



COCHRANE EYES AND VISION GROUP

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THE COCHRANE
COLLABORATION

CEVG EDITORIAL BASE MOVES

In April 2003, the CEVG editorial base moved to the London School of Hygiene & Tropical Medicine (LSHTM). We joined the new International Centre for Eye Health (ICEH), a WHO Collaborating Centre for the Prevention of Blindness.

This rapidly growing department focuses its activities on the prevention of blindness in developing countries through VISION 2020 – the Right to Sight. As well as running an annual MSc in Community Eye Health, it also runs a network of short courses and resource centres around the world.

CEVG will collaborate with the Journal of Community Eye Health, a well-established international journal already reaching more than 16,000 readers around the world. It is hoped to use this as a channel for disseminating best evidence for best practice to those parts of the world where it is most needed.

We look forward to working with the Cochrane Injuries Group, also based at LSHTM, and to contributing with them to teaching systematic review methodology to the numerous post-graduate students from all over the world.

We will maintain strong links with Moorfields Eye Hospital, as part of the growing collaboration with LSHTM. This is an important means by which research into eye health and issues in Ophthalmic Epidemiology and public health will grow.

New members of the editorial team

Sarah Richardson, Senior Research Orthoptist at the Royal Victoria Infirmary, Newcastle upon Tyne, UK has become our new editor for paediatric ophthalmology and strabismus reviews.

We also welcome **Roberta Scherer**, University of Maryland, USA as our new methodological editor. **Bobbi** is also leading the CEVG@US handsearching project (see page 4 & 5).

We look forward to working with **Marie Diener-West**, USA and **Alicja Rudnicka**, UK who have kindly agreed to help us with statistical peer review.

From April 2004 **Karen Blackhall** joined us for 2 days per week as Trials Search Co-ordinator. Karen has responsibility for maintaining and updating the trials register.

CEVG – the next generation

2003 was a good year for CEVG's empire building:

Katherine Henshaw (RGC) and **Catey Bunce** (Statistical Editor) both had baby boys.

Suzanne Brodney-Folse (CEVG@US Project Director) had a baby girl.

And in March this year, **Anupa Shah** (RGC/TSC) got married.

Congratulations to them all.

Aubrey Sheiham Scholarship

One of our reviewers, **Dr Mansur Rabi** from Nigeria, was awarded the Aubrey Sheiham Scholarship last year.

Mansur has prepared a review on environmental sanitary interventions for preventing active trachoma. This review is due to be published on Issue 4, 2004 of the Cochrane Library

The scholarship allowed Mansur to stay in Oxford, UK where he received training to help him write the review. Mansur is also a co-reviewer on another trachoma review and a corneal abrasion review.

CEVG book published

After three years of preparation by members of the CEVG, Evidence-Based Ophthalmology was published in November 2003.

Edited by **Katherine Henshaw**, **Liam Smeeth** and **Richard Wormald** with research by **Anupa Shah**, the book is part of a series on evidence based medicine published by BMJ Books and comes with a free CD-ROM.

Philippines leading the way

Richard Wormald

The 2002 Annual Meeting of the Philippine Academy of Ophthalmology (November) focussed entirely on evidence based ophthalmology (EBO). I gave several presentations to plenary sessions and smaller groups at the meeting. One of the best-appreciated sessions was based on case scenarios, which were used as the basis for clinical discussion and search of the evidence base to inform decisions on interventions.

Sessions on EBO were also held at the first Singapore Eye Research Institute ARVO meeting (February 2003), which included a workshop on developing a Cochrane protocol. In the absence of the co-ordinating editor (who had to cancel at the last minute), Professor Sally Green of the Australasian Cochrane Centre gave an excellent presentation.

At ARVO 2003 there was another Special Interest Group meeting which was attended by more than 80 delegates who enjoyed an excellent presentation from Professor Henry Jampel from Johns Hopkins University (also a member of the CEVG US Steering Group and Associate Editor-in-chief of Ophthalmology) (May).

On the basis of the success of the Philippine meeting, Charles Moore, Chairman of the eye faculty at the University of West Virginia, invited me to speak at the UWV annual glaucoma day in October 2003. In November 2003, the first full-day workshop on EBO was held at the American Academy of Ophthalmology meeting at Anaheim, CA. In December 2003, I gave the 8th Symala Bhaskaran Endowment Lecture at the LV Prasad Institute of Ophthalmology in Hyderabad, India on 'Evidence for the Prevention of Blindness'.

CEVG@US has been active in organising workshops in the USA over the last year; most recently a full day satellite workshop on EBO was held at ARVO 2004.

12th Cochrane Colloquium October 2 - 6, 2004 - 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. Further information is available from <http://www.colloquium.info/>

NEW, IMPROVED REVMAN

All reviewers are encouraged to use the latest version of RevMan software to prepare their reviews. The new version has many new features including:

- Image files can be added to reviews as additional figures
- Bold, italics, underline, subscript and superscript can be used in the main text
- A new statistical method, generic inverse variance, is included
- A new program for statistical analysis with better options for printing and exporting graphs
- Improved import/export and tables functionality

RevMan 4.2.6 can be downloaded from

<http://www.cc-ims.net/RevMan/current.htm>

NEW COCHRANE REVIEWERS' HANDBOOK (March 2004)

The Reviewers' Handbook is the official document which describes in detail the process of creating Cochrane systematic reviews. Section 8, 'Analysing and presenting results' has been substantially updated for version 4.2.2 and is available as a separate download

<http://www.cochrane.org/resources/handbook/>

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CEVG@US

In 2002 the National Eye Institute of the US National Institutes of Health provided funds to support the US activities of the Cochrane Eyes and Vision Group over the next seven years. Here is a brief overview of some of the work so far. If you would like more information regarding CEVG@US, please contact [Joyce Coutu](mailto:Joyce.Coutu@brown.edu).

Bringing Cochrane to US clinicians

Lively discussion and critical thinking were in full swing as CEVG@US launched several successful workshops this year to educate clinicians about evidence-based healthcare. Our workshops attracted participants from all over the US as well as many other parts of the world. Translating critical appraisal to meaningful peer review was held at Brown Medical School in Providence, RI, and also at the annual meeting of the American Glaucoma Society. Evidence-based ophthalmology: A workshop on finding, synthesizing and applying clinical evidence was held at the American Academy of Ophthalmology annual meeting in Anaheim, CA, and was also a big hit at ARVO in Ft. Lauderdale, FL. Other well-received workshops include Evidence-based optometry at the American Academy of Optometry annual meeting in Dallas, TX, Developing a protocol for a systematic review at Brown Medical School in Providence, RI, and How to Perform a Cochrane Systematic Review in Sarasota, FL. A short web-based course is now available to prepare handsearchers to identify randomized controlled and controlled clinical trials that fit the rigorous standards which providers, researchers, healthcare consumers, and others have come to expect from the Cochrane Collaboration in the last decade. This training is also available as a paper-based manual. You can find more information about upcoming workshops and web-based training on our website: www.CochraneEyes.org.

Increasing the US contribution to The Cochrane Library

The CEVG@US staff has successfully helped with registration of nine titles and publishing of three protocols on The Cochrane Library. We offer timely and comprehensive methodological support to US-based vision practitioners who undertake a review. The CEVG@US has office space available for prospective reviewers needing quiet space away from the everyday distractions in order to work on a review. CEVG@US can facilitate the development and publication process for busy clinicians and we encourage US-based vision practitioners who are interested in becoming trained in the Cochrane systematic review process and conducting Cochrane systematic reviews to contact us by email or telephone (401-863-9950). If you would like to get involved but do not have a topic, please view the priority topics that need reviewers on our website or email us at CEVG@brown.edu and we will guide you through the process.

Identification of trials for the CEVG Register – Roberta Scherer

Handsearching, the process of manually screening peer-reviewed biomedical journals, conference proceedings and other publications for the best-available evidence is integral in the process in identifying results of research that can be used in Cochrane systematic reviews.

The first step was to decide which journals or conference proceedings we wished to search and then to prioritise these according to importance or yield. Knowing that only about 66% of controlled clinical trials first presented in abstract form are subsequently published in full, we decided that searching conference proceedings was a high priority. We also decided to search those vision science journals previously identified as having the most reports of randomised controlled trials. We strove to achieve balance in the number of ophthalmology and optometry conferences and journals.

We drew up a list of three major conferences (the American Academy of Ophthalmology, the American Academy of Optometry, and the Association for Research in Vision and Ophthalmology) and seven vision science journals (American Journal of Ophthalmology; Archives of Ophthalmology; the CLAO Journal; Ophthalmic and Physiological Optics; Ophthalmology; Optometry and Vision Science (formerly the American Journal of Optometry and Archives of American Academy of Optometry); and Optometry (formerly Journal of the American Optometric Association); and Journal of the American Optometric Association. We obtained copies of the conference proceedings from 1990 to 2001 or 2002. We decided to search journals from the most current issues back to 1948 or date of first publication. We then developed paper and online materials to train handsearchers and to ensure quality control. Four volunteers from the Association of Vision Science

Librarians and one student completed the hand searching training. Hand searching began in September 2002.

To date, we have completed searching the following conference proceedings: American Academy of Ophthalmology, 1990 to 2002; American Academy of Optometry, 1990 to 1997 and 1999 to 2001; Association for Research in Vision and Ophthalmology, 1990 and 1994.

We identified a total of 1,480 abstracts reporting trials (830 randomised controlled trials (RCTs) and 650 controlled clinical trials (CCTs)) from a total of 17,390 abstracts. If only 66% of these abstracts are published in full, then we will have identified 504 reports of trials likely to be published only in abstract form.

We also completed searching the following journals: American Journal of Ophthalmology - 1999 and 2001; Archives of Ophthalmology - 1980, 1982 to 1984, and 1998 to 2000; CLAO Journal - 1996 to 2002; Ophthalmic and Physiological Optics - 1995 to 2002; Ophthalmology - 1994 to 2002; Optometry and Vision Science – 2002.

We identified a total of 414 reports of RCTs and 58 CCTs. A number of these are not currently indexed by MEDLINE with publication type [randomized controlled trial] or [controlled clinical trial]. Overall, we found approximately 2,000 reports of clinical trials from handsearching 26 years of conference proceedings and 27 years of journals. We expect to handsearch about this same number of conference proceedings or journals per year for the next six years. This will significantly increase the comprehensiveness of the CEVG Register.

Association for Research in Vision and Ophthalmology							
Year	Total No. Abstracts	Struct-ured abstract	Search time (hours)	No. RCTs	No. CCTs	Estimated full publication	
						No. trials published	No. trials not published
1990	2987	No	49.8	54	24	51	27
1994	4487	Yes	37.4	88	25	75	38
TOTAL	7474		87.2	142	49	126	65

American Academy of Ophthalmology							
Year	Total No. Abstracts	Struct-ured abstract	Search time (hours)	No. RCTs	No. CCTs	Estimated full publication	
						No. trials published	No. trials not published
1990	290	No	4.8	13	16	19	10
1991	449	No	7.5	19	13	21	11
1992	401	No	6.7	33	16	32	17
1993	400	No	6.7	19	16	23	12
1994	436	No	7.3	31	22	35	18
1995	455	Yes	3.8	29	16	30	15
1996	447	Yes	3.7	32	26	38	20
1997	438	Yes	3.7	36	25	40	21
1998	454	Yes	3.8	26	27	35	18
1999	609	Yes	5.1	32	25	38	19
2000	470	Yes	3.9	34	9	28	15
2001	485	Yes	4.0	40	33	48	25
2002	411	Yes	3.4	30	22	34	18
TOTAL	5745		64.3	374	266	422	218

American Academy of Optometry							
Year	Total No. Abstracts	Struct-ured abstract	Search time (hours)	No. RCTs	No. CCTs	Estimated full publication	
						No. trials published	No. trials not published
1990	297	No	5.0	16	24	26	14
1991	368	No	6.1	20	34	36	18
1992	336	No	5.6	18	31	32	17
1993	322	No	5.4	22	19	27	14
1994	345	No	5.8	26	25	34	17
1995	374	Yes	3.1	25	24	32	17
1996	372	Yes	3.1	36	42	51	27
1997	338	Yes	2.8	35	36	47	24
1999	456	Yes	3.8	38	39	51	26
2000	442	Yes	3.7	34	16	33	17
2001	521	Yes	4.3	44	45	59	30
TOTAL	4171		48.7	314	335	428	221

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Progress on reviews of age-related macular degeneration

Jennifer Evans

Age-related macular degeneration (AMD) is the most frequently occurring cause of blindness and visual impairment in most countries in Europe, North America and Australasia. As the population ages, this disease is increasing in importance.

For people who have AMD the outlook is bleak. They are likely to lose their central vision progressively and currently there are no effective treatments to restore sight.

With funding from the Guide Dogs for the Blind Association we have assembled a register of controlled trials – currently we are aware of approximately 80 trials, published and ongoing. A summary of the evidence from these trials is published in Evidence-Based Ophthalmology (see page 2).

We have developed a priority list of reviews, some of which require reviewers. Please come forward if you are interested in reviewing any of these areas. We hope that in the next few years we will have regularly updated reviews on The Cochrane Library of all interventions relevant to AMD.

Status	Intervention (no. trials)	Lead reviewer
Treatment of choroidal neovascular membranes		
Protocol	Thermal laser photocoagulation (15)	Gianni Virgili
Review	Photodynamic therapy (10)	Richard Wormald
Review in editorial process	Radiotherapy (12)	Victor Chong
Protocol	Anti-angiogenic therapy (4)	Magdalena Krzystolik
Protocol	Surgically implanted steroids (3)	Arthur Geltzer
	Submacular surgery (3)	
	Thermotherapy (1)	
Treatments designed to halt the progression of AMD		
Review	Antioxidant vitamins/minerals (6)	Jennifer Evans
Review	Antioxidant vitamins/minerals for preventing AMD (1)	Jennifer Evans
Review	Gingko biloba (1)	Jennifer Evans
Title	Laser treatment of drusen (10)	Jennifer Evans (co-reviewer required for this title)
	Treatments aimed to improve the choroidal circulation (9)	
Other treatments		
	Relocation of the retina (1)	
Rehabilitation		
	Health education in AMD (2)	
Review	Orientation and mobility training for adults with low vision (0)	Gianni Virgili
Diagnosis		
	Diagnostic methods in AMD (1)	

COCHRANE WORKSHOPS 2004

Below is a list of all workshops offered by Cochrane centres for reviewers in their region. For further information please follow the link to the relevant centre. Up to date details can be obtained from the [Cochrane Collaboration website](#).

<u>AUSTRALASIAN COCHRANE CENTRE</u>		
31 May – 1 June	Singapore	Protocol and analysis
15 June	Sydney	Protocol
18 June	Sydney	Work-in for reviewers
5 – 7 July	Vellore, India	How to do a Cochrane systematic review
15 – 16 July	Hobart	Introduction to systematic reviews and protocols
August (dates tba)	Brisbane	Protocol and analysis
15 – 19 November	Melbourne	Review completion program
22 – 23 November	Christchurch	Analysis and review completion
<u>BRAZILIAN COCHRANE CENTRE</u>		
<u>CANADIAN COCHRANE CENTER</u>		
<u>DUTCH COCHRANE CENTRE</u>		
<u>GERMAN COCHRANE CENTRE</u>		
<u>IBEROAMERICANO COCHRANE CENTRE</u>		
13 December	Barcelona	Developing a protocol and using RevMan
14 December	Barcelona	Developing a protocol and using RevMan
<u>NORDIC COCHRANE CENTRE</u>		
1–2 and 14–15 June	Copenhagen	Kursus i evidensbaseret klinik (in Danish)
21 October	Kuopio, Finland	Basic course on writing Cochrane reviews
25 October	Copenhagen	Protocol workshop
On demand	Copenhagen and Oslo	Individual sessions on writing protocols/reviews and using RevMan
<u>UK COCHRANE CENTRE</u>		
27 May	Oxford	Developing a protocol for a review
28 May	Oxford	Introduction to analysis
8 June	Dundee	Developing a protocol for a review
9 June	Dundee	Introduction to analysis
13 July	London	Developing a protocol for a review
14 July	London	Introduction to analysis
13 September	Oxford	Developing a protocol for a review
14 September	Oxford	Introduction to analysis
8 November	Belfast	Developing a protocol for a review
9 November	Belfast	Introduction to analysis
1 December	Liverpool	Developing a protocol for a review
2 December	Liverpool	Introduction to analysis
<u>US COCHRANE CENTER</u>		
21 – 23 July	Cape Cod	How to perform a systematic review
1 August	Utah	Translating critical appraisal into meaningful peer review
22 October	New Orleans	Developing a protocol for a systematic review

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10th Annual Meeting of UK Contributors to the Cochrane Collaboration

Edinburgh Conference Centre, 25–26 March 2004

Here is a brief report from each of the workshops that I attended at the meeting.

Jennifer Evans

INTERPRETING RESULTS AND DRAWING CONCLUSIONS

DOUG ALTMAN

This workshop was not for the faint hearted. Doug Altman, an eminent professor of medical statistics and expert on systematic reviews, went through an exhaustive list of the potential problems in interpreting systematic reviews. He outlined the fact that, although a systematic review aims to be an objective piece of work, there are decisions to be made that involve 'judgement' at many stages of doing and interpreting the review. The sorts of questions that he covered were:

- Have we got all the relevant studies?
- Are studies similar enough to combine statistically – consider interventions, patient characteristics, length of follow up and outcome? Do we lump all the studies together or split them up?
- How should we handle variation in study quality?
- Which model should we use for combining the studies? Which effect measure/outcome? How do we deal with subgroup analyses?

Where possible, these decisions should be laid out in the protocol. However, it is not always possible to predict what is going to arise in the review. Any decisions about how the review is done that are made after the protocol stage need to be acknowledged in the review.

As far as quality assessment goes, we should not rely on overall quality 'scores' but consider each parameter of quality i.e. allocation concealment, masking etc separately. There should be more effort to include the assessment of quality in the interpretation of the review. If all the trials were poor and likely to be susceptible to bias then this should be acknowledged in the abstract (as well as the results/discussion) as this is the part of the review that is most widely circulated.

Doug touched on the problem of 'selective reporting bias'. This occurs when trialists report only certain (usually statistically significant) outcomes from their trials. Recent research by Doug's team has documented this problem in several cohorts of trials. It is essential in reviews to pre-specify outcomes and to be suspicious of trials that have not reported outcomes that you would expect.

The subject of subgroup analyses came with a health warning – 'Beware'. He gave examples of reviews where the authors had compared p-values between different subgroups and because one subgroup showed a statistically significant effect and the other had not, the authors had drawn erroneous conclusions. Never do that! If you want to know how to compare two risk ratios (or relative risks) in different subgroups look at Altman and Bland BMJ 2003;326:219 or contact the editorial base who will give you statistical help.

So, when drawing conclusions from your review, you need to decide how much account should be taken of study weakness, heterogeneity, the amount of information, and potential for publication bias, are the findings clinically valuable, what evidence is there for harms? Does that put you off? The take home message is: "Beware the simple answer!!"

CHOICE OF STATISTICS FOR BINARY DATA

JON DEEKS

This workshop covered the basics as to which effect measure to choose i.e.:

(1) Odds ratios and risk ratios are similar if the outcome of interest is rare (for example, less than 10% of the control group experience the outcome). If the outcome of interest is common, odds ratios always exaggerate treatment effect compared to risk ratios.

(2) Use risk ratios if the outcome occurs more often as risk ratios are easier to interpret than odds ratios.

(3) Risk difference is of interest because it tells you about the absolute effect of treatment, however can be difficult to interpret if the trials have very different risks in the control group.

And extended the discussion of risk ratios. When it comes to meta-analysis, the risk of an event happening is not the same as the event not happening. The example in the workshop was something like: risk ratio of bad outcome with treatment 1.32 but the risk ratio reversed (i.e. risk ratio of bad outcome not happening) was 0.90. If you think about drawing conclusions in your review are you going to say that there was a 30% increased risk of (for example) vision loss, or a 10% reduction in risk of not losing vision?

So, bear in mind that there is one more outcome to choose between when doing your review – the ‘risk ratio reversed’ and that it would make sense to get statistical advice before you finalise your outcomes in your protocol. If you are statistically inclined yourself you could look at Jon Deeks’s paper (Deeks JJ, Issues in the selection of a summary statistic for meta-analysis of clinical trials with binary outcomes, *Statistics in Medicine*, 2002; 21:1575–1600).

My take home message from the workshop was that the sorts of outcomes that I look at in my reviews i.e. loss of vision, were probably appropriately described by the risk ratio.

THE NEW ‘GENERIC INVERSE VARIANCE’ OUTCOME TYPE IN REVMAN

JULIAN HIGGINS

This is a very useful addition to RevMan. If you have the sorts of trials where the units of analysis are not independent (e.g. eyes, cluster randomised trials, cross-over trials), this facility gives you the ability to input the data in RevMan. You can also use this feature to enter data such as rates or adjusted estimates.

You enter the estimate (which could be an odds ratio, mean difference, rate ratio etc) and its standard error for each trial. You can cut and paste from a spreadsheet. The tricky bit is calculating the standard error in the first place.

If you have data from cluster randomised trials and from trials where individuals have been randomised you can pool all these together using the generic inverse variance feature. However you would need to be sure that the trials were similar enough in other respects – interventions, patient characteristics, outcomes etc – before you did that.

NEXT UK MEETING 14–15 MARCH 2005

**11TH ANNUAL MEETING OF UK CONTRIBUTORS TO THE COCHRANE
COLLABORATION**

MANCHESTER CONFERENCE CENTRE

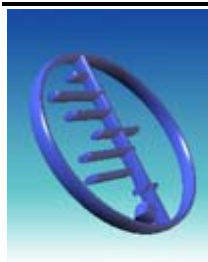
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	Post-operative 5-Fluorouracil for glaucoma surgery
LENS AND CATARACT	
Titles	Antibiotics for treating endophthalmitis after cataract surgery
	Medical interventions for preventing cataract
	Non-steroidal anti-inflammatory agents versus topical steroids for cataract surgery
	Peri-operative antibiotics for preventing acute endophthalmitis after cataract surgery
	Site of incision for reducing surgically induced astigmatism after sutureless cataract surgery (phacoemulsification)
	Viscoelastics for preventing endothelial cell loss in people who have undergone cataract surgery
Protocols	Antioxidant supplementation for preventing age-related cataract
	Bilateral surgery versus unilateral surgery for cataracts
	Interventions for preventing posterior capsule opacification after-ataract surgery
Reviews	Day care versus in-patient surgery for age-related cataract
	Multifocal versus monofocal intraocular lenses after cataract extraction
	Surgical interventions for age-related cataract
MEDICAL RETINA	
Titles	Blood pressure control for the management of diabetic retinopathy
	Haemodilution for retinal vein occlusion
	Interventions for cytomegalovirus retinitis
	Laser treatment for diabetic maculopathy
	Laser treatment for diabetic retinopathy
	Laser treatment of drusen to prevent visual loss in age-related macular degeneration (co-reviewer required for this title)
	Surgical implantation of steroids with antiangiogenic characteristics for treating exudative macular degeneration
Protocols	Antiangiogenic therapy for age-related macular degeneration
	Laser photocoagulation for choroidal neovascularisation in myopic macular degeneration
	Laser photocoagulation for neovascular age-related macular degeneration
	Non-steroidal anti-inflammatory agents for treating cystoid macular oedema
	Radiotherapy for exudative age-related macular degeneration
Reviews	Antioxidants for age-related macular degeneration
	Antioxidants for preventing age-related macular degeneration
	Ginkgo Biloba for age-related macular degeneration
	Interventions for acute non-arteritic central retinal artery occlusion
	Photodynamic therapy for neovascular age-related macular degeneration
NEURO-OPHTHALMOLOGY	
Titles	Steroids versus control for traumatic optic neuropathy
	Surgery for traumatic optic neuropathy
Protocols	Antiplatelet therapy for preventing non-arteritic ischaemic optic neuropathy in the second eye
	Corticosteroids for treating optic neuritis
Reviews	Interventions for idiopathic intracranial hypertension
	Surgery for nonarteritic ischaemic optic neuropathy

OCULAR ADNEXAL	
Titles	Lid hygiene for blepharitis (co-reviewer required for this title)
	Probing for congenital nasolacrimal duct obstruction
	Surgical interventions for involutional lower lid ectropion
	Surgical interventions for involutional upper lid ptosis
Protocols	Corticosteroids for thyroid eye disease
	Endonasal versus external dacryocystorhinostomy for nasolacrimal duct obstruction
	Laser versus non-laser endonasal dacryocystorhinostomy
	Radiotherapy for thyroid eye disease
Reviews	Interventions for involutional lower lid entropion
PAEDIATRIC OPHTHALMOLOGY	
Titles	Contact lenses versus spectacles for slowing myopia progression in children
	Interventions for strabismic amblyopia
	Pharmaceutical treatment for myopia control
	Spectacle lens treatment for myopia control
	Surgical interventions for uveitic cataract in children
Protocols	Interventions for preventing ophthalmia neonatorum
	Ocular interventions excluding refraction for reading difficulties
Reviews	Surgical interventions for bilateral congenital cataract
SQUINT AND STRABISMUS	
Titles	Interventions for infantile esotropia
	Interventions for refractive amblyopia
	Interventions for stimulus deprivation amblyopia
	Occlusion versus atropine penalisation for amblyopia
	Refractive correction for amblyopia
	Screening for amblyopia in childhood
Protocols	Adjustable versus non-adjustable sutures in surgery for strabismus
Reviews	Interventions for intermittent distance exotropia
UVEITIS	
Reviews	Antibiotics versus control for toxoplasma retinochoroiditis
	Ivermectin for onchocercal eye disease (river blindness)
VISUAL IMPAIRMENT AND REHABILITATION	
Protocols	Reading aids for people with low vision
Reviews	Community screening for visual impairment in the elderly
	Orientation and mobility training for adults with low vision
VITREO-RETINAL DISEASES	
Titles	Surgical interventions for repairing simple rhegmatogenous retinal detachments
Protocols	Interventions for acute retinal necrosis
Reviews	Interventions for asymptomatic retinal breaks and lattice degeneration for preventing retinal detachment



ABSTRACTS OF NEW REVIEWS

Below are the abstracts of reviews published since the last newsletter. The full reviews are available on [The Cochrane Library](#).

Day versus in-patient surgery for age-related cataract

Hamed WW, Federowicz Z

Background: Age-related cataract accounts for more than 40% of cases of blindness in the world with the majority of people who are blind from cataract found in the developing world. With the increased number of people with cataract there is an urgent need for cataract surgery to be made available as a day-care procedure.

Objectives: The objective of this review is to provide reliable evidence regarding the safety, feasibility, effectiveness and cost-effectiveness of cataract extraction performed as day-care versus in-patient procedure.

Search strategy: We searched the Cochrane Central Register of Controlled Trials (CENTRAL) (which contains the Cochrane Eyes and Vision Group trials register) on The Cochrane Library (Issue 4 2002), MEDLINE (1966 to November 2002), EMBASE (1980 to November 2002) and LILACS (November 2002).

Selection criteria: This review includes randomised controlled trials comparing day-care and in-patient surgery for age-related cataract. The primary outcome was the achievement of a satisfactory visual acuity six weeks after the operation.

Data collection and analysis: Although two trials are included in the review, adequate data were available for only one trial and therefore pooling of data from studies was not attempted. A descriptive summary is presented.

Main results: Two trials, involving a total of 1284 people, are included in this review. One trial reported statistically significant differences in early postoperative complication rates in the day-care group, with an increased risk of increased intraocular pressure, which had no clinical relevance to visual outcomes four months postoperatively. The mean change in visual acuity (Snellen lines) of the operated eye four months postoperatively was 4.1 (standard deviation (SD) 2.3) for the day-care group and 4.1 (SD 2.2) for the in-patient group and not statistically significant. The four-month postoperative mean change in quality of life score measured using the VF14 showed minimal differences between the two groups. Costs were 20% more for the in-patient group and this was attributed to higher costs for overnight stay. One study only reported hotel costs for the non-hospitalised participants making aggregation of data on costs impossible.

Reviewers' conclusions: This review provides some evidence that there is a cost saving but no significant difference in outcome or risk of postoperative complications between day-care and in-patient cataract surgery. This is based on one detailed and methodologically sound trial conducted in the developed world. The success, safety and cost-effectiveness of cataract surgery as a day-care procedure appears to be acceptable but additional well-designed trials are required to confirm these perceptions.

Interventions for idiopathic intracranial hypertension

Lueck C, McIlwaine G

Background: Idiopathic intracranial hypertension (IIH) occurs throughout the world with an estimated incidence of one to three per 100,000 population per year. It occurs most commonly in obese young women, but the cause is unknown. It presents a significant threat to sight and is associated with severe morbidity in the form of headaches in the majority of cases. Several different treatments have been proposed, ranging from relatively conservative measures such

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as diuretic therapy to more invasive treatments such as optic nerve sheath fenestration or lumbo-peritoneal shunting.

Objectives: The aim of this review is to assess the evidence from controlled trials looking at the various treatments used for idiopathic intracranial hypertension with a view to producing an evidence-based treatment strategy.

Search strategy: We searched the Cochrane Controlled Trials Register - CENTRAL/CCTR (which contains the Cochrane Eyes and Vision Group trials register) on the Cochrane Library Issue 2, 2002, MEDLINE (1966 to March 2002) and EMBASE (1980 to February 2002).

Selection criteria: We included only randomised controlled trials in which any intervention used to treat idiopathic intracranial hypertension had been compared to placebo or to another form of treatment in people with a clinical diagnosis of idiopathic intracranial hypertension.

Data collection and analysis: Two reviewers independently assessed the search results for trials to be included in the review. Discrepancies were resolved by discussion. Since no trials met our inclusion criteria, no assessment of quality or meta-analysis was undertaken.

Main results: No randomised controlled trials were found that met the inclusion criteria.

Reviewers' conclusions: There is insufficient information to generate an evidence-based management strategy for idiopathic intracranial hypertension. Of the various treatments available, there is inadequate information regarding which are truly beneficial and which are potentially harmful. Properly designed and executed trials are needed.

Interventions for intermittent distance exotropia

Richardson S, Gnanaraj L

Background: The clinical management of intermittent distance exotropia has been discussed frequently in the literature but there is a lack of clarity regarding the indications for intervention, the most effective type and the optimum age at which it should be carried out.

Objectives: The objective of this review is to assess intervention criteria, the effects of various surgical and non-surgical treatments in people with intermittent distance exotropia and to determine the significance of factors such as age with respect to outcome.

Search strategy: We searched the Cochrane Central Register of Controlled Trials - CENTRAL (which contains the Cochrane Eyes and Vision Group trials register) on the Cochrane Library (Issue 4 2002), MEDLINE (1966 to November 2002), EMBASE (1980 to November 2002) and LILACS (Latin American and Caribbean Literature on Health Sciences) (1966 to 2002). We manually searched the British Orthoptic Journal, proceedings of the European Strabismological Association (ESA), International Strabismological Association (ISA) and American Academy of Paediatric Ophthalmology and Strabismus meeting (AAPOS). We contacted researchers who are active in the field for information about further published or unpublished studies. There were no language restrictions in the manual or electronic searches.

Selection criteria: We planned to include randomised controlled trials of any surgical or non-surgical treatment for intermittent distance exotropia.

Data collection and analysis: Each reviewer independently assessed study abstracts identified from database and manual searches. Reviewer analysis was then compared and full papers for appropriate studies were obtained.

Main results: No studies were found that met our selection criteria and therefore none were included for analysis.

Reviewers' conclusions: The available literature consists mainly of retrospective case reviews. These are difficult to compare and analyse due to a large variation in the definition of intermittent distance exotropia, intervention criteria and outcome measures. However there seems to be general agreement that non-surgical treatment is most appropriate in small angle deviations or as a supplement to surgery. Studies were found supporting both early and late surgical intervention so the optimal timing of surgical intervention cannot be concluded. Recent work indicates that bilateral surgery may be the most effective surgical procedure in these cases. There is clearly a need for carefully planned clinical trials to be undertaken to improve the evidence base for the management of this condition.

Interventions for normal tension glaucoma

Sycha T, Vass C, Findl O, Bauer P, Groke I, Schmetterer L, Eichler H

Background: Normal tension glaucoma is a clinical condition in which the optic nerve is pathologically excavated and the visual field is disturbed. Nevertheless it has been assumed that intraocular pressure plays a role in the progression of visual field defects in this disease, but other, mainly vascular factors, have been discussed as well.

Objectives: The objective of this review is to assess the effects of medical and surgical treatments for normal tension glaucoma.

Search strategy: Trials were identified from the Cochrane Central Register of Controlled Trials (CENTRAL) (which contains the Cochrane Eyes and Vision Group trials register), MEDLINE, EMBASE and BIOSIS Previews. Bibliographies of identified trials were searched to find additional trials. In addition, investigators and pharmaceutical companies were contacted. Date of last search: January 2001.

Selection criteria: This review includes randomised controlled trials in which medical or surgical interventions were compared to no treatment, placebo or other treatment in people with normal tension glaucoma.

Data collection and analysis: Data were extracted by two reviewers and results were compared for differences. Discrepancies were resolved by discussion. The heterogeneity of interventions, follow-up periods and outcomes did not allow for statistical combinations of the study results.

Main results: According to the selection criteria on visual field loss, eight studies were included in this review. Only three studies focussed on patient relevant outcomes. In one trial a beneficial effect of lowering intraocular pressure was found, but only if data were corrected for cataract development. In two small studies a beneficial effect on visual field loss of brovincamine, a calcium antagonist was reported.

Reviewers' conclusions: In one study the effect of intraocular pressure lowering on visual field outcome was only significant when data were corrected for cataract development. The results for calcium antagonists are promising, but larger trials have to be performed. Studies that focussed on reduction of intraocular pressure or haemodynamic variables are not necessarily relevant for the outcome in people with normal tension glaucoma.

Needling for encapsulated trabeculectomy filtering blebs

Feyi-Waboso A, Ejere HOD

Background: Encapsulation of a filtering bleb following trabeculectomy may lead to elevation of intraocular pressure, prompting further medical or surgical intervention. It has been suggested that needling of an encapsulated bleb may be effective in re-establishing drainage and lowering intraocular pressure.

Objectives: The objective of this review is to assess the effects of needling encapsulated blebs on intraocular pressure.

Search strategy: We searched the Cochrane Central Register of Controlled Trials - CENTRAL (which contains the Cochrane Eyes and Vision Group trials register) on The Cochrane Library (Issue 2 2003), MEDLINE (1966 to March 2003), EMBASE (1980 to May 2003) and LILACS (Latin American and Caribbean Health Sciences) (June 2003). There were no language or date restrictions in the searches.

Selection criteria: We included randomised and quasi-randomised in which bleb needling was compared with any form of antiglaucoma medication in people with encapsulated trabeculectomy blebs. The primary outcome was mean intraocular pressure measured in millimetres of mercury at day one, one week, one month and at last available follow-up.

Data collection and analysis: Two reviewers independently assessed trial quality and extracted data. Study authors were contacted for additional information.

Main results: One trial, which randomised 25 eyes to either needling or medical treatment, met the inclusion criteria. At one day post-treatment, mean intraocular pressure was lower in the needling group (16.28 mm Hg, standard deviation 5.9) than the medical group (19.45 mm

Hg, standard deviation 3.75). The difference was not statistically significant. At all other follow-up points, mean intraocular pressure was consistently higher in the needling group than the medical group, although the differences were not statistically significant. However, only one needled bleb remained successful at the end of follow-up compared to 10 out of the 11 blebs managed conservatively. This difference was statistically highly significant.

Reviewers' conclusions: Evidence from one small trial suggests that needling of encapsulated trabeculectomy blebs is not better than medical treatment in reducing intraocular pressure.

Orientation and mobility training for adults with low vision

Virgili G, Rubin G

Background: Orientation and mobility (O&M) training is provided to people who are visually impaired to help them maintain travel independence, teaching them new orientation and mobility skills to compensate for reduced visual information.

Objectives: The objective of this review was to assess the effects of orientation and mobility training, with or without associated devices, for adults with low vision.

Search strategy: We searched the Cochrane Central Register of Controlled Trials - CENTRAL (which contains the Cochrane Eyes and Vision Group trials register) (Issue 3 2002), MEDLINE (1966 to August 2002), EMBASE (1980 to September 2002) and LILACS (September 2002) and the reference lists of articles.

Selection criteria: We planned to include randomised or quasi-randomised trials comparing orientation and mobility training with no training in adults with low vision.

Data collection and analysis: Two reviewers independently assessed the search results for eligibility.

Main results: No studies were found that satisfied the inclusion criteria.

Reviewers' conclusions: We could not find any controlled trials on the effects of orientation and mobility training for adults with low vision. As a premise to future trials, orientation and mobility instructors and scientists should reach a consensus and develop valid measures of mobility performance which are both reliable and meaningful to people with low vision.