An international organisation that aims to help people make well-informed decisions about healthcare by preparing, maintaining and promoting the accessibility of systematic reviews of the effects of healthcare interventions.

Cochrane Oral Health Group

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Scope of the Group:

The Cochrane Oral Health Group aims to produce systematic reviews which primarily include all randomised controlled trials (RCTs) of oral health. Oral health is broadly conceived to include the prevention, treatment and rehabilitation of oral, dental and craniofacial diseases and disorders.

Editorial

Input and Output

It is a pleasure to report that the UK Department of Health has agreed to provide core funding for the Oral Health Group, along with 24 other UK based groups, for a further five years. This means that until 2009, we are able to secure the invaluable support of three key members of the administrative team, Emma Tavender, Luisa Fernandez and Sylvia Bickley. This generous award is a direct response to the Oral Health Group’s high productivity (as illustrated on page 2).

The Department of Health’s financial support is however (continued on page 2)
only a small part of the true investment in the Group. All members of the editorial team undertake their work voluntarily with the permission of their employers and an additional 393 reviewers and referees around the world (including 50 in the developing world) also volunteer their efforts. Across the review groups of the Collaboration, the return on this kind of investment is difficult to estimate but, the broad extent of the print and online dissemination of Cochrane evidence has recently been revealed by an initial inventory assembled by the Canadian Cochrane Centre (www.cochrane.org/reviews/impact/index.htm).

And yet, if we are to make sense of the vast number of reports of clinical trials in the world's medical literature (18,587 in the Oral Health Groups' Trials Register alone), much remains to be done. Undoubtedly there are other agencies around the world that may be willing to fund reviews, and the editorial group would be delighted to help others to prepare grant applications, provided these do not contravene the principles described on pages 15-17.

Prof Bill Shaw
Co-ordinating Editor

Progress of the Group

Strength to strength!

by Emma Tavender, Review Group Co-ordinator.

Once again, 2004 has been a very busy and productive year for the Cochrane Oral Health Group. I would like to thank all those who have contributed to the work of the Group, without you, we would not have achieved so much (see graph). With the publication of Issue 3, July 2004 of The Cochrane Library there will be 43 reviews and 39 protocols published by the Group, the abstracts for the new reviews are on pages 3 to 9.
Retention procedures for stabilising tooth position after treatment with orthodontic braces

Littlewood SJ, Millett DT, Doubleday B, Bearn DR, Worthington HV

Background: Retention is the phase of orthodontic treatment that attempts to keep teeth in the corrected positions after orthodontic (dental) braces. Without a phase of retention there is a tendency for the teeth to return to their initial position (relapse). To prevent relapse almost every patient who has orthodontic treatment will require some type of retention.

Objectives: To evaluate the effectiveness of different retention strategies used to stabilise tooth position after orthodontic braces.

Search strategy: The Cochrane Oral Health Group's Trials Register, CENTRAL, MEDLINE and EMBASE were searched. Several journals were handsearched. No language restrictions were applied. Authors of randomised controlled trials (RCTs) were identified and contacted to identify unpublished trials. Most recent search: December 2002.

Selection criteria: RCTs on children and adults, who have had retainers fitted or adjunctive procedures undertaken, following orthodontic treatment with braces to prevent relapse. The outcomes are: how well the teeth are stabilised, survival of retainers, adverse effects on oral health and quality of life.

Data collection and analysis: Screening of eligible studies, assessment of the methodological quality of the trials and data extraction were conducted in duplicate and independently by two reviewers. As no two studies compared the same retention strategies (interventions) it was not possible to combine the results of any studies.

Main results: Four trials satisfied the inclusion criteria. These trials all compared different interventions: circumferential supracrestal fiberotomy (CSF) combined with full-time removable retainer versus a full-time removable retainer alone; circumferential supracrestal fiberotomy (CSF) combined with a nights-only removable retainer versus a nights-only removable retainer alone; removable Hawley retainer versus a clear overlay retainer; and three types of fixed retainers versus a removable retainer. There was weak unreliable evidence, based on data from one trial, that there was a statistically significant increase in stability in both the mandibular (p < 0.001) and maxillary anterior segments (p < 0.001) when the CSF was used, compared with when it was not used. There was also weak, unreliable evidence that teeth settle quicker with a Hawley retainer than with a clear overlay retainer after 3 months. The quality of the trial reports was generally poor.

Reviewers' conclusions: There are insufficient research data on which to base our clinical practice on retention at present. There is an urgent need for high quality randomised controlled trials in this crucial area of orthodontic practice.


Combinations of topical fluoride (toothpastes, mouthrinses, gels, varnishes) versus single topical fluoride for preventing dental caries in children and adolescents

Marinho VCC, Higgins JPT, Sheiham A, Logan S

Background: Topical fluoride therapy (TFT) in the form of toothpastes, mouthrinses, varnishes and gels are effective caries preventive measures. However, there is uncertainty about the relative value of these interventions when used together.

Objectives: To compare the effectiveness of two TFT modalities combined with one of them alone (mainly toothpaste) when used for the prevention of dental caries in children.

Search strategy: We searched the Cochrane Oral Health Group's Trials Register (May 2000), the Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library Issue 2, 2000), MEDLINE (1966 to January 2000), plus several other databases. We handsearched journals, reference lists of articles and contacted selected authors and manufacturers.

Selection criteria: Randomized or quasi-randomized controlled trials with blind outcome assessment, comparing fluoride varnish, gel, mouthrinse, or toothpaste in combination with each other in children up to 16 years during at least 1 year. The main outcome was caries increment measured by the change in decayed, missing and filled tooth surfaces (D(M)FS).
Data collection and analysis: Inclusion decisions, quality assessment and data extraction were duplicated in a random sample of one third of studies, and consensus achieved by discussion or a third party. Authors were contacted for missing data. The primary measure of effect was the prevented fraction (PF) that is the difference in mean caries increments between the 'treatment' and 'control' groups expressed as a percentage of the mean increment in the control group. Random effects meta-analyses were performed where data could be pooled.

Main results: Eleven of the 12 included studies contributed data for the meta-analyses. For the nine trials that provided data for the main meta-analysis on the effect of fluoride mouthrinses, gels or varnishes used in combination with toothpaste (involving 4026 children) the D(M)FS pooled PF was 10% (95% CI, 2% to 17%; p = 0.01) in favour of the combined regimens. Heterogeneity was not substantial in these results (I square = 32%). The separate meta-analyses of fluoride gel or mouthrinse combined with toothpaste versus toothpaste alone favoured the combined regimens, but differences were not statistically significant; the significant difference in favour of the combined use of fluoride varnish and toothpaste accrues from a very small trial and appears likely to be a spurious result. Not all other combinations of possible practical value were tested in the included studies. The only other statistically significant result was in favour of the combined use of fluoride gel and mouthrinse in comparison to gel alone (pooled DMFS PF 23%; 95% CI, 4% to 43%; p = 0.02), based on two trials. No other combinations of TFT were consistently superior to a single TFT.

Reviewers’ conclusions: Topical fluorides (mouthrinses, gels, or varnishes) used in addition to fluoride toothpaste achieve a modest reduction in caries compared to toothpaste used alone. No conclusions about any adverse effects could be reached, because data were scarcely reported in the trials.


One topical fluoride (toothpastes, or mouthrinses, or gels, or varnishes) versus another for preventing dental caries in children and adolescents
Marinho VCC, Higgins JPT, Sheiham A, Logan S

Background: Topical fluorides in the form of toothpaste, mouthrinse, varnish and gel are effective caries preventive measures. However, there is uncertainty about the relative value of these interventions.

Objectives: To compare the effectiveness of one form of topical fluoride intervention with another when used for the prevention of dental caries in children.

Search strategy: We searched the Cochrane Oral Health Group's Trials Register (May 2000), the Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library Issue 2, 2000), MEDLINE (1966 to January 2000), plus several other databases. We handsearched journals, reference lists of articles and contacted selected authors and manufacturers.

Selection criteria: Randomized or quasi-randomized controlled trials with blind outcome assessment, comparing fluoride varnish, gel, mouthrinse, or toothpaste with each other in children up to 16 years during at least 1 year. The main outcome was caries increment measured by the change in decayed, missing and filled tooth surfaces (D(M)FS).

Data collection and analysis: Inclusion decisions, quality assessment and data extraction were duplicated in a random sample of one third of studies, and consensus achieved by discussion or a third party. Authors were contacted for missing data. The primary measure of effect was the prevented fraction (PF) that is the difference in mean caries increments between the 'experimental' and 'control' groups expressed as a percentage of the mean increment in the control group. Random effects meta-analyses were performed where data could be pooled.

Main results: There were 17 studies included, and 15 contributed data for the meta-analyses. Fluoride toothpaste was not significantly different from mouthrinse (pooled DMFS PF 0%; 95% CI, -18% to 19%; p = 0.94), or gel (pooled DMFS PF 0%; 95% CI, -21% to 21%; p = 1), or both gel and mouthrinse (pooled DMFS PF 1%; 95% CI, -13% to 14%; p = 0.94); heterogeneity was substantial. Results from the single trial comparing toothpaste with varnish (in deciduous teeth) were inconclusive (dfs PF 5%; CI not obtainable). The pooled results from the comparisons of fluoride varnish with mouthrinse was a non-significant difference favouring varnish (DMFS PF 10%; 95% CI, -12% to 32%; p = 0.40), but this result was not robust to sensitivity analysis performed, and heterogeneity was considerable. Results from the single trial comparing varnish with gel (14%, 95% CI, -12% to 40%; p = 0.30) and the single trial comparing gel with mouthrinse (-14% DMFS PF; 95% CI, -40% to 12%; p = 0.30) were
inconclusive (favoured varnish and mouthrinse respectively).

**Reviewers’ conclusions:** Fluoride toothpastes in comparison to mouthrinses or gels appear to have a similar degree of effectiveness for the prevention of dental caries in children. There is no clear suggestion that fluoride varnish is more effective than mouthrinses and the evidence for the comparative effectiveness of fluoride varnishes and gels, and mouthrinses and gels is inconclusive. No conclusions about adverse effects could be reached, because no data were reported on in the trials. Acceptance is likely to be greater for fluoride toothpaste.

**Citation:** Marinho VCC, Higgins JPT, Sheiham A, Logan S. One topical fluoride (toothpastes, or mouthrinses, or gels, or varnishes) versus another for preventing dental caries in children and adolescents (Cochrane Review). In: The Cochrane Library, Issue 2, 2004. Chichester, UK: John Wiley & Sons, Ltd.

**Direct versus indirect veneer restorations for intrinsic dental stains**
Wakiaga J, Brunton P, Silikas N, Glenny AM

**Background:** Patients with discoloured teeth frequently present to the dentist requesting restorations designed to improve their appearance. For teeth that are sound, this might include the use of a veneer restoration. The veneer acts as a thin layer of a material covering the labial surface of a tooth and can be applied directly to the tooth, or by using indirect methods.

**Objectives:** To examine the effectiveness of direct versus indirect laminate veneer restorations.

**Search strategy:** The following electronic databases were searched: The Cochrane Oral Health Group’s Trials Register, The Cochrane Central Register of Controlled Trials (CENTRAL), (The Cochrane Library Issue 3, 2002), MEDLINE (1980 to 19/11/2002) and EMBASE (1980 to 19/11/2002). There was no restriction on language.

**Selection criteria:** All randomised controlled trials (RCTs) of participants with permanent anterior teeth suitable for restorations using laminate venerees, comparing direct (different composite materials) and indirect techniques for making dental venerees. The indirect restorations may be either composite or porcelain. The primary outcome was restoration failure.

**Data collection and analysis:** Assessment of relevance and validity and data extraction were conducted in triplicate. Authors of the primary studies were contacted to provide additional information as necessary.

**Main results:** Six full publications were screened as being potentially relevant to the review, only one trial was found to meet the review’s inclusion criteria. Although the trial met the review’s inclusion criteria with regard to participant characteristics, interventions and outcomes assessed, problems with the reporting of the data prevented any statistical analysis of the results.

**Reviewers’ conclusions:** There is no reliable evidence to show a benefit of one type of veneer restoration (direct or indirect) over the other with regard to the longevity of the restoration.

**Citation:** Wakiaga J, Brunton P, Silikas N, Glenny AM. Direct versus indirect veneer restorations for intrinsic dental stains (Cochrane Review). In: The Cochrane Library, Issue 2, 2004. Chichester, UK: John Wiley & Sons, Ltd.

**Stabilisation splint therapy for temporomandibular pain dysfunction syndrome**
Al-Ani MZ, Davies SJ, Gray RJM, Sloan P, Glenny AM

**Background:** Pain dysfunction syndrome (PDS) is the most common temporomandibular disorder (TMD). There are many synonyms for this condition including facial arthromyalgia, TMJ dysfunction syndrome, myofacial pain dysfunction syndrome, craniomandibular dysfunction and myofacial pain dysfunction. The aetiology of PDS is multifactorial and many different therapies have been advocated.

**Objectives:** To establish the effectiveness of stabilisation splint therapy in reducing symptoms in patients with pain dysfunction syndrome.

**Search strategy:** Electronic databases (including the Cochrane Oral Health Group’s Trials Register; the Cochrane Central Register of Controlled Trials (CENTRAL); The Cochrane Library Issue 2, 2003; MEDLINE (1966 to June 2001); EMBASE (1966 to June 2001)) were searched. Handsearching of relevant journals was undertaken and reference lists of included studies screened. Experts in the field were contacted to identify unpublished articles. There was no language restriction.

**Selection criteria:** Randomised or quasi-randomised controlled trials (RCTs), in which splint therapy was compared concurrently to no treatment, other occlusal appliances, or any other active intervention.

**Data collection and analysis:** Data extraction was carried out independently and in duplicate. Validity assessment of the included trials was carried out at the same time as data extraction. Discrepancies were discussed and a third review-
er consulted. The author of the primary study was contacted where necessary. The studies were grouped according to treatment type and duration of follow up.

Main results: Twenty potentially relevant RCTs were identified. Eight trials were excluded leaving 12 RCTs for analysis. Stabilisation splint therapy was compared to: acupuncture, bite plates, biofeedback/stress management, visual feedback, relaxation, jaw exercises, non-occluding appliance and minimal/no treatment. There was no evidence of a statistically significant difference in the effectiveness of stabilisation splint therapy (SS) in reducing symptoms in patients with pain dysfunction syndrome compared with other active treatments. There is weak evidence to suggest that the use of SS for the treatment of PDS may be beneficial for reducing pain severity, at rest and on palpation, when compared to no treatment.

Reviewers’ conclusions: There is insufficient evidence either for or against the use of stabilisation splint therapy for the treatment of temporomandibular pain dysfunction syndrome. This review suggests the need for further, well conducted RCTs that pay attention to method of allocation, outcome assessment, large sample size, and enough duration of follow up. A standardisation of the outcomes of the treatment of PDS should be established in the RCTs.


Interventions for treating oral candidiasis for patients with cancer receiving treatment
Clarkson JE, Worthington HV, Eden OB

Background: Treatment of cancer is increasingly effective but is associated with short and long-term side effects. Oral side effects, including oral candidiasis, remain a major source of illness despite the use of a variety of agents to treat them.

Objectives: To assess the effectiveness of interventions for the treatment of oral candidiasis for patients with cancer receiving chemotherapy and or radiotherapy.

Search strategy: Computerised searches of Cochrane Oral Health Group’s Trials Register, CENTRAL, MEDLINE and EMBASE were undertaken. Reference lists from relevant articles were searched and the authors of eligible trials were contacted to identify trials and obtain additional information. Date of the most recent searches: August 2003: (CENTRAL) (The Cochrane Library Issue 3, 2003).

Selection criteria: All randomised controlled trials comparing agents prescribed to treat oral candidiasis in people receiving chemotherapy or radiotherapy for cancer. The outcomes were eradication of oral candidiasis, dysphagia, systemic infection, amount of analgesia, length of hospitalisation, cost and patient quality of life.

Data collection and analysis: Data were independently extracted, in duplicate, by two reviewers. Authors were contacted for details of randomisation and withdrawals and a quality assessment was carried out. The Cochrane Oral Health Group statistical guidelines were followed and relative risk values calculated using random effects models where significant heterogeneity was detected (P < 0.1).

Main results: Eight trials involving 418 patients, satisfied the inclusion criteria and are included in this review. Only two agents, each in single trials, were found to be effective for eradicating oral candidiasis. A drug absorbed from the gastrointestinal tract, ketoconazole, was more beneficial than placebo in eradicating oral candidiasis (relative risk (RR) = 0.35, 95% confidence interval (CI) 0.20 to 0.61) and clotrimazole, at a higher dose of 50 mg was more effective than a lower 10 mg dose in eradicating oral candidiasis, when assessed mycologically (RR = 0.47, 95% CI 0.25 to 0.89). Another trial demonstrated no statistically significant difference between a 10 mg dose of the partially absorbed drug, clotrimazole, and placebo. No differences were found when comparing different absorbed drugs; and comparing absorbed drugs with drugs which are not absorbed.

Reviewers’ conclusions: There is weak and unreliable evidence that the absorbed drug, ketoconazole, may eradicate oral candidiasis and that a higher dose of the partially absorbed drug, clotrimazole, may give greater benefit than a lower 10 mg dose, however, researchers may wish to prevent rather than treat oral candidiasis. Further well designed, placebo-controlled trials assessing the effectiveness of old and new interventions for treating oral candidiasis are needed.


(Please note: An updated search has not found any more trials to include in this update of the original review, only four more excluded studies. This update has updated references to other
Domestic violence screening and intervention programmes for adults with dental or facial injury
Coulthard P, Yong S, Adamson L, Warburton A, Worthington HV, Esposito M

Background: Domestic violence exists in all communities across the world. Healthcare services have a pivotal role in the identification, assessment and response to domestic violence. As the face is a common target in assault, dentists and oral and maxillofacial surgeons are in a unique position to screen for domestic violence in the context of presentation of dental and facial injury. Owing to lack of training, dentists and oral and maxillofacial surgeons may not be the best persons to give advice to someone experiencing domestic violence. Improper advice such as encouragement to leave an abusive relationship may escalate the frequency of violence. It may be more appropriate to refer to specialist agencies for intervention and support. It would, therefore be useful to know whether screening and intervention programmes are effective.

Objectives: (1) To assess the benefits and harms of intervention programmes employed to reduce and/or prevent domestic violence in adults with dental and/or facial injuries. (2) To assess the benefits and harms of screening and the use of different screening tools in the detection of the proportion of adult victims of domestic violence who present with dental and/or facial injury.

Search strategy: We searched the Cochrane Oral Health Group’s Trials Register, the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, EMBASE, CINAHL, PsycINFO and Lilacs databases. No language restrictions were applied. Personal contacts were used and international domestic violence organisations were contacted to identify any unpublished trials. Last search was done February 2004.

Selection criteria: Randomised controlled trials involving adults aged 16 years and over presenting with dental and/or facial injury relating to domestic violence in any healthcare setting.

Data collection and analysis: Screening of eligible studies was conducted in duplicate and independently by two reviewers. Results were to be expressed as random effects models using weighted mean differences for continuous outcomes and relative risk for dichotomous outcomes with 95% confidence interval. Heterogeneity was to be investigated including both clinical and methodological factors.

Main results: No eligible randomised controlled trials (RCTs) were identified.

Reviewers’ conclusions: There is no evidence to support or refute that screening for domestic violence in adults with dental or facial injury is beneficial nor that it causes harm. Screening tools to detect domestic violence exist but no RCTs have specifically evaluated their effectiveness for patients presenting with facial and/or dental injuries. There is also lack of evidence that intervention programmes are effective at reducing frequency of physical assaults and at reducing the severity of facial injuries.


Penicillins for the prophylaxis of bacterial endocarditis in dentistry
Oliver R, Roberts GJ, Hooper L

Background: Many dental procedures cause bacteraemia and it is believed that this may lead to bacterial endocarditis (BE) in a few people. Guidelines in many countries recommend that prior to invasive dental procedures antibiotics are administered to people at high risk of endocarditis. However, it is unclear whether the potential risks of this prophylaxis outweigh the potential benefits.

Objectives: To determine whether prophylactic penicillin administration compared to no such administration or placebo before invasive dental procedures in people at increased risk of BE influences mortality, serious illness or endocarditis incidence.

Search strategy: The search strategy was developed on MEDLINE and adapted for use on the Cochrane Oral Health, Heart and Infectious Diseases Groups’ Trials Registers (to October 2003), as well as the following databases: Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library, Issue 2, 2002), OLDMEDLINE (1966 to June 2002); EMBASE (1980 to June 2002); SIGLE (to June 2002); and the Meta-register of current controlled trials.

Selection criteria: Due to the low incidence of BE it was anticipated that few if any trials would be located. For this reason, cohort and case controlled studies were included where suitably matched control or comparison groups had been studied. The intervention was the administration of antibiotics (penicillin or penicillin combined with a beta-lactamase inhibitor) compared to no such administration or placebo (oral or intramuscular antibiotics) before invasive dental procedures.
of penicillin compared to no such administration before a dental procedure in people with an increased risk of BE. Cohort studies would need to follow those at increased risk and assess outcomes following any invasive dental procedures, grouping by whether prophylaxis was received. Included case control studies would need to match people who had developed endocarditis (and who were known to be at increased risk before undergoing an invasive dental procedure preceding the onset of endocarditis) with those at similar risk but who had not developed endocarditis. Outcomes of interest were: mortality or serious adverse event requiring hospital admission; development of endocarditis following any dental procedure in a defined time period; development of endocarditis due to other non-dental causes; any recorded adverse events to the antibiotics; and cost implications of the antibiotic provision for the care of those patients who develop endocarditis.

Data collection and analysis: Two reviewers independently selected studies for inclusion, then assessed quality and extracted data from the included study.

Main results: No RCTs, CCTs or cohort studies were included. One case-control study met the inclusion criteria. It collected all the cases of endocarditis in the Netherlands over 2 years, finding a total of 24 people who developed endocarditis within 180 days of an invasive dental procedure, definitely requiring prophylaxis according to current guidelines and who were at increased risk of endocarditis due to a pre-existing cardiac problem. This study included participants who died because of the endocarditis (using proxies). Controls attended local cardiology outpatient clinics for similar cardiac problems, had undergone an invasive dental procedure within the past 180 days and were matched by age with the cases. No significant effect of penicillin prophylaxis on the incidence of endocarditis could be seen. No data were found on other outcomes.

Reviewers' conclusions: There is no evidence about whether penicillin prophylaxis is effective or ineffective against bacterial endocarditis in people at risk who are about to undergo an invasive dental procedure. There is a lack of evidence to support published guidelines in this area. It is not clear whether the potential harms and costs of penicillin administration outweigh any beneficial effect. Ethically practitioners need to discuss the potential benefits and harms of antibiotic prophylaxis with their patients before a decision is made about administration.


Interventions for treating oral mucositis for patients with cancer receiving treatment

Worthington HV, Clarkson JE, Eden OB

Background: Treatment of cancer is increasingly effective but associated with short and long-term side effects. Oral side effects, including oral mucositis (mouth ulceration), remain a major source of illness despite the use of a variety of agents to treat them.

Objectives: To assess the effectiveness of interventions for treating oral mucositis or its associated pain in patients with cancer receiving chemotherapy and/or radiotherapy.

Search strategy: Computerised searches of Cochrane Oral Health Group's Trials Register, CENTRAL, MEDLINE and EMBASE were undertaken. Reference lists from relevant articles were searched and the authors of eligible trials were contacted to identify trials and obtain additional information. Date of the most recent searches August 2003: (CENTRAL) (The Cochrane Library Issue 3, 2003).

Selection criteria: All randomised controlled trials comparing agents prescribed to treat oral mucositis in people receiving chemotherapy and/or radiotherapy. Outcomes were oral mucositis, time to heal mucositis, oral pain, duration of pain control, dysphagia, systemic infection, amount of analgesia, length of hospitalisation, cost and quality of life.

Data collection and analysis: Data were independently extracted, in duplicate, by two reviewers. Authors were contacted for details of randomisation, blindness and withdrawals. Quality assessment was carried out on these three criteria. The Cochrane Oral Health Group statistical guidelines were followed and relative risk values calculated using fixed effect models.

Main results: Twenty-five trials involving 1292 patients satisfied the inclusion criteria. Three agents, each in single trials, were found to be effective for improving (allopurinol RR 3.33, 95% CI 1.06 to 10.49; immunoglobulin RR 1.81, 95% CI 1.24 to 2.65; human placental extract RR 4.50, 95% CI 2.29 to 8.86) or eradicating mucositis (allopurinol RR 19.00, 95% CI 1.17 to 307.63). Two of these trials were rated as at moderate risk of bias and one as at high risk of bias. The following agents were not found to be effective: benzydamine HCl, sucralfate, tetrachlorodecaoxide, chlorhexidine and ‘magic’ (lidocaine solution, diphenhydramine hydrochloride and aluminum hydroxide suspension).
Six trials compared the time to heal and mucositis was found to heal more quickly with two interventions: Granulocyte Macrophage-Colony Stimulating Factor when compared to povidone iodine, with mean difference -3.5 days (95% CI -4.1 to -2.9) and allopurinol compared to placebo, with mean difference -4.5 days (95% CI -5.8 to -3.2). Three trials compared patient controlled analgesia (PCA) to the continuous infusion method for controlling pain. There was no evidence of a difference, however, less opiate was used per hour for PCA, and the duration of pain was shorter. One trial demonstrated that pharmacokinetically based analgesia (PKPCA) reduced pain compared with PCA, however more opiate was used with PKPCA.

**Reviewers' conclusions:** There is weak and unreliable evidence that allopurinol mouthwash, vitamin E, immunoglobulin or human placental extract improve or eradicate mucositis. There is no evidence that patient controlled analgesia (PCA) is better than continuous infusion method for controlling pain, however, less opiate was used per hour, and duration of pain was shorter, for PCA. Further, well designed, placebo-controlled trials assessing the effectiveness of allopurinol mouthwash, immunoglobulin, human placental extract, other interventions investigated in this review and new interventions for treating mucositis are needed.

**Citation:** Worthington HV, Clarkson JE, Eden OB. Interventions for treating oral mucositis for patients with cancer receiving treatment (Cochrane Review). In: The Cochrane Library, Issue 2, 2004. Chichester, UK: John Wiley & Sons, Ltd.

*(Please note: 10 included and 18 excluded studies have been added to this update of the original review.)*

For the abstracts of all the Oral Health Group reviews please refer to the following web site:

http://www.cochrane-oral.man.ac.uk/abstracts.htm

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**Collaborators Wanted!**

There are several ways in which you can contribute to the work of the Oral Health Group:

- **Preparing a review** as a lead reviewer or assisting as a co-reviewer. If you would like more information or if you have a particular subject area you wish to pursue, please contact Emma Tavender (emma.tavender@man.ac.uk) who will be happy to discuss your ideas.

- **Peer-reviewing** reviews and protocols for the Group.

- **Handsearching a journal.** If you have access to a particular oral health related journal and would be willing to handsearch for trials, please contact Sylvia Bickley (Sylvia.R.Bickley@man.ac.uk).

- **Offering consumer input** commenting on drafts of Cochrane reviews or suggesting questions for review. Representing the recipients of health care (patients or carers) viewpoint, as a consumer you will ensure that reviews are relevant and clear to those affected by the condition, their carers or family members. Please contact Luisa Fernandez (luisa.fernandez@man.ac.uk) for further information.

- **Translating articles or parts of articles.** Cochrane systematic reviews include all relevant studies regardless of language. Translators are therefore needed to translate these studies from the original language to English.

If you are interested in contributing please complete the OHG’s membership form, which can be found on the last page of this newsletter.

We look forward to hearing from you!
This year’s annual UK conference was held in Edinburgh at Heriot-Watt University. The event was well attended (250) with a full programme of plenary sessions and workshops over two days. The Cochrane Oral Health Group (COHG) formed one of the largest contingents with 25 attending. Delegates opted for two workshops on each day and these covered many aspects of conducting a Cochrane review. Several innovations were unveiled including a new software programme dealing with time-to-event data and Julian Higgins’ workshop on the new I² statistic. By general consensus this was one of the best Cochrane meetings ever held in the UK.

Professor Richard Ibbetson, Director of Edinburgh Dental Institute, hosted a pre-dinner reception to welcome COHG to Edinburgh. At this event the IADR/ICEBD 2004 award for the best systematic review protocol was presented by Jan Clarkson (Editor, COHG) to Terry Simpson the lead reviewer on the review, Treatment of Periodontal Disease for Glycaemic Control in People with Diabetes. Professor Ibbetson praised the contribution of the group of local general dental practitioners (Terry Simpson, Elaine Downie and Yann Maidment) in the area of research and their success in obtaining several awards, including the IADR and Faculty of GDP’s BSGDS awards. In receiving the award, Terry thanked Ian Needleman, David Moles, Ed Mills and Sarah Wild for their contributions as collaborators on the review. He further acknowledged the part of COHG in helping revise the protocol and, in particular, Sylvia Bickley for the search strategy and Lee Hooper as Lecturer in Evidence Based Care and Systematic Reviews. On a personal note, Terry finished by thanking Mike Clarke (Director, UK Cochrane Centre), Chris Deery and Professor Ibbetson for their continuing support.

(From left to right) Ian Needleman, Terry Simpson, Mike Clarke and David Moles following the presentation of the IADR/ICEBD 2004 award.

Meet the new members of the OHG Editorial Team - New Editor

Valeria Marinho:

I worked as a dentist in the public health sector in Brazil for 4 years before moving to England in the early 1990s, where I did a MSc in Dental Public Health at the Department of Epidemiology and Public Health (UCL). In the late 1990s, while doing my PhD, I became involved in teaching sessions on evidence-based health care and The Cochrane Collaboration for MSc students at UCL for 2 consecutive years. This was concomitant and subsequent to the excellent one year course on systematic reviews methodology at the Systematic Reviews Training Unit (UCL). Since then, I have worked closely with the Cochrane Oral Health Group, primarily as a review author, because my PhD consisted mainly of a series of Cochrane reviews on topical fluoride therapies: toothpastes, mouthrinses, gels and varnishes, used alone or in conjunction with one of the others.
Since 2000, following a return to Brazil, I became involved in other activities of The Cochrane Collaboration, especially as one of the developing countries representatives within the RevMan Advisory Group (RAG), and also as a member of the Aubrey Sheiham Public Health and Primary Care Scholarship panel. Recently, I have been appointed lecturer at UCL, and have joined the Cochrane Oral Health Group as an editor.

I am very happy to have been invited to be a member of the Editorial Team and look very much forward to contributing in providing support for Cochrane reviewers. This is certainly providing an added incentive for me to continue to pursue my interest in evidence synthesis, both from a practical and methodological perspective.

**Journal of Dental Education co-publication agreement**

The Journal of Dental Education (JDE) and the Cochrane Oral Health Group (OHG) have entered into an agreement whereby Cochrane reviews published by the OHG can be considered for a fast-track option for publication in the JDE. Systematic reviews may need to be modified to adhere to the journal’s format but in accordance with the Cochrane Collaboration’s policy for co-publication, JDE will have a non-exclusive copyright.

If you are interested in publishing your Cochrane systematic review in the Journal of Dental Education please contact Emma Tavender (emma.tavender@man.ac.uk) who will provide you with further information.

**Consumers Wanted!**

Are you or any of your family affected by an oral health condition? Are you from a consumer/community group? Would you like to represent the recipients of oral health care, the patients or carers viewpoint? If so, do join the Oral Health Group as a consumer!

Consumer feedback plays an essential role in making Cochrane reviews more relevant, accessible, and able to improve health care for the people who need it. Consumers can provide a particularly valuable perspective —shaped by knowledge of people’s experiences of health issues and health care that researchers may not have, or may forget about. Consumers may also be able to help make sure that the writing can be understood by people who are not highly medically specialised.

If you would like to be included among the experts called on to assess draft protocols and reviews on oral health before publication on The Cochrane Library, to get consumers’ perspectives and ideas incorporated or accommodated in the reviews; or if you would like to help identify important questions for review from the point of view of people who have to deal with the health problem, please complete the Group’s membership form which can be found on the last page of this newsletter, or contact luisa.fernandez@man.ac.uk for an information pack. We look forward to hearing from you!
Searching for trials – bridging the gaps

by Sylvia R Bickley, Trials Search Co-ordinator: Oral Health Group (OHG), Pain, Palliative Care & Supportive Care Group (PaPaS).

Background: Comprehensive searching for relevant controlled trials forms the essential foundation for systematic reviews. In executing electronic searches, beyond an understanding of the rules that must be applied to each search platform, an awareness and understanding of how and why record retrieval can still vary between databases searched is helpful.

Objective: The objective of this exercise was to demonstrate some anomalies which affect record retrieval and to reinforce the importance of searching a range of databases in the interests of meticulous and systematic searching to identify reports of trials.

Method: Search strategies were developed for two reviews: Single dose dextropropoxyphene, alone and with paracetamol (acetaminophen), for postoperative pain (PaPaS) and Surgical techniques for removal of mandibular third molar teeth (OHG). Search strategies were tailored appropriately to address differences in controlled vocabulary; truncation symbols; operators and syntax rules of individual databases and search platforms and the following databases were searched: Cochrane Central Register of Controlled Trials (CENTRAL); MEDLINE; EMBASE; review groups’ trials registers. Records were downloaded and de-duplicated and where the search strategy had not retrieved a record from a particular database the reasons for exclusion were identified.

Results: The failure of some MEDLINE records to be retrieved in the search was shown to be due to fewer indexing terms in the record when compared to the EMBASE record. [Table 1] For recently published records failure to retrieve was due to records being entered into one database earlier than another. Retrieval of records from CENTRAL was also affected by whether the record in CENTRAL was sourced from MEDLINE or EMBASE because of differences in content of the electronic record. [Table 1.]

There is a minimum delay of 3-4 months in publication in CENTRAL of ‘new’ records from MEDLINE (retrieved either by the quarterly search carried out by Update-Software which searches only the PT (publication type) indexing field for controlled trials or from MEDLINE records uploaded from review group registers). This gap increases to 6-7 months immediately prior to publication of the next quarterly issue of The Cochrane Library. Lack of a proximity searching facility in the review groups’ trials registers, (ProCite® bibliographic management program) was the cause of failure to retrieve some records from the register that came up in other databases. Example: Alternative description of postoperative pain in free text: “pain following surgery” retrieved in CENTRAL by proximity searching pain* NEAR surg* or in OVID pain$ adj6 surg$.

Another potential problem was identified where additional spaces found in the abstracts of some records negated phrase searching where this occurred.

Example: “….wound pain during mobilization…” The double space between wound and pain would negate a phrase search of “wound pain” as would “…local anaesthetics ” negate the phrase search of “local anaesthetics” or “…..impacted wisdom tooth was removed…” fail to retrieve searching the phrase “wisdom tooth”. The Cochrane Library (Update Software) search engine does not allow number searching and this failed to retrieve records in which third molar was expressed as “3rd molar”. This particularly affects conference abstract records which have no controlled vocabulary indexing.

Conclusions: The Cochrane Collaboration continues its commitment to helping reviewers by the development of the Cochrane Central Register of Controlled Trials (CENTRAL) in The Cochrane Library and through working with the National Library of Medicine to ensure records are correctly tagged by publication type. Searching a range of databases and search platforms remains a prerequisite to address the diversity of variables within search facilities and is fundamental to achieving the meticulous and comprehensive searching that is the foundation for systematic reviewing. The reviewers’ subject knowledge and the expertise of the information specialist provide the complementary and essential elements for effective electronic searching.
Searching for trials – bridging the gaps

Table 1. Example of outcome of searches in relation to retrieval or omission of the citation below from each database searched.

Column 4 identifies reasons for failure to retrieve the record.

<table>
<thead>
<tr>
<th>Database</th>
<th>Citation in database</th>
<th>Citation retrieved in search</th>
<th>Reason citation not retrieved in search</th>
<th>Controlled vocabulary indexing terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDLINE</td>
<td>YES</td>
<td>NO</td>
<td>Term dextropropoxyphene not indexed</td>
<td>Adult; Amides[Administration &amp; Dosage]; Analgesics[Administration &amp; Dosage]; Therapeutic Use; Anesthetics, Local[Administration &amp; Dosage]; Therapeutic Use; Cholecystectomy, Laparoscopic[Methods]; Cholelithiasis[Surgery]; Dose-Response Relationship, Drug; Double-Blind Method; Drug Administration Schedule; Ketamine[Administration &amp; Dosage]; Pain Measurement; Pain, Postoperative[Diagnosis]; Prevention &amp; Control; Postoperative Complications[Epidemiology]; Prospective Studies; Vomiting[Epidemiology]</td>
</tr>
<tr>
<td>PaPaS Register</td>
<td>YES</td>
<td>NO</td>
<td>(Record sourced from MEDLINE via CENTRAL) Term dextropropoxyphene not indexed</td>
<td>(As MEDLINE above)</td>
</tr>
<tr>
<td>CENTRAL</td>
<td>YES</td>
<td>NO</td>
<td>(Record sourced from MEDLINE) Term dextropropoxyphene not indexed</td>
<td>(As MEDLINE above)</td>
</tr>
</tbody>
</table>
New publishers of The Cochrane Library

John Wiley & Sons Limited have taken over the publishing responsibilities of The Cochrane Library from Update Software. The Cochrane Library will soon be available through Wiley InterScience.

Contact details are as follows:

Sarah Stevens
Cochrane Customer Services Manager
John Wiley & Sons Ltd
1 Oldlands Way, Bognor Regis
West Sussex PO22 9SA, UK
Phone: +44 (0)1243 843 355
Fax: +44 (0)1243 843 232
Email: sasteven@wiley.co.uk

Further details can be found at:

http://www.wileyeurope.com/go/cochrane

Cochrane Library training

The Centre for Reviews and Dissemination (CRD) at the University of York, UK, is no longer funded to provide Cochrane Library training.

Training materials for the Update Software interface of The Cochrane Library will remain on the usual web site:

http://www.york.ac.uk/inst/crd/cochlib.htm

for the moment, but will not be updated by CRD either for new issues of the Update Software version, or for the new Wiley interface. Details will be released separately on any developments and dates for new interfaces from Wiley.

Kate Light, at CRD, is happy to continue to answer queries about the Update Software version of The Cochrane Library (email: kl9@york.ac.uk) but once the Wiley version replaces the Update Software version of The Cochrane Library, enquiries should be directed to the Wiley support team.

John Wiley & Sons Ltd is keen to assess the training needs of Cochrane Library users, so if you would like to register an interest, please contact Deborah Pentesco-Gilbert, Managing Editor, The Cochrane Library: cochrane training@wiley.co.uk.

New web interface

The Cochrane Library is getting a new interface. Check http://www.cochrane.org regularly for information about the new web interface being introduced by the new publisher of The Cochrane Library, John Wiley & Sons Limited.

Deadlines dates for publication on the Cochrane Library

<table>
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<tr>
<th>Issue</th>
<th>Review/Protocol sent to referees</th>
<th>Final version to Editorial base</th>
<th>Editorial base submit Module</th>
<th>Cochrane Library Publication Date</th>
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<td>8th Oct</td>
<td>26th Sep</td>
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<td>1st Oct</td>
<td>17th Sep</td>
<td>10th November 2004</td>
<td>17th November 2004</td>
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</table>
Cochrane Collaboration policy on commercial sponsorship

by Jim Neilson and Mike Clarke, Co-Chairs, Cochrane Collaboration Steering Group.

Introduction

The Steering Group of The Cochrane Collaboration has undertaken a process of consultation on commercial sponsorship. The current debate was stimulated by a letter from several members of The Cochrane Collaboration who felt that existing policy ought to be more restrictive - to provide still greater reassurance that the conclusions of Cochrane reviews were not biased through the influence of funding by commercial entities that stood to benefit financially from the results of reviews.

Commercial sponsorship of health-related research is, of course, not an issue of concern uniquely to The Cochrane Collaboration.

Many members of The Cochrane Collaboration have pointed out that external perception is also important. Any perception that for-profit commercial organisations, notably but not exclusively, the pharmaceutical industry and medical device manufacturers, were influencing the conclusions of Cochrane reviews would damage a carefully nourished reputation for impartiality and scientific rigour.

This issue was discussed at length at the 11th annual Cochrane Colloquium in Barcelona in October 2003. A consultation document was disseminated during December 2003 with a request for views by 31 January 2004; 156 individuals or groups responded. Most were active members of The Cochrane Collaboration. The Steering Group met in Bergamo, Italy, from 29 February to 2 March 2004 and considered at length the very extensive and detailed documentation. As described below, for some questions, there was very clear consensus; for others, there was not.

Background

Since the decisions taken by The Cochrane Collaboration are also of interest to others it may be helpful to describe, briefly, the structure of The Cochrane Collaboration. It is a highly devolved organisation that involves more than 10,000 people, in different capacities, worldwide. Most do not receive any payment for the work they do within The Collaboration. They are drawn to The Collaboration through a wish to commit, either as a professional or as a consumer, to a movement to provide more sound evidence on which healthcare decisions can be made. The formal structure of The Collaboration comprises Collaborative Review Groups (which produce systematic reviews), Centres (with responsibilities that include support for Collaborative Review Groups within their area of geographical responsibility), Methods Groups, Fields, a Consumer Network, an elected Steering Group, and a small Secretariat. The Secretariat, Steering Group and Advisory Group meetings, and key generic developments (e.g. software for information management, production of The Cochrane Reviewers’ Handbook, and development of The Collaboration’s web site) are all funded, in part or in whole, through royalties on sales of The Cochrane Library. Everything else (including support of Collaborative Review Groups and Centres) is funded through applications to other sources (often government agencies), and these sources are almost all in the country in which the entity is located.

There is substantial variation internationally in the amount of funding for support of Cochrane activity and, in some parts of the world, it is extremely difficult to access government or charitable funds. In some areas, there has recently been an important decrease in financial support for Review Groups and Centres. Therefore, an alternative option, of seeking funding from commercial sources, could be attractive to, say, Coordinating Editors of Review Groups, or Centre Directors, who otherwise face the prospect of curtailing productivity and/or making skilled and experienced staff redundant. Setting policy on issues as sensitive and important as sources of funding in as complex an organisation as The Cochrane Collaboration is never an easy matter, and may be even more difficult at this time.

Definitions

- By ‘commercial source’ we mean any for-profit manufacturer or provider of health care, or any other for-profit source with a real or potential vested interest in the findings of a specific review. Whilst government departments, not-for-profit medical insurance companies and health management organisations may find the conclusions of Cochrane reviews carry financial consequences for them, these are not included in this definition. Also not included are for-profit companies that do not have
real or potential vested interests in Cochrane reviews (e.g. banks).

- By ‘sponsorship’ of a review, we mean a sum of money given to a reviewer or group of reviewers to prepare, or update, a Cochrane review. Such sponsorship could include not only commissioning of specific systematic reviews, but also, for example, funding of a sabbatical period to work on a Cochrane review.

- We used the term ‘firewall’ in the consultation document. By this, we mean, figuratively, a fireproof wall put in place to ensure that, if a fire occurs, it is confined to one area. We used the term to indicate a clear barrier or separation between a source of funding and the use to which that funding is put, so as to prevent any influence by the funding source on the outcome of, say, a Cochrane review.

Conclusions

1. There was overwhelming consensus that there should be a clear barrier between the production of Cochrane reviews and any funding from commercial sources with financial interests in the conclusions of Cochrane reviews.

2. Thus, sponsorship of a Cochrane review by any commercial source or sources (as defined above) is prohibited.

3. Other sponsorship is allowed, but:
   - A sponsor should not be allowed to delay or prevent publication of a Cochrane review.
   - A sponsor should not be able to interfere with the independence of the authors of reviews in regard to the conduct of their reviews.
   - The protocol for a Cochrane review should specifically mention that a sponsor cannot prevent certain outcome measures being assessed in the review.

4. These rules also apply to ‘derivative products’ (containing Cochrane reviews) so that commercial sponsors could not prevent or influence what would be included in such products.

5. To ensure the integrity (real and perceived) of the ‘firewall’, it is also prohibited for a commercial source or sources (as defined above) to sponsor Cochrane entities that produce Cochrane reviews, that is, Collaborative Review Groups.

6. It was agreed that these same restrictions should apply to Fields and to the Consumer Network because of the close proximity of these entities to review production.

7. It was agreed that commercial sources of funding to Methods Groups should not be prohibited. However, the Screening and Diagnostic Tests Methods Group needs to be considered as a special case because of its likely close involvement in the preparation and maintenance of Cochrane reviews of diagnostic test accuracy. The Funding Arbiter (see below) should be asked to advise on those situations that are not clear-cut.

8. The situation with regard to Cochrane Centres is more complex than for other Cochrane entities. For example, Centres can be both close to review production (like Fields and the Consumer Network) but can also engage in methodological work (like Methods Groups). It was agreed, therefore, that a further, short, period of consultation should take place specifically in relation to the sponsorship of Cochrane Centres by commercial sources.

9. Some entities may find themselves in financial difficulty because of the need to shed current commercial funding. Therefore, although this policy is mandatory now in relation to any new funding, it will become mandatory in relation to existing sources of funding two years after the date of adoption, to allow time for entities to seek alternative sources of funding. If any entity has contractual obligations that mean that they cannot shed current commercial funding within the next two years, they should discuss this urgently with the Funding Arbiter.

10. The position of ‘Funding Arbiter’ will be established, analogous to the Publication Arbiter. The Funding Arbiter will be a Steering Group member and will convene a standing panel of three to give guidance on difficult cases.

11. The responsible Collaborative Review Group should refer any existing Cochrane reviews that have been produced by a process that would no longer be permissible to the Funding Arbiter. A decision will be taken within the first twelve months of the implementation of this policy to consider what should happen to these Cochrane reviews (e.g. whether they should be withdrawn from The Cochrane Library).
12. Authors of reviews should declare financial support for the review, private clinical practice (if relevant), stocks, legal advice, consultancies, involvement in primary research in the subject area of their review, and any other ‘competing interests’ that they judge relevant.

13. Such declarations will be described in the review. The declarations will not be published outside of the review itself, for example with the abstract or synopsis.

14. If an author has been actively involved in a study/studies that was/were eligible for their review, they should have, as a co-author, someone who was not involved in the study/studies. The co-author would not necessarily be the contact author for the review, but could act as a ‘guarantor’.

15. If a review has been done, or is proposed, by people who are employed by a pharmaceutical or medical devices company that relates to the products of that company, it will be referred to the Funding Arbiter. In such circumstances, The Cochrane Collaboration will insist on a multi-disciplinary review team with a majority of the team of reviewers not being employed by the relevant company.

16. People with a direct financial interest in a particular intervention should not be involved in a review of that intervention, either as reviewers, editors or peer reviewers.

17. It was agreed to establish a central fund or Foundation into which unrestricted donations could be made. It was further agreed that there should not be a prohibition on donations from any single company or type of industry but that all funding of activity in The Cochrane Collaboration should be in keeping with the principles of The Cochrane Collaboration.

18. There is an existing Collaboration policy on sponsorship of Colloquia. The Colloquium Policy Advisory Group will be asked to reconsider this in light of changes to the policy on commercial sponsorship, so that any recommendations can be brought to the next Steering Group meeting in Ottawa in October 2004.

19. Reviewers and Collaborative Review Groups should not receive royalties on sales of reprints of their reviews, since these sales are likely to have been made to commercial sources and might, therefore, be assumed to be equivalent to direct sponsorship of the review or Group. Therefore, the current policy that royalties on reprint sales go to The Cochrane Collaboration centrally, via the Collaboration Trading Company, will continue. When a Foundation is established, the possibility that such income should go into it will be discussed.

20. John Wiley and Sons Limited should continue to be encouraged to make bulk sales of *The Cochrane Library* and derivative products to commercial sources.

21. All Cochrane Collaboration policies are kept under continual review, but these decisions will be formally reviewed after three years.

For further information visit [http://www.cochrane.org/index0.htm](http://www.cochrane.org/index0.htm)

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Cochrane Reviewers’ Handbook

The Reviewers’ Handbook is the official document which describes in detail the process of creating Cochrane systematic reviews. Version 4.2.2 (March 2004) of the Handbook is now available. This version contains a major rewrite of all the core material on analysis and presentation of results contained in Section 8 - Methods new to RevMan 4.2 (including generic inverse variance outcome type and a new inconsistency statistic) are explained, and there is extensive new material on the following topics, among others:

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-- Effect measures for single studies
-- Extraction of study results
-- Summarising effects across studies (meta-analysis)
-- Intention to treat issues
-- Heterogeneity

The first three are subdivided by type of data, so that dichotomous data, continuous data, ordinal data, scales, counts, rates and time to event data are considered in more detail than previous versions of the Handbook.

The Cochrane Reviewers’ Handbook 4.2.2 is available on the Collaboration web site (Section 8, ‘Analysing and presenting results’ is also available as a separate download):

[http://www.cochrane.org/resources/handbook/](http://www.cochrane.org/resources/handbook/)
New features in RevMan 4.2.7

Review Manager (RevMan) is The Cochrane Collaboration's software for preparing and maintaining Cochrane reviews for publication in *The Cochrane Library*. The latest major version of RevMan for Windows is RevMan 4.2. The latest bugfix to RevMan 4.2 has version number 4.2.7. It is bundled with RevMan Analyses, which performs statistical analysis of the data entered into RevMan, and the following new features:

Images
- Image files can be added to reviews as 'additional figures'

Text of review
- **Bold**, *italics*, underline, subscript and superscript can be used in the main text of the review
- More symbols (e.g. Greek letters) can be used
- It is possible to print a highlighted section only
- Text marker can be used to highlight changes (highlight colour is not published)
- Import of RTF files
- Delete and backspace keys can be used to delete a marked block of text containing links
- A new medical dictionary for spell checking that allows both UK and US spelling is included

Studies and references
- Copy studies and references to other reviews
- Use of Tab key in reference windows to change field
- Classification pending references can be moved to studies in block
- Importing of whole studies with references, e.g. from Meerkat
- References can be imported to an existing study or directly to 'additional' or 'other versions' sections
- Pick list for journal names
- Highlighting of required fields in references
- Choice of sections when exporting references
- Copy citation to clipboard

Tables
- Improved printing of additional tables and 'other data' tables
- Insert/delete rows/columns in additional tables
- Spell checking of entire tables
- Split bar in characteristics of ...studies tables
- Single study view for characteristics of included studies
- Copy additional tables to other reviews
- Data tables can be sorted by under defined order

Data and analyses
- Copy comparisons and outcomes to other reviews
- Studies can be removed from a data table using the right click menu (rather than using the tree view)
- Generic inverse variance method
- $I^2$ statistic added to the test for heterogeneity
- New RevMan Analyses program (replaces MetaView)
- Printing of several graphs on the same page
- Printing of analysis graphs from RevMan
- Export multiple graphs in bitmap or vector formats
- Copy graphs to the clipboard
- Save graphs as RTF files
- Funnel plots can be inserted into reviews as additional figures

Contact details
- Highlighting of differences when importing contact details
- Improved functionality for importing contact details
- Printing of all contact details
- Export contact details
- Contact IDs can easily be changed

Other
- Improved functionality for exporting reviews
- Use Ctrl+click to select/deselect reviews
- Review checking now follows the same rules as in ModMan
- New status window displays numbers of reviews, protocols, titles, etc.
- Automatic backup keeps up to three backup files
- The 'list of reviewers for citation' can be generated automatically
- Function to close the database temporarily (F8) so that ModMan can access it
- The list of amended sections is updated automatically
- The title of the tree view window can be changed to distinguish between different copies of RevMan
- RevMan exercise included.

For further details and to download RevMan 4.2.7 visit: [http://www.cc-ims.net/RevMan/](http://www.cc-ims.net/RevMan/)
New addition to RevMan 4.2: $I^2$ – A test for statistical heterogeneity

Assessing statistical heterogeneity: chi$^2$ or $I^2$?

by Julian Higgins.

A generally desirable attribute for a meta-analysis is that the results of the studies agree. This may be important irrespective of how clinically or methodologically diverse the studies are. For example, consistent results across studies in different populations, with different methodologies and with slight variations on the outcome definition can add considerable weight to the generalizability of the findings. In statistical terms, we define consistency across studies in terms of homogeneity. We say there is homogeneity of effect across studies if every study is estimating the same magnitude of effect (for example a common odds ratio or a common standardised mean difference). Whenever homogeneity does not exist, we say there is heterogeneity. This article discusses how we could assess heterogeneity in a particular meta-analysis.

The traditional test: chi$^2$

Meta-analysis in Cochrane reviews, RevMan or MetaView include a statistical test that aims to answer the question of whether studies have homogeneous effects. This is displayed in a meta-analysis, for example, as:

Test for heterogeneity: chi squared = 12.44, df = 7, $p = 0.09$

In this case, the test produces a chi squared value of 12.44 on 7 degrees of freedom (df), the latter obtained as the number of studies minus one. (In the example, there were eight studies.) The resulting $p$ value is 0.09, which would not be deemed statistically significant using the conventional cut off of 0/05.

Is this a useful test? A well known problem with the test is that it typically has low power, meaning that it is unlikely to yield a statistically significant result when there is genuinely some heterogeneity of effect. This is because it is difficult to demonstrate variation across studies when there are not many of them. Thus a non-significant test result should not be taken as evidence of homogeneity. A more fundamental problem, however, concerns the whole notion of testing for heterogeneity. Since systematic reviews inevitably bring together studies in different populations, in different settings, using different methods, with different outcome definitions (and the list goes on…) we might reasonably always expect heterogeneity of underlying effects to be present. In that case we should not be interested in determining whether heterogeneity is present, but instead should focus attention on how large it is and how much it impacts on the conclusions of the review.

The new addition in RevMan 4.2: $I^2$

RevMan 4.2 supplements the test for heterogeneity with a new quantity that describes the impact of heterogeneity on the meta-analysis. The quantity is called $I^2$ and it is displayed thus:

Test for heterogeneity: chi squared = 12.44, df = 7 ($p = 0.09$), $I^2 = 44\%$

$I^2$ measures the degree of inconsistency across studies. It is calculated as follows:

- $I^2 = 100\% \times (\text{chi}^2 - \text{df})/\text{chi}^2$

Its lowest possible value is 0% and its highest is 100%. It may be interpreted approximately as the proportion of total variation in the observed results of the studies that may be explained by heterogeneity, rather than by chance variation. This, if $I^2 = 0\%$, then there is no apparent heterogeneity, whereas in the example $I^2 = 44\%$, almost half of the variability in effect estimated was due to genuine variation in the underlying effects. In practice, $I^2$ will never reach 100% but values in excess of 70% would usually inspire particular caution in interpreting a meta-analysis.

Some useful properties of $I^2$ are:

- $I^2$ may be bigger than zero even if the test result is not statistically significant.
- $I^2$ will be bigger than zero if, and only if, a random effects meta-analysis differs from a fixed effect meta-analysis.
- Larger values of $I^2$ indicate greater heterogeneity, and less easily generalized conclusions.

To read more about $I^2$, see: Higgins JPT, Thompson SG, Deeks JJ, Altman DG. Measuring inconsistency in meta-analyses. BMJ 2003;327: 557-60.
New outcome type: Generic inverse variance

Article based on information obtained from http://www.cc-ims.net/RevMan/ivnotes.htm

A new statistical method, generic inverse variance, is included in the latest version of RevMan. Until now methods available in RevMan have been designed for data from parallel group trials with randomisation at the level of the individual. Furthermore, it has only been possible to enter data as dichotomous data, as continuous data or as O – E and V statistics based on individual patient data. All other data could only be entered in text form as ‘Other data’. A method of meta-analysis for other types of studies and other types of outcomes sometimes is needed, since Cochrane reviewers frequently encounter these. The new ‘generic inverse variance’ outcome facilitates such meta-analyses.

The inverse variance method of meta-analysis is a widely applicable approach to meta-analysis. It involves a weighted average of the effect estimates from the separate studies. The weight for each study is taken to be the inverse of the variance (one divided by the square of the standard error) of the effect estimate. Peto odds ratios, weighted mean differences, standardised mean differences and all random effects meta-analyses in previous versions of RevMan use the inverse-variance method, although applied specifically to particular outcome types.

A generic inverse variance outcome requires two numbers: an effect estimate and its standard error for each of the trials to be combined. The effect estimate summarises the treatment effect in a clinical trial (for example as an odds ratio, a mean difference or a hazard ratio) and the standard error summarises the precision of the estimate (the sampling error within the study). These numbers may be used to perform a meta-analysis to combine results across multiple studies using the inverse variance method.

The generic inverse variance outcome should be used only when it is impossible or inappropriate to enter data as dichotomous, continuous or individual patient data.

The most likely situations are:

- special study designs such as cross-over trials and other matched designs, cluster randomised trials or non-randomised studies;
- special types of outcome such as time-to-event outcomes, ordinal outcomes or rates (events per unit time);
- special effect measures, such as hazard ratios, ratios of means or adjusted estimates.

Note that at least one study with an unusual design is sufficient to indicate that the generic inverse variance outcome should be used. Although studies with different designs may be combined using this technique, this should be undertaken with great caution and may not be appropriate in some circumstances.

If you have previously entered any of the above types of result into RevMan as dichotomous outcomes or continuous outcomes you should return to your review and consider re-entering the data using the generic inverse variance outcome. You are advised to consult your review group’s statistician if you are unsure about whether data have been analysed appropriately.

Generic inverse variance outcomes are added in the same ways as other outcomes: by adding an outcome to a comparison within the ‘Table of comparisons’.

Many effect measures in clinical trials are ratio measures (e.g. odds ratio, hazard ratio, rate ratio, risk ratio). When the inverse variance method is applied to ratio measures all calculations are performed on the log scale. You should therefore enter logarithmic data. For example:

- log odds ratio; standard error of the log odds ratio;
- log hazard ratio; standard error of the log hazard ratio;
- etc.

All logarithms are to be taken to base e (obtained by using the ‘In’ button on your calculator rather than the ‘log’ button).

The Cochrane Reviewers’ Handbook contains more details of the generic inverse variance method and many of the situations in which it should be used at:

http://www.cochrane.de/cochrane/hbook.htm
Cochrane systematic reviews of diagnostic test accuracy

by Jon Deeks, Constantine Gatsonis, Mike Clarke, Jim Neilson.
In: Hopewell S, Clarke M (editors). The Cochrane Collaboration
Methods Groups Newsletter June 2003; Volume 7.

The Cochrane Collaboration Steering Group in April 2003 accepted a proposal to take forward a programme of work to extend the definition of Cochrane reviews to include systematic reviews of diagnostic test accuracy. Diagnostic tests fall within the ethos of the Collaboration, as they relate to healthcare management decisions, and they need to be empirically evaluated to determine whether their use causes more benefit than harm. Healthcare professionals, policy makers, carers and consumers are regularly faced with decisions concerning the selection and timing of diagnostic tests, and the interpretation of their results. Now that the infrastructure and mechanisms for producing systematic reviews of healthcare interventions are established within the Collaboration, it is timely to start the second decade of the Collaboration with the new challenge of developing Cochrane reviews of diagnostic test accuracy.

Systematic reviews of diagnostic test accuracy will not be included in The Cochrane Library overnight. There is much work to be done in deciding methodological standards, developing publication formats and software, and considering questions such as the role of handsearching and development of databases of primary studies.

Of paramount importance will be working out how this new challenge can interleave with current functions of Cochrane Centres and Review Groups, as well as Fields and Methods Groups, without creating unmanageable demands, and ensuring that all involved will be able to obtain training and the necessary methodological and software support. It will be an opportunity to work in partnership with several groups currently not as yet directly involved in the work of The Cochrane Collaboration. We will also be looking outside the Collaboration for financial resources to support these developments.

To take this programme forward, a new subgroup jointly chaired by Jon Deeks (Methods Group representative on the Steering Group) and Constantine Gatsonis (convener of the Screening and Diagnostic Tests Methods Group) is being created, who will work with key people in the Collaboration to manage the development of Cochrane diagnostic test accuracy reviews. Currently, they are producing a document, which outlines key issues and tasks that need to be explored, which will be circulated for consultation within the Collaboration. We look forward with excitement to this new development within the work of The Cochrane Collaboration.
Would you like to visit us?

We have had several visits from reviewers who come to Manchester to work on their review with us. If you would like to come please just call and let us know so we can arrange some desk space for you. In the past our reviewers used their time here to:

- Have ‘protected’ time away from their busy desks
- Develop and run search strategies
- Consult statisticians
- Input data into RevMan.

If Manchester, UK, is too far to travel, but a similar set up would be useful, let us know as another Cochrane Group/Centre local to you may be able to help.
XII Cochrane Colloquium

BRIDGING THE GAPS

The 12th Cochrane Colloquium will take place from October 2-6, 2004 in Ottawa, Canada. As indicated by the theme of ‘Bridging the Gaps’, the focus of the 12th Cochrane Colloquium is to bridge some of the key gaps that have been identified: gaps between The Cochrane Collaboration and clinical practice, gaps between high and low income countries and individuals, gaps between methodologists and reviewers, and gaps between producers and users of healthcare information.

Colloquium objectives

1. To introduce The Cochrane Collaboration, its achievements and its future plans to all those interested in using the best available evidence for the planning and delivery of health care.
2. To identify and explore the gaps in the structure and processes of the Collaboration and develop bridges to produce a stronger, more effective organization.
3. To provide an opportunity for those preparing Cochrane systematic reviews to meet and to make progress in their work.
4. To advance the knowledge and skills of the members of the Collaboration and to support them in their work.
5. To explore and develop partnerships among consumers, policy makers, administrators, clinical researchers, clinicians, funders and industry representatives committed to advancing evidence-based health care.
6. To recruit and actively involve people who are curious about The Cochrane Collaboration and what it has to contribute to health care worldwide.
7. To provide an opportunity for the hard-working Colloquium participants to meet each other in person and enjoy the social, cultural and recreational sports events planned for their relaxation and entertainment.

Opening session

The keynote speaker for the opening session of the Ottawa Colloquium will be Dr James Orbinsky, a Canadian physician who is the past president of Médecins Sans Frontières (Doctors Without Borders), a Nobel Peace Prize-winning organization that delivers emergency aid to victims of armed conflict, epidemics, and natural and man-made disasters. Dr Orbinsky is a dynamic speaker with a passion for international health and justice who will help set the tone for the entire Colloquium.

Key dates

- Early registration deadline: June 14, 2004
- Curling Bonspiel registration deadline: June 14, 2004
- Deadline for Chris Silagy Prize nominations: July 1, 2004
- Regular registration deadline: August 30, 2004
- Hotel registration deadline: August 30, 2004
- Cancellation refunds deadline: August 30, 2004
- Late registration deadline: September 21, 2004
- On-site registration: September 22, 2004 onwards
- First day of Colloquium: October 2, 2004
- Welcome reception: October 2, 2004
- Final party: October 6, 2004

Full details, including a complete list of plenary sessions, workshops and social events, are available on the Colloquium web site: http://www.colloquium.info
Training Course: Evidence Based Practice in Dentistry

A three-day course for all dentists and members of the dental team provided by staff from the Cochrane Oral Health Group.

The aim of the course is to develop the skills to implement an evidence based care approach for effective clinical practice, audit and research.

The course will be complemented by distance learning, self-directed study and mentored support.

By the end of the course you will be able to:
♦ Understand the ideas and principles of evidence based practice
♦ Identify clinical issues where assessment of the evidence would be helpful
♦ Search out and critically appraise relevant dental literature
♦ Concisely present the evidence on a clinical issue
♦ Interpret your findings and develop an implementation strategy, audit criteria and/or research plan.

*21 hours verifiable CPD*

Three days of workshops taught by members of the editorial team will take place in Manchester at the headquarters of the Cochrane Oral Health Group.

Dates for Spring 2005:
- 9, 10 & 11 May.

For further information and an application form visit: www.cochrane-oral.man.ac.uk or contact: luisa.fernandez@man.ac.uk.

### Australasian Cochrane Centre

<table>
<thead>
<tr>
<th>DATE</th>
<th>LOCATION</th>
<th>WORKSHOP</th>
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<tbody>
<tr>
<td>5-7 July 2004</td>
<td>Vellore (India)</td>
<td>How to do a Cochrane systematic review</td>
</tr>
<tr>
<td>15-16 July 2004</td>
<td>Hobart</td>
<td>Introduction to systematic reviews</td>
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<tr>
<td>Aug (dates TBA)</td>
<td>Brisbane</td>
<td>Protocol &amp; analysis</td>
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<tr>
<td>Sept (dates TBA)</td>
<td>Christchurch</td>
<td>Protocol &amp; analysis</td>
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<tr>
<td>15-19 Nov 2004</td>
<td>Melbourne</td>
<td>Review completion program</td>
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<tr>
<td>22-23 Nov 2004</td>
<td>Christchurch</td>
<td>Analysis &amp; review completion</td>
</tr>
<tr>
<td>9-10 Dec 2004</td>
<td>Sydney</td>
<td>Protocol &amp; analysis</td>
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### German Cochrane Centre

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<tr>
<td>Summer 2004</td>
<td>Freiburg</td>
<td>Developing a protocol for a review &amp; getting a review into RevMan</td>
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### Iberoamerican Cochrane Centre

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<tr>
<td>13 Dec 2004</td>
<td>Barcelona</td>
<td>Desarrollo de un protocolo de revisión. Uso del programa RevMan</td>
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<tr>
<td>14 Dec 2004</td>
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<td>Desarrollo de un protocolo de revisión. Uso del programa RevMan</td>
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### Nordic Cochrane Centre

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<tr>
<td>21 Oct 2004</td>
<td>Kuopio (Finland)</td>
<td>Basic course on writing Cochrane reviews</td>
</tr>
<tr>
<td>On demand</td>
<td>Copenhagen &amp; Oslo</td>
<td>Individual sessions on writing Protocols/Reviews &amp; using RevMan</td>
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### UK Cochrane Centre

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<tbody>
<tr>
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<td>London</td>
<td>Developing a protocol for a review</td>
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<tr>
<td>14 July 2004</td>
<td>London</td>
<td>Introduction to analysis</td>
</tr>
<tr>
<td>13 Sept 2004</td>
<td>Oxford</td>
<td>Developing a protocol for a review</td>
</tr>
<tr>
<td>14 Sept 2004</td>
<td>Oxford</td>
<td>Introduction to analysis</td>
</tr>
<tr>
<td>8 Nov 2004</td>
<td>Belfast</td>
<td>Developing a protocol for a review</td>
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<td>9 Nov 2004</td>
<td>Belfast</td>
<td>Introduction to analysis</td>
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<td>1 Dec 2004</td>
<td>Liverpool</td>
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<td>2 Dec 2004</td>
<td>Liverpool</td>
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### US Cochrane Centre

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<td>Cape Cod</td>
<td>How to perform a systematic review</td>
</tr>
<tr>
<td>1 August 2004</td>
<td>Utah</td>
<td>Translating critical appraisal into meaningful peer review</td>
</tr>
<tr>
<td>22 Oct 2004</td>
<td>New Orleans</td>
<td>Developing a protocol for a review</td>
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For an up-to-date listing see: [http://www.cochrane.org/cochrane/workshop.htm](http://www.cochrane.org/cochrane/workshop.htm)

### DIARY DATES

**11th Annual Meeting of UK Contributors to The Cochrane Collaboration**
14th–15th March 2005, Manchester, UK

**13th Cochrane Colloquium**
22nd–26th October 2005, Melbourne, Australia
ICEPH, Eastman Dental Institute, University College London, UK.

Limited attendance annual intensive four-day course in systematic reviews for clinical and non-clinical professionals in oral health care. The course is aimed both at those who have not yet conducted a systematic review and those engaged in a review and who are seeking guidance.

Course content:
Scientific basis of systematic reviews; assembling a collaborative review team; developing a protocol; searching for data; quality appraisal of research; planning study eligibility; data abstraction; pooling data and meta-analysis; producing review conclusions and reports.

It is provided by staff from the Eastman Dental Institute, UK Cochrane Centre and Cochrane Oral Health Group.

For more details and enquiries contact Mrs Shirley Goodey (s.goodey@eastman.ucl.ac.uk), or visit: http://www.eastman.ucl.ac.uk/

How can we improve?
Any comments or suggestions on how we can improve any aspect of our newsletter? Please send them to luisa.fernandez@man.ac.uk or post them to us at the address given at the end of the newsletter.
Cochrane Oral Health Group Reviews

Published Reviews

- Orthodontic treatments for posterior crossbites – Harrison J, Ashby D [UPDATED JANUARY 2001]
- Interventions for treating oral lichen planus – Chan ES-Y, Thornhill M, Zakrzewska J
- Interventions for preventing oral candidiasis for patients with cancer receiving treatment – Clarkson JE, Worthington HV, Eden OB [UPDATED JULY 2002]
- Guided tissue regeneration for periodontal infra-bony defects – Needleman I, Giedrys-Leeper E, Tucker R, Worthington HV
- Potassium nitrate toothpaste for dentine hypersensitivity – Poulsen S, Erboe M, Hovgaard O, Worthington HV
- Interventions for the treatment of burning mouth syndrome – Zakrzewska J, Glenny AM, Forsell H
- Interventions for treating oral candidiasis for patients receiving chemotherapy and or radiotherapy – Clarkson JE, Worthington HV, Eden OB [UPDATED JANUARY 2004]
- Interventions for treating oral mucositis for patients receiving chemotherapy and or radiotherapy – Worthington HV, Clarkson JE, Eden OB [UPDATED APRIL 2004]
- Fluoride gels for preventing dental caries in children and adolescents – Marinho VCC, Sheiham A, Logan S, Higgins JPT
- Interventions for replacing missing teeth: hyperbaric oxygen therapy for irradiated patients who require dental implants – Coulthard P, Esposito M, Worthington HV, Jokstad A
- Interventions for replacing missing teeth: maintaining and re-establishing healthy tissues around dental implants – Esposito M, Coulthard P, Worthington HV, Thomsen P [UPDATE TO BE PUBLISHED JULY 2004]
- Interventions for preventing oral mucositis for patients with cancer receiving treatment – Worthington HV, Clarkson JE, Eden OB [UPDATED JULY 2003]
- Interventions for replacing missing teeth: pre-prosthetic surgery versus dental implants - Coulthard P, Esposito M, Worthington HV, Jokstad A
- Interventions for replacing missing teeth: different times for loading dental implants – Esposito M, Coulthard P, Worthington HV [UPDATE TO BE PUBLISHED JULY 2004]
- Ceramic inlays for restoring teeth – Hayashi M, Yeung CA
- Pulp treatment for extensive decay in primary teeth – Nadin G, Glenny AM, Goel B, Yeung A
- Interventions for replacing missing teeth: surgical techniques for placing dental implants – Coulthard P, Worthington HV, Esposito M, Jokstad A
- Hyaluronate for the treatment of temporomandibular joint disorders – Zongdao S, Awad M
- Occlusal adjustment for treating temporomandibular joint disorders – Koh H, Robinson P
- Adhesives for fixed orthodontic brackets - Mandall NA, Mattick CR, Millett DT, Harrison JE, Davies K, Hickman J, Worthington HV
- Enamel matrix derivative (Emdogain) for periodontal tissue regeneration in intrabony defects – Esposito M, Coulthard P, Worthington HV
- Interventions for replacing missing teeth: bone augmentation techniques for dental implant treatment - Coulthard P, Esposito M, Worthington HV, Jokstad A
- Fluoride mouthrinses for preventing dental caries in children and adolescents – Marinho VCC, Higgins JPT, Sheiham A, Logan S
- Antibiotics to prevent complications following dental implant treatment – Esposito M, Coulthard P, Oliver R, Thomsen P, Worthington HV
- Interventions for replacing missing teeth: dental implants in zygomatic bone for the rehabilitation of the severely deficient edentulous maxilla – Esposito M, Coulthard P, Thomsen P, Worthington HV
- Screening programmes for the early detection and prevention of oral cancer – Kujan O, Glenny AM, Duxbury AJ, Thakker N, Sloan P
- Topical fluoride (toothpastes, mouthrinses, gels or varnishes) for preventing dental caries in children and adolescents - Marinho VCC, Higgins JPT, Sheiham A, Logan S
- Stabilisation splint therapy for temporomandibular pain dysfunction syndrome – Al-Ani Z, Gray R, Davies S, Sloan P, Worthington HV
- Retention procedures for stabilising tooth position after treatment with orthodontic braces – Littlewood S, Millett D, Doubleday B, Beam D, Worthington HV
- One topical fluoride (varnishes, or gels, or rinses, or toothpastes) versus another for preventing dental caries in children and adolescents – Marinho VCC, Higgins JPT, Sheiham A, Logan S
- Combinations of topical fluorides (varnishes, or gels, or rinses, or toothpastes) versus one topical fluoride for preventing dental caries in children and adolescents - Marinho VCC, Higgins JPT, Sheiham A, Logan S
Published Protocols

- Topical fluoride for treating dental caries – Ferreira de Oliveira MA, Celeste RK, Rodrigues C
- Orthodontic treatment for children with prominent upper front teeth – Harrison JE, O’Brien KD, Worthington HV, Bickley SR, Scholey JM, Shaw WC
- Orthodontic treatment for children with prominent lower front teeth – Harrison JE, Shaw WC, Worthington HV, Bickley SR, Scholey JM, O’Brien KD
- Orthodontic treatment for crowded teeth in children – Harrison JE, Scholey JM, Worthington HV, Bickley SR, O’Brien KD, Shaw WC
- Interventions for replacing missing teeth: resin bonded bridges and other restorations for the replacement of adult teeth – Swift B, Jepson NJA, McColl E, Steele JG, Steen IN
- Complete or ultracconservative removal of decayed tissue in unfilled teeth – Ricketts DJN, Kidd EAM, Innes N
- Antibiotics to prevent complications following tooth extraction – Lodig G, Sardella A, Bez C, Demarosi F, Carrassi A
- Sedation of anxious children undergoing dental treatment – Matharu L, Ashley P
- Fluoridated milk for preventing dental caries in children and adolescents – Yeung A, Tickle M
- Anterior repositioning splint for temporomandibular joint disc displacement – Al-Ani MZ, Gray RJM, Davies S, Sloan P
- Drug interventions for pain relief during orthodontic treatment – Cooper J, Harrison J
- Interventions for treating ameloblastomas of the jaws – Zheng JW, Chen CJ, Wang MG
- Surgical techniques for removal of mandibular third molar teeth – Coulthard P, Esposito M, Worthington HV
- Recall intervals for oral health in primary care patients – Forgie A, Beirne P, Worthington HV, Clarkson J
- Dental fillings for the treatment of early childhood caries – Yengopal J, Siegfried N, Patel N
- Paracetamol for pain relief after the surgical removal of wisdom teeth – Coulthard P, Afzal Z, Weil K, Esposito M, Worthington HV
- Home-based interventions for whitening teeth in adults -
- Pulp management for caries in adults – Miyashita H, Qualtrough A
- Adhesives for fixed orthodontic bands – Millett D, Mandall H, Matlick C, Hickman J
- Full mouth disinfection for the treatment of periodontitis – Eberhard J, Jepson S, Needleman I, Worthington HV
- Xyitol containing oral products for preventing dental caries – Hildebrandt G
- Extraction of primary (baby) canine teeth for unerupted palatally displaced permanent canine teeth in children – Shah A, Benson P, Parkin N, Third B
- Root canal posts for the restoration of root filled teeth – Muller-Bola M, Bola M, Lupi-Pegurier L, Laplanche O, Leforestier E
- Pharmacological interventions for pain in patients with temporomandibular disorders – Lele S, Hooper L
- Treatment of periodontal disease for glycaemic control in people with diabetes – Simpson T, Needleman I, Wild SH, Moles DR, Mills EJ
- Local delivery antimicrobials for chronic periodontitis – Suvan J, Needleman I, Moles D, Tonetti M, Minchuan L [TO BE PUBLISHED JULY 2004]
- Interventions for replacing missing teeth: denture chewing surface designs in edentulous adults – Sutton F, McCord JF, Jokstad A [TO BE PUBLISHED JULY 2004]
- Pharmacological interventions for preventing salivary gland dysfunction following radiotherapy – Tavender E, Davies A, Glenny A-M [TO BE PUBLISHED JULY 2004]
- Triclosan-contained toothpaste for gingival health – Yaziz YA, Needleman I, Moles D, Esposito M [TO BE PUBLISHED JULY 2004]
Issue 9

Chemo-mechanical (Carisolv) for treating dental caries – Braun A, Eberhard J, Krause F, Glenny AM, Jepsen S [TO BE PUBLISHED JULY 2004]

Protocols in the refereeing process

- School dental screening for oral health – Holden L, Jones CJ
- Delayed versus immediate traction for unerupted upper canine teeth – Third B, Shah A, Stirups D
- Arthrocentesis and lavage for temporomandibular joint disorders – Chunlan G, Revington P
- Interleukin-1 receptor antagonist for treating periodontitis – Dashash M, Glenny AM, Drucker D, Hutchinson IV, Blinkhorn A
- Single visit or multiple visits for endodontic treatment – Gagliani M, Colombo M, Maddalone M, Figini L, Gorni F
- Occlusal management for periodontitis in adults – Weston P, Needleman I, Moles D
- Surgically assisted methods used to reinforce anchorage for patients undergoing orthodontic treatment with fixed braces – Skeggs R, Benson P
- Fixation methods for stabilisation following jaw surgery – Cunningham S, Hunt N, Moles D
- Psychological interventions for increasing adherence to oral hygiene education and instruction in adults with periodontitis – Renz A, Smith D, Robinson P
- Systemic antibiotics as adjunctive treatment for chronic periodontitis – Lodi G, Cazzaniga A, Cantini E, Fiorini A, Galli C
- Powered toothbrushes for oral health – Deacon S
- Physical therapy for treating temporomandibular disorders – Craene B, Stappaerts K, Pijkastra P, Stegenga B, De Laat A
- Interventions for the repair of iatrogenic lingual nerve injury in oral surgery – Renton T, Robinson P
- Interventions for the repair of iatrogenic inferior alveolar nerve injury in oral surgery – Renton T, Robinson P
- Amide local anaesthetics for postoperative pain following third molar surgery – Joshi A, Rood JP, Hooper L
- Antibiotic use for irreversible pulpitis – Keenan J

Titles registered

- Therapeutic trials for recurrent (aphthous) oral ulcers – Prolo P, Delgoel S, Thornhill M
- Management of orbital blow-out fractures – Courtney D, Hughes C
- Replacement of amalgam fillings for reactions in the mouth – Issa Y, Duxbury J, Brunton P
- Arthroscopy for temporomandibular joint pain – Harrison S, Jokstad A
- Chlorhexidine for the prevention and management of dental caries – Hunter L, Ricketts D, Clarkson J, Addy M, Uribe S
- Preparation of teeth for root canal therapy – Sequeira P, Barbakow F
- Interventions for preventing stomatitis caused by dentures – Hilgert J, Hugo F, Rosi de Freitas Medero L
- Interventions for treating stomatitis caused by dentures – Hugo F, Hilgert J, Rosi de Freitas Medero L
- Interventions for caries management in head and neck cancer patients – Morrow L, Wilson MA
- Interventions for periodontal management in head and neck cancer patients – Morrow L, Wilson MA
- Bone grafting for periodontal intrabony defects – Aichelmann-Reidy ME, Branch-Mays G
- Direct composite restorations for posterior teeth – Schmidlin P, Crevona M, Sequeira P
- Hyperbaric oxygen therapy for osteoradionecrosis in people with oral cancer – Akhtar S, Edwards A
- Acyclovir for primary herpetic gingivostomatitis in children – Alkhennan A, Aljumaah S
- The management of the fractured edentulous atrophic mandible – Mckenzie J, Hyde N
- Mouthrinses for the prevention of complications after dental extraction – Ellassar H, Kilgariff JK, Ibarhim A, Ho-A-Yun J
- Interventions for treating dental caries in children under five years – Gussy M, Love K, Waters L, Kilpatrick N
- Interventions for the treatment of oral cancer – Clarkson J, Worthington HV, Glenny AM, Coulthard P
- Interspace brushes for oral hygiene in orthodontic patients with fixed appliances – Goh HH
- Slow-release fluoride devices for the prevention of dental decay – Bonner B, Clarkson J
- Headgear treatment for the movement of molar teeth in orthodontics – Goh HH
- Oral hygiene education and instruction for preventing plaque and gingivitis in adults – Young L, Clarkson J, Needleman I
- Enamel etching for fixed orthodontic appliances – Qingsong Y, Zhihe Z, Soma K, Wei SHY, Zongdao S
- Closed eruption versus apically repositioned flap in the management of impacted canines – Sanu T
- Adjunctive chlorhexidine for treating chronic periodontitis – Cheucharoenvasuchai N
- Antibiotic prophylaxis for preventing infection of prosthetic joints after dental treatment – Oliver R, Hooper L
- Fluoride toothpaste and flourosil in children – Tavener J
- Self etching primer for bonding orthodontic brackets – Zhijian L
- Treating periodontal disease to prevent preterm birth in pregnant women – Crowther C, Slade G
- Interventions for caries management in non-impacted wisdom teeth – Oseghale P
- Dexamethasone for reducing swelling following oral surgery – Promod P, Joshi A
- Materials for retrograde fillings in root canal treatment – Luihe J
- Non-pharmacological techniques for helping anxious children accept dental procedures – Lertsinvorakul J
- Preformed metal crowns versus conventional fillings for decayed primary molar teeth – Innes N
- Crowns versus conventional fillings for the restoration of root filled teeth – Minchella C, Steele J
- Pulp management for caries in adults: pulpotomy versus pulpectomy – Quatrough A, Miyashita H
- Replacement versus repair of failing restorations in adults – Brunton P, Tickle M, Dunne S, Castleth M, Merry A
- Interventions for treating temporomandibular joint osteoarthrits – Leonardi R, Barbato E
- Alendronate for preventing tooth loss in postmenopausal women – Gondim V, Romito G, Pustiglioni F, Aldrighi J, Gomes G, Trítone A
- Occlusal splint for treating bruxism (tooth grinding) – Rufino de Macedo C, Fernandes de Prado G, Silva B
Registration of title for a Cochrane Systematic Review

Please complete and return this form by mail or fax to: The Co-ordinator, Cochrane Oral Health Group, MANDEC, University Dental Hospital of Manchester, Higher Cambridge Street, Manchester, M15 6FH (UK) Fax: +44 (0)161 275 7815.

Date: ....................................

Contact Reviewer Name: ............................................................................................................................

Position/Department: .................................................................................................................................

Address: ....................................................................................................................................................
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Tel: .................................................................Fax: ........................................................................
E-mail: ......................................................................................................................................................

I am/my colleagues and I are (delete as appropriate) intending to undertake a Cochrane systematic review and wish to submit the title below for consideration by the editorial team of the Oral Health Group.

Guidance on titles. Titles should succinctly state the focus of the review. It should make clear the intervention(s) reviewed and the problem at which the intervention is directed. Someone scanning the title should be able to decide quickly whether the review addresses a question of interest. The format of Cochrane titles is: [Intervention] for [health problem] in [participants/setting]

Full title of proposed review (Maximum 250 characters)

(please print)

................................................................................................................................................................

Authors

................................................................................................................................................................

Expected date for submission of protocol ......................................................

(For office use)
Title accepted on behalf of the Cochrane Oral Health Group

(Signature) .................................................. (Status) .................................................................

Date ......................................................
Dear Colleague

To register as a member of the Cochrane Oral Health Group (free of charge) please complete the
details below and return the form to the address below, by post or by fax, marked for the attention of
The Co-ordinator, Cochrane Oral Health Group.
If you know of others who may be interested in joining the group please feel free to photocopy and
forward a copy of this form to them for their completion and return.

(Please print your entries clearly)

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<tr>
<th>Last Name:</th>
<th>First name/s:</th>
<th>Title:</th>
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<td>(Mr; Mrs; Miss; Ms; Dr; Prof)</td>
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Address:

Telephone: Fax:

Email:

**Participation** There are several options for your participation in the Cochrane Oral
Health Group. Please tick the appropriate box/es below.
We welcome all those interested in supporting the Oral Health Group. Preparing and
maintaining systematic reviews is a very time consuming, arduous but rewarding process.
We encourage collaboration between members on reviews. Please indicate by ticking the
box/es below the option/s that best suits your available time commitment.

**Review subject interest:**

I wish to choose a topic and be responsible for carrying out and
maintaining a systematic review.

I am willing to assist others in carrying out and maintaining a
systematic review.

I am willing to be responsible for handsearching a journal
retrospectively and prospectively to maintain surveillance of the
journal in the future.

I am willing to become a referee for the Group, my specialist
interests are:

I am willing to offer consumer input commenting on drafts of
Cochrane reviews or suggesting questions for review.

I am unable to make a practical commitment to the Oral Health
Group at the present time but would like to remain on the
mailing list to be kept informed of the Group’s activities.

Emma Tavender, Co-ordinator, Cochrane Oral Health Group
MANDEC, University Dental Hospital of Manchester
Higher Cambridge Street
MANCHESTER M15 6FH UK
Tel: +44 (0)161 275 7818 / Fax: +44 (0)161 275 7815
Email: emma.tavender@man.ac.uk