthma: serious adverse events. Cochrane Database of Systematic Reviews 2008, Issue 3. Art. No.: CD006363. DOI: 10.1002/14651858.CD006363.pub2. Cochrane Airways Group.

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Foot pain: custom-made insoles offer relief

Custom-made insoles known as foot orthoses can reduce foot pain caused by arthritis, overly prominent big toe joints and highly arched feet, a new systematic review shows.

A team of Cochrane Researchers found that custom orthoses were safe interventions for foot pain in a number of different conditions. However, more research is required to develop an in depth understanding of their effectiveness.

Approximately one in four people are affected by foot pain at any given time. It is often disabling and can impair mood, behaviour, self-care ability and overall quality of life. People suffer from foot pain for a variety of reasons, but pain is more common in the elderly and those with chronic conditions such as arthritis. In the majority of cases, patients undergo a combination of different treatments, one of which may be custom-made foot orthoses (insoles moulded to a cast of the foot).

The Cochrane Systematic Review focuses on the results of 11 trials that together involved 1,332 people. Researchers found that custom foot orthoses can relieve pain within three months in adults with rheumatoid arthritis, as well as in children with juvenile idiopathic arthritis, an early onset form of the disease. Adults with painful highly arched feet or painfully prominent big toe joints also benefited from treatment with orthoses over three and six month periods respectively.

“Custom foot orthoses can be an effective treatment for a variety of conditions, but there are still many causes of foot pain for which the benefit of this treatment is unclear. There is also a lack of data on the long term effects of treating with orthoses,” says Fiona Hawke, the lead researcher, who works at the Central Coast campus of the University of Newcastle, Australia.

Hawke F, Burns J, Radford JA, du Toit V. Custom-made foot orthoses for the treatment of foot pain. Cochrane Database of Systematic Reviews 2008, Issue 3. Art. No.: CD006801. DOI: 10.1002/14651858.CD006801.pub2. Cochrane Musculoskeletal Group.

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After ankle surgery: mobilise with care

People recover faster after surgery for ankle fracture if they are given a cast or splint that can be removed to let them exercise the ankle, than if their foot is placed in an immobilising plaster cast. If the fracture is stable, then encouraging them to walk soon after surgery is also beneficial. However, increased activity does increase the chance of experiencing problems with the surgical wound. These conclusions are published in a systematic review included in the latest update of The Cochrane Library.

Ankle fracture is one of the most common fractures of the lower limb, especially in young men and older women. In about half of the cases, the broken bone requires surgery to realign the bones, and then the lower leg and foot are placed in a cast to immobilise and protect the area.

The problem with immobilisation is that it can lead to pain, stiffness, weakness and swelling in the ankle. A team of Cochrane Researchers therefore looked to see whether there was evidence that using removable casts or splints can improve outcome.

The researchers found only limited evidence, but current research indicated that removable casts or splints which allow the ankle to be exercised soon after surgery reduced pain and increased mobility when compared to using a traditional plaster cast. But early exercise on the ankle also led to increased (albeit mainly minor) adverse events, such as problems with the surgical wound and changes in skin sensation.

“Getting a patient to exercise soon after surgery has significant benefits, but the increased risks to the wound show that you need to make sure that a person can do this safely before supplying them with a removable cast or splint instead of a standard cast,” says Christine Lin, who works at the Musculoskeletal Division of The George Institute for International Health, Australia.

Lin CWC, Moseley AM, Refshauge KM. Rehabilitation for ankle fractures in adults. Cochrane Database of Systematic Reviews 2008, Issue 3. Art. No.: CD005595. DOI: 10.1002/14651858.CD005595.pub2. Cochrane Bone, Joint and Muscle Trauma Group.

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Childhood diarrhoea: treat with zinc over six months of age

Zinc supplementation benefits children suffering from diarrhoea in developing countries, but only in infants over six months old, Cochrane Researchers have found. Their study supports World Health Organization (WHO) guidelines for the treatment of diarrhoea with zinc, although not in the very young.

“Zinc is clearly of benefit to children with diarrhoea,” says lead researcher Marzia Lazzerini, who works at the Unit of Research on Health Services and International Health in Trieste, Italy.

Diarrhoea is a common cause of death for children in the developing world, occurring most often in children aged between six months and five years. It is estimated that two million children die every year as a result of the disease. Zinc is a micronutrient that plays a critical role in physical growth as well as in gastrointestinal and immune function. Its main dietary sources are red meat, fish and dairy products, but these are costly and in short supply in many developing countries. Currently the WHO advises treating a child with zinc for between 10 and 14 days, as well as giving oral rehydration salts to reduce the risk of death due to dehydration.

The Cochrane Researchers identified 18 trials of zinc treatment that together involved 6,165 people from Asia, South America and Africa. Collectively the trials show that zinc is effective in reducing the duration of diarrhoea in children aged between six months and five years. Below six months, two large trials involving 1,334 children, in three continents found no effect.

“These studies back up previous research that shows zinc can play an important role in restoring children with diarrhoea to full health. No conclusions regarding zinc’s impact on hospitalisation or death could be drawn from the trials, but given these results it’s expected that a policy of zinc supplementation during diarrhoea in the community could also reduce hospitalisation rate and mortality,” says Lazznerini.

Lazznerini M, Ronfani L. Oral zinc for treating diarrhoea in children. *Cochrane Database of Systematic Reviews* 2008, Issue 3. Art. No.: CD005436. DOI: 10.1002/14651858.CD005436.pub2. Cochrane Infectious Diseases Group.

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Combating urinary schistosomiasis: both metrifonate and praziquantel can be used

In 2000 the World Health Organization (WHO) stopped recommending metrifonate for treating urinary schistosomiasis because the drug did not appear to be as effective as the treatment of choice, praziquantel. Now a systematic review published in the latest edition of The Cochrane Library indicates that both metrifonate and praziquantel are effective at treating the infection. The team of researchers who carried out this study suggest that metrifonate may be a valid addition to the current one-drug strategy against urinary schistosomiasis.

These findings were reached after considering the data in 24 trials that together involved 6,315 participants.

Urinary schistosomiasis occurs when a tiny worm, a blood fluke (*Schistosoma haematobium*), penetrates a person’s skin while walking or bathing in fresh water contaminated with snails that contain the worm. The fluke lays eggs in the body, and these eggs cause tissue damage that leads to blood in urine and pain on passing urine. If left untreated they can cause serious disease including kidney failure. Estimates indicate that more than 100 million people in African and Eastern Mediterranean regions are infected by the flukes, resulting in considerable social and economic hardships.

Praziquantel requires only one dose and is operationally more convenient, while metrifonate requires three at 14-day intervals. This could be a strong reason for stopping metrifonate use, especially in rural community-based treatment

programmes, where it is difficult to give multiple doses. However, the researchers believe that it would be prudent to have more than one drug in use in order to minimise the chance of the organism developing resistance against the only drug, praziquantel.

“Relying only on praziquantel for treating schistosomiasis is a risky strategy as it could encourage the development of drug resistance,” says lead researcher Anthony Danso-Appiah, who works at the Liverpool School of Tropical Medicine, Liverpool, UK.

Danso-Appiah A, Utzinger J, Liu J, Olliaro P. Drugs for treating urinary schistosomiasis. *Cochrane Database of Systematic Reviews* 2008, Issue 3. Art. No.: CD000053. DOI: 10.1002/14651858.CD000053.pub2. Cochrane Infectious Diseases Group.

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Type 2 diabetes: culturally tailored education can improve blood sugar control

Using community-based health advocates, delivering information within same-gender groups or adapting dietary and lifestyle advice to fit a particular community’s likely diet can help people with type 2 diabetes control their blood sugar levels, certainly for up to six months, following health education. This conclusion was reached by a team of Cochrane Researchers after they considered the data in 11 trials that involved 1,603 people.

Type 2 diabetes is a particular problem for minority ethnic groups who originate from developing countries, but live in upper-middle income or high income countries. These people tend to have low socio-economic status and find that they are faced with many physical, communication and cultural barriers that make it difficult to access healthcare effectively.

The Cochrane Researchers found 11 trials where people had deliberately tried to overcome cultural barriers. In short-term studies, culturally appropriate health education programs led to improved blood-sugar control within 3 months. This benefit was still seen when the 6-month trial periods ended. Knowledge about diabetes and healthy lifestyles also improved over this time period. One-year later, however, the benefits had not been sustained.

"These are important and encouraging results. They show that providing culturally tailored information can help people control their diabetes." says Kamila Hawthorne, who works at the Department of Primary Care and Public Health at the University of Cardiff, UK.

“Diabetes is a chronic condition and complications can develop over many years. We now need to carry out longer term studies with larger groups, all measuring the same results, to discover which type of assistance is most useful and see how to keep the benefits running for longer,” says Hawthorne

Hawthorne K, Robles Y, Cannings-John R, Edwards AGK. Culturally appropriate health education for type 2 diabetes mellitus in ethnic minority groups. *Cochrane Database of Systematic Reviews* 2008, Issue 3. Art. No.: CD006424. DOI: 10.1002/14651858.CD006424.pub2. Cochrane Metabolic and Endocrine Disorders Group.

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Can diet alone control type 2 diabetes? No evidence yet

Despite strong evidence that type 2 diabetes can be prevented or at least delayed by a combination of lifestyle changes and good dietary advice, a team of Cochrane Researchers found that there is no indication whether dietary advice alone can prevent the disease.

Type 2 diabetes is very common and the number of people affected is increasing. The disease is linked to obesity, with 80% of individuals who develop the disease being obese. Therefore as the incidence of obesity rises around the world, so too does the incidence of type 2 diabetes. The World Health Organization (WHO) estimates that more than 180 million people worldwide have diabetes. It claims that this number is likely to more than double by 2030.*

When a team of Cochrane Researchers set out to see if dietary advice alone could help a person with type 2 diabetes, they were only able to identify two trials that together involved just 358 people.

“Considering the importance of this disorder, we were disappointed to find such a small amount of relevant data,” says lead researcher Lucie Nield, who works in Centre for Food, Physical Activity & Obesity, University of Teesside, Middlesbrough.

The two studies did, however, indicate that dietary advice alone could play an important role. One study randomly assigned people to either a control group or a dietary advice group. After six years 67.7% of people in the control group had diabetes, compared with only 43.8% in the advice group. This was a 33% reduction. In another study 12 months of dietary advice led to significant reductions in many diabetes related factors, such as insulin resistance, fasting C-peptide, fasting proinsulin, fasting blood glucose, fasting triglycerides, and fasting cholesterol and PAI-1.

“These two studies give grounds for believing that dietary advice alone could play an important role in reducing type 2 diabetes, but we do need more well-designed, long-term studies before we can work out the best advice to give,” says Nield.

*<http://www.who.int/mediacentre/factsheets/fs312/en/>

Nield L, Summerbell CD, Hooper L, Whittaker V, Moore H. Dietary advice for the prevention of type 2 diabetes mellitus in adults. *Cochrane Database of Systematic Reviews* 2008, Issue 3. Art. No.: CD005102. DOI: 10.1002/14651858.CD005102.pub2. Cochrane Metabolic and Endocrine Disorders Group.

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Chronic fatigue patients benefit from cognitive behaviour therapy

Cognitive behaviour therapy is effective in treating the symptoms of chronic fatigue syndrome, according to a recent systematic review carried out by Cochrane Researchers.

Chronic fatigue syndrome (CFS) is a potentially long-lasting illness that can cause considerable distress and disability. Some estimates suggest it may affect as many as 1 in 100 of the population globally. There is no widely accepted explanation for the disease and patients are currently offered a variety of different treatments.

Cognitive behaviour therapy (CBT) uses psychological techniques to balance negative thoughts that may impair recovery with more realistic alternatives. In treating CFS, these techniques are combined with a gradual increase in activity levels.

The researchers looked at data from 15 studies involving a total of 1,043 patients with CFS. The studies compared the effects of CBT with those of usual care and other psychological therapies and suggest that in both cases CBT is more effective at reducing the severity of symptoms, provided patients persist with treatment.

Further research is required to determine whether CBT is more beneficial than other forms of treatment, such as exercise and relaxation therapies. The researchers also suggest that CBT could be more effective if used as part of a combination treatment approach.

“CFS is a challenging illness for patients, and there is ongoing controversy about its causes. There remain unanswered questions, but the available evidence is clear – CBT can help many people with CFS”, says lead researcher Jonathan Price, who works at the University of Oxford in the UK.

Price JR, Mitchell E, Tidy E, Hunot V. Cognitive behaviour therapy for chronic fatigue syndrome in adults. Cochrane Database of Systematic Reviews 2008, Issue 3. Art. No.: CD001027. DOI: 10.1002/14651858.CD001027.pub2. Cochrane Depression, Anxiety and Neurosis Group.

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Extracts from a selection of other Cochrane Systematic Reviews

This section contains extracts from 11 selected new or updated reviews also publishing in The Cochrane Library 2008, Issue 3. These extracts have been divided into headings of:

[Respiratory](#)

[Pain](#)

[Psychological](#)

[Policy](#)

[Internal](#)

[Disease](#)

[Cancer](#)

[Smoking](#)

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 / +44 (0) 7802 468863 or by email, jbeal@wiley.com.

Respiratory

"Combination fluticasone and salmeterol versus fixed dose combination budesonide and formoterol for chronic asthma in adults and children"

(CD004106) by Lasserson et al

Background

Combination therapies are frequently recommended as maintenance therapy for people with asthma, whose disease is not adequately controlled with inhaled steroids.

Fluticasone/salmeterol (FP/SAL) and budesonide/formoterol (BUD/F) have been assessed against their respective monocomponents, but there is a need to compare these two therapies on a head-to-head basis.

Extract from the Implications for Practice findings

The confidence intervals for our estimates in our primary outcomes include no statistically significant difference. However, the width of the confidence intervals for these endpoints also include possibly meaningful differences between the treatments in either direction and as such more evidence would help to improve their precision. Serious adverse events were too infrequent to generate findings which could be easily interpreted. Our analyses could not detect significant differences between these drugs in terms of lung function and symptoms. These observations pertain to adults and adolescents whose asthma is not adequately controlled with high doses of inhaled steroids.

"Intranasal corticosteroids for nasal airway obstruction in children with moderate to severe adenoidal hypertrophy"

(CD006286) by Zhang et al

Background

Adenoidal hypertrophy is generally considered a common condition of childhood. When obstructive sleep apnoea or cardio-respiratory syndrome occurs, adenoidectomy is generally indicated. In less severe cases, non-surgical interventions may be considered, however few medical alternatives are currently available. Intranasal steroids may be used to reduce nasal airway obstruction.

Extract from the Implications for Practice findings

Limited evidence suggests that intranasal corticosteroids may significantly improve nasal obstruction symptoms in children with moderate to severe adenoidal hypertrophy and that this improvement may be associated with a reduction in adenoid size. Given the potential clinically relevant benefits and relatively good tolerability of intranasal corticosteroids, these drugs may be indicated as an alternative treatment for children with moderate to severe adenoidal hypertrophy when adenoidectomy is not urgently required or not available.

"Non-invasive positive pressure ventilation (CPAP or bilevel NPPV) for cardiogenic pulmonary edema"

(CD005351) by Vital et al

Background

Non-invasive positive pressure ventilation (NPPV) has been widely used to alleviate signs and symptoms of respiratory distress due to cardiogenic pulmonary edema. NPPV prevents alveolar collapse and helps redistribute intra-alveolar fluid, improving pulmonary compliance and reducing the pressure of breathing.

Extract from the Implications for Practice findings

Data from RCTs have demonstrated that NPPV (CPAP and bilevel NPPV) is effective in reducing hospital mortality, intubation rate and ICU length of stay. In addition, NPPV resulted in faster improvement and was better tolerated than standard medical care. Further, our meta-analysis did not demonstrate an increase in the incidence of adverse events or AMI during and after NPPV application. CPAP should be considered as first option in the choosing of NPPV because the evidence for bilevel NPPV remains inconclusive due to insufficient patient numbers recruited to the studies to detect statistical power to define its effectiveness.

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Pain

"Normobaric and hyperbaric oxygen therapy for migraine and cluster headache"

(CD005219) by Bennett et al

Background

Migraine and cluster headaches are severe and disabling. Migraine affects up to 18% of women, while cluster headaches are much less common (0.2% of the population). A number of acute and prophylactic therapies are available. Hyperbaric oxygen therapy (HBOT) is the therapeutic administration of 100% oxygen at environmental pressures greater than one atmosphere, while normobaric oxygen therapy (NBOT) is oxygen administered at one atmosphere.

Extract from the Implications for Practice findings

While there is some evidence that HBOT may effectively terminate migraine headache in a general population of migraineurs, the practical problems involved in delivery of therapy suggest that HBOT should be reserved for those migraineurs resistant to standard pharmacological therapies. There is, however, insufficient evidence of the efficacy of HBOT in this subgroup of patients to recommend HBOT as a routine therapy. HBOT cannot be recommended as a prophylactic therapy for migraine. There is no evidence to support the practice of administering NBOT to patients with acute migrainous headache.

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Psychological

"Psychosocial interventions for prevention of psychological disorders in law enforcement officers"

(CD005601) by Peñalba et al

Background

Psychosocial interventions are widely used for the prevention of psychological disorders in law enforcement officers.

Extract from the Implications for Practice findings

There is insufficient evidence to show whether police officers benefit from psychosocial interventions including exercise-based interventions. There is lack of evidence that psychosocial interventions can reduce stress-related psychological symptoms.

"Cannabis and schizophrenia"

(CD004837) by Rathbone et al

Background

Many people with schizophrenia use cannabis and its effects on the illness are unclear.

Extract from the Implications for Practice findings

1. For people with schizophrenia – At present, the data is too limited to support, or refute, the use of cannabis/cannabinoid compounds for people suffering with schizophrenia.
2. For clinicians – There is insufficient trial-based evidence to support or refute the use of cannabis based interventions. Clearly the clinician cannot be sure that treating patients with cannabis/cannabinoid compounds is desirable practice. It is understandable if clinicians, and people with schizophrenia, felt that treatment outside of a randomised controlled trial would be difficult to justify.
3. For policy makers – There is an absence of robust data regarding the clinical implications of using cannabis based compounds in schizophrenia.

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Policy

"Printed educational materials: effects on professional practice and health care outcomes"

(CD004398) by Farmer et al

Background

Printed educational materials (PEMs) are widely used passive dissemination strategies to improve knowledge, awareness, attitudes, skills, professional practice and patient outcomes. Traditionally they are presented in paper formats such as monographs, publication in peer-reviewed journals and clinical guidelines and appear to be the most frequently adopted method for disseminating information.

Extract from the Implications for Practice findings

PEMs are a commonly used method of disseminating information to healthcare professionals. They can be distributed to large numbers of healthcare professionals and are relatively cheap. Studies of the effects of PEMs generally show small improvements in the process of care. Only a few studies have evaluated the effects of PEMs and have generally shown small deteriorations of uncertain clinical significance. However these studies tend to be small and methodologically weak. Further there is little evidence about how to optimize educational materials. Those interested in using PEMs should be aware of the potentially small effects and limitations of the current evidence.

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Internal

"Open surgical procedures for incisional hernias"

(CD006438) by den Hartog et al

Background

Incisional hernias occur frequently after abdominal surgery and can cause serious complications. The choice of a type of open operative repair is controversial. Determining the type of open operative repair is controversial, as the recurrence rate may be as high as 54%.

Extract from the Implications for Practice findings

There is good evidence from three trials included in this review that open mesh repair is superior to suture repair in terms of recurrences, but inferior in the occurrence of wound infection. There is insufficient evidence from five trials in this review as to which type of mesh or which position of the mesh (on- or sublay) should be used in open ventral hernia repair. Also, insufficient evidence was found to advocate the use of the components separation technique.

"Interventions for renal vasculitis in adults"

(CD003232) by Walters et al

Background

Renal vasculitis presents as rapidly progressive glomerulonephritis (RPGN) which comprises of a group of conditions characterised by acute kidney failure (AKF), haematuria and proteinuria. Treatment of these conditions comprises steroid and non-steroid agents in combination with plasma exchange in several situations. Although immunosuppression overall has been very successful in treatment of these conditions, many questions remain unanswered in terms of dose and duration of therapy and the use of plasma exchange.

Extract from the Implications for Practice findings

Plasma exchange is effective in patients with severe ARF secondary to vasculitis. On current data, the use of pulse CPA results in an increased risk of relapse when compared to continuous use but a reduced total dose. The use of cotrimoxazole is likely to be beneficial to prevent relapse of vasculitis. AZA is effective as maintenance therapy once remission has been achieved.

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Disease

"Interventions for skin changes caused by nerve damage in leprosy"

(CD004833) by Reinar et al

Background

More than three million persons are disabled by leprosy worldwide. The main complication of sensory nerve damage is neuropathic ulceration, particularly of the feet. In this review we explored interventions that can prevent and treat secondary damage to skin and limbs.

Extract from the Implications for Practice findings

Which of the interventions are the most effective? Topical ketanserin may be more effective than clioquinol cream or zinc paste and topical phenytoin may be more effective than saline dressing in ulcer healing. However, this is based on very weak evidence, for topical ketanserin only one study tested the comparison and for phenytoin the summary analysis of

two studies did not show a very clear effect. For the other comparisons the results were equivocal.

"Vaccines for post-exposure prophylaxis against varicella (chickenpox) in children and adults"

(CD001833) by Macartney and McIntyre

Background

Live attenuated varicella vaccines for the prevention of varicella (chickenpox) has been demonstrated both in randomised controlled trials (RCTs) and in population-based immunisation programmes in countries such as the United States. However, many countries do not routinely immunise children against varicella, and exposures continue to occur. Although the disease is often mild, complications such as secondary bacterial infection, pneumonitis and encephalitis occur in about 1% of cases, usually leading to hospitalisation. The use of varicella vaccine in persons who have recently been exposed to the varicella zoster virus has been studied as a form of post-exposure prophylaxis (PEP).

Extract from the Implications for Practice findings

This review provides information relevant to immunisation policy makers. Although routine childhood varicella vaccination has been provided through publicly funded immunisation programmes in a few countries such as the USA, Canada, and Australia (Macartney 2005; MMWR 1996; NACI 2004) experience indicates that VZV circulation persists, despite moderately high vaccine coverage, and the risk of exposure of unimmunised individuals to those with varicella also persists. The findings of this review are particularly applicable to young children in the household or other close contact settings. However safety data are not available.

"Probiotics for induction of remission in Crohn's disease"

(CD006634) by Butterworth et al

Background

Crohn's disease has a high morbidity and there is no known cure. Current treatments have multiple side effects and an effective treatment with minimal side effects is desired. Probiotics have been proposed as such a treatment but their efficacy is undetermined. There is some evidence that probiotics are effective in other conditions affecting the gastrointestinal tract and they are popular with patients. They are thought to work through competitive action with commensal and pathogenic flora, influencing the immune response.

Extract from the Implications for Practice findings

There is currently no evidence to support the use of probiotics for the induction of remission in Crohn's disease. The use of probiotics as induction therapy for Crohn's disease cannot be recommended at this time.

"Budesonide for induction of remission in Crohn's disease"

(CD000296) by Seow et al

Background

Corticosteroids play a key role in the induction of remission in Crohn's disease. However, corticosteroids can cause significant adverse events. Budesonide is an alternate enteral glucocorticoid with limited systemic bioavailability.

Extract from the Implications for Practice findings

Budesonide is more effective than placebo or mesalamine for induction of remission in active ileo-caecal Crohn's disease. Although short-term efficacy with budesonide is less than with conventional steroids, particularly in patients with severe disease or more extensive colonic involvement, the likelihood of adverse events and adrenal suppression is lower.

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Cancer

"Fraction size in radiation treatment for breast conservation in early breast cancer"

(CD003860) by James et al

Background

Shortening the duration of radiation therapy would benefit women with early breast cancer treated with breast conservation. It may also improve access to radiation therapy by improving efficiency in radiation oncology departments globally. This can only happen if the shorter treatment is as effective and safe as conventional radiation therapy.

Extract from the Implications for Practice findings

In selected women with early breast cancer (node negative tumours with negative margins and size 5 cm or less) shortened fractionation regimens may be considered.

"Chemotherapeutic wafers for High Grade Glioma"

(CD007294) by Hart et al

Background

Standard treatment for high grade glioma (HGG) usually entails biopsy or surgical resection where possible followed by radiotherapy. Systemic chemotherapy is usually only given in selected cases and its use is often limited by side effects. Implanting wafers impregnated with chemotherapy agents into the resection cavity represents a novel means of delivering drugs to the central nervous system (CNS) with fewer side effects. It is not clear how effective this modality is or whether it should be recommended as part of standard care for HGG.

Extract from the Implications for Practice findings

There is evidence that Gliadel increases survival in primary therapy for GBM but not for recurrent disease, and that this benefit is without a significant increase in adverse events. There is no evidence of enhanced PFS or QOL. These findings are based predominantly on two well designed trials with a total of just under 300 patients. In a well selected subgroup of patients presenting with presumed GBM, Gliadel warrants consideration for use as primary therapy. Decisions on the use of Gliadel need to be made on an individual basis as part of a multi-disciplinary team discussion.

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Smoking

"Nicotine receptor partial agonists for smoking cessation"

(CD006103) by Cahill et al

Background

Nicotine receptor partial agonists may help people to stop smoking by a combination of maintaining moderate levels of dopamine to counteract withdrawal symptoms (acting as an agonist) and reducing smoking satisfaction (acting as an antagonist). Varenicline was developed as a nicotine receptor partial agonist from cytisine, a drug widely used in central and Eastern Europe for smoking cessation. The first trial reports of varenicline were released in 2006, and further trials have now been published or are currently underway.

Extract from the Implications for Practice findings

- Varenicline increased the chances of successful long-term smoking cessation by between two- and three-fold compared with pharmacologically unassisted quit attempts.
- More people quit successfully with varenicline than with bupropion.
- One open-label trial of varenicline versus nicotine replacement therapy demonstrated a modest benefit of varenicline.
- The effectiveness of varenicline as an aid to relapse prevention has not been clearly established.
- The main adverse effect of varenicline was nausea, but mostly at mild to moderate levels and tending to subside over time.
- Possible links with serious adverse events, including depressed mood, agitation and suicidal thoughts, are currently under review.

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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^a.
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4. A **new feature** from The Cochrane Library for 2008: a collection of **podcasts** on a selection of Cochrane Reviews by the authors will be available from <http://www.cochrane.org/podcasts> from Wednesday 16th July 2008.

For Issue 3, 2008, the podcasts are:

- **Salmeterol for asthma: more evidence of long-term problem**
- **Foot pain: custom-made insoles offer relief**
- **After ankle surgery: mobilise with care**
- **Removing ovaries during hysterectomy: effects remain unknown**
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- **Physical activity programs for persons with dementia**

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^a 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.