



COCHRANE EYES AND VISION GROUP

NEWSLETTER Number 10, July 2006

In this issue . . .

2	New faces	5	Handsearching for trials
3	EBO workshop, Hobart	6	Searching for trials
3	Updated protocol template/ Cochrane Handbook/ Section 8	8	Upcoming activities
4	Move to Johns Hopkins	8	Farewell for now
4	US activities	9	Published protocols & reviews
		12	Peer reviewers wanted

Editorial team

Co-ordinating Editor

Richard Wormald (UK)

Editors

Catey Bunce (UK)

Jennifer Burr (UK)

Kay Dickersin (USA) (& *CEVG@US*)

Project Investigator

Sue Elliott (UK)

Jennifer Evans (UK)

Scott Fraser (UK)

Sarah Hatt (UK)

Roberta Scherer (USA) (& *Handsearching
Unit Director*)

Gianni Virgili (Italy)

Other members of the editorial team

Review Group Co-ordinator (and primary
contact for the Group)

Anupa Shah (UK)

Trials Search Co-ordinator

Karen Blackhall (UK) (*1 day a week*)

CEVG@US Project Director

Ann Ervin

CEVG@US Project Administrative Assistant

Ayana Burrus

Methodologists

Stephen Gichuhi (USA)

Tianjing Li (USA)

Statistical Peer Reviewers

Marie Diener-West (USA)

Barbara Hawkins (USA)

Alicja Rudnicka (UK)

Web developer

Christine Costantino (USA)

Cochrane Eyes and Vision Group (CEVG)
International Centre for Eye Health
London School of Hygiene & Tropical
Medicine
Keppel Street
London WC1E 7HT, UK
Tel: +44 20 7958 8167
Fax: +44 20 7958 8325
<http://www.cochraneeyes.org>



CEVG US Project
Johns Hopkins Center for Clinical Trials
615 N. Wolfe Street, W5010
Baltimore MD 21205
USA
Tel: +1 410 502 4631
Fax: +1 410 502 4623

New Faces

Since our last newsletter, we welcome three new editors.

Sue Elliott is the head orthoptist at Salisbury District Hospital and has completed a review on 'Interventions for infantile esotropia' and is co-author on two other reviews; 'Optical aids for visually impaired children' and 'Interventions for strabismic amblyopia'. Sue is joint contact editor for the paediatric ophthalmology and squint & amblyopia sections.

Scott Fraser is Consultant Ophthalmologist at Sunderland Eye Infirmary and Honorary Clinical Lecturer University of Newcastle-Upon-Tyne and has completed a review on 'Interventions for acute non-arteric central retinal artery occlusion' and is a co-author on another review on 'Fixed versus loose drug combinations for raised intraocular pressure. Scott will share responsibility for reviews on glaucoma.

Gianni Virgili is Associate Professor of Ophthalmology based at the University of Florence. He has completed two reviews on 'Orientation and mobility training for adults with low vision' and 'Laser photocoagulation for choroidal neovascularisation in pathologic myopia'. He also has a published protocol on 'Laser photocoagulation for neovascular age-related macular degeneration' and is currently leading a review on 'Reading aids for adults with low vision'.

We welcome **Ayana Burrus** as the new Administrative Assistant for the CEVG@US Project and the US Cochrane Center. Ayana has many years of experience as an administrative coordinator, formerly working with The Center for Women's Health and Medicine, Mercy Medical Center, Baltimore, Maryland, USA.

Ann Ervin has joined the CEVG@US Project as Project Director. Ann has long-term interest in the epidemiology of eye disease and related clinical trials. She recently completed her PhD in Epidemiology at the Johns Hopkins Bloomberg School of Public Health, where she received support from a National Eye Institute Training Grant. Ann is working on a review on 'Punctal occlusion or dry eyes'.

We also welcome **Barbara Hawkins**, a Professor of Ophthalmology at the Johns Hopkins School of Medicine, to the CEVG@US Project as a Co-Investigator and statistical peer reviewer. Barbara is the Director of Wilmer Clinical Trials and Biometry at Johns Hopkins, which houses the Coordinating Center for the Macular Photocoagulation Study, Collaborative Ocular Melanoma Study, and the Submacular Surgery Trials. Barbara is co-authoring a review on 'Surgery for post-vitreotomy cataract'.

We look forward to working with **Jennifer Thorne**, an Assistant Professor of Ophthalmology at the Johns Hopkins School of Medicine. Dr. Thorne will be working with CEVG@US faculty on the Evidence Gap Project (EGP). The EGP is a research initiative to identify systematic reviews and clinical trials supporting ophthalmic and optometric professional practice guidelines.

Stephen Gichuhi, MBChB, M.Med, MBA, MSc, is an ophthalmologist from Nairobi, Kenya with extensive experience in evidence-based healthcare and systematic reviews.

He will join CEVG@US on 27th July and replace Swaroop Vedula who has provided support and training on conducting systematic reviews for many of our US review authors.

Evidence Based Ophthalmology Workshop, Hobart 2005

Immediately after the annual Cochrane Colloquium in Melbourne, the UK editorial team (Richard, Anupa and Karen) flew over to Hobart, Tasmania where they had been invited by Professor Doug Coster (of Flinders University, Adelaide) to present at an one day EBO workshop as a satellite meeting to the annual RANZCO (Royal Australia and New Zealand College of Ophthalmologists) meeting. The workshop was structured around presentations followed by discussion on a number of clinical problems including OHT, CRVO, ARM and diet. Eminent members of RANZCO were present and

a very lively and interesting day was enjoyed by all.



Presenters at the workshop from left to right: John Landers, Doug Coster, Keryn Williams, Katie Billing, Peter van Wijngaarden, Richard Wormald, Karen Blackhall, Anupa Shah.

Updated protocol template

We have recently updated our Cochrane protocol template and for those protocols that are currently underway (but not published) we have been/ are encouraging the review authors to adopt the extra subheadings we have created. As the protocol is now in line with the guidance given in the Cochrane Handbook, we feel that the protocols will be more streamlined and focused.

Cochrane Handbook for Systematic Reviews of Interventions

Please note that this has been updated since 2005 and the latest version is 4.2.5 and can be downloaded from <http://www.cochrane.org/resources/handbook/index.htm>.

Section 8 of the Handbook

We recommend that *ALL* our review authors (old and new) read this section before:

- they start writing their protocol;
- they start writing their review; and
- they start writing their update.

Move to Johns Hopkins

In October 2005, the CEVG@US Project and the US Cochrane Center relocated to the Johns Hopkins Bloomberg School of Public Health (JHSPH), Department of Epidemiology (JHSPH). We joined the Johns Hopkins Center for Clinical Trials where **Kay Dickersin**, the principal investigator for CEVG@US, was appointed Center Director. The Center for Clinical Trials supports investigators within the Johns Hopkins Medical Institutions through all phases of clinical trials including design, conduct, analysis, and dissemination.

Satyanarayana (Swaroop) Vedula and **Tianjing Li**, CEVG@US methodologists and **Christine Costantino**, Web Developer/ Network Administrator, relocated from Brown University to JHSPH. **Roberta Scherer**, CEVG's methodological editor and Handsearching Unit Director, also relocated to JHSPH from the University of Maryland and serves as the Deputy Director of the US Cochrane Center.

Update on CEVG@US

We applaud CEVG@US methodologists Swaroop Vedula and Tianjing Li for their hard work in the past year (April 2005 - April 2006). In cooperation with our UK counterparts, Swaroop and Tianjing have contributed to 5 new publications in *The Cochrane Library*. Additionally, 4 new titles were developed under their direction, with systematic reviews currently in process.

The CEVG@US has been hard at work conducting workshops. We offered 'How to Perform a Cochrane Systematic Review' in Providence, RI, 21 – 23 July 2005, and again in Sarasota Florida, 5 – 7 February 2006. Attendees included clinicians, researchers, and students from the US and UK. The presentations by Kay Dickersin, Roberta Scherer, Swaroop Vedula, as well as CEVG@US Advisory Board members Marie Diener-West, who is also a CEVG statistical peer reviewer, and Donald Minckler, who has also published a Cochrane systematic review, were very well received. The February 2006 workshop also included a special presentation on value-based medicine by Dr. Melissa Brown, an ophthalmologist and co-founder of the Center for Value Based Medicine. The Advanced Handsearcher Workshop conducted by Susan Wieland during the XIII Cochrane Colloquium in Melbourne, Australia, 22 – 26 October 2005 was also a success.

We continue to host a web-based self-study handsearcher training course designed to teach the learner how to handsearch medical journals and conference abstracts to identify the "highest" level of research evidence. There have been 124 enrollees since November 2005.

The CEVG@US Project offers many services to US-based practitioners. In addition to the many training opportunities, CEVG@US faculty and staff are also available to provide comprehensive methodological support for those interested in completing a Cochrane systematic review. If review authors require a quiet space to work on reviews and consult with CEVG@US methodologists, we also have office space for mini systematic review sabbaticals.

ARVO Special Interest Group session, May 1 2006

Applying Cochrane Systematic Review Methodology to Improve Evidence-based Clinical Practice and Practice Guidelines

CEVG@US sponsored the above session at the annual meeting of the Association for Research in Vision and Ophthalmology (ARVO). Roberta Scherer introduced the Cochrane Collaboration, systematic reviews, and evidence-based healthcare. The panel discussion continued with a description of the Cochrane systematic review process by Donald Minckler, MD, Professor of Ophthalmology, Doheny Eye Institute, with examples from his recently completed systematic review of aqueous shunts for glaucoma. Karla Zadnik, OD, PhD presented the evolution of her group's review of interventions for slowing myopia progression including the unique situation of combining three interventions, originally proposed in separate protocols, into one comprehensive review of the topic. Henry Jampel, MD, MHS, and David Friedman, MD, MPH, discussed the impact of systematic reviews on clinical practice and American Academy of Ophthalmology (AAO) Preferred Practice Patterns (PPPs). Dr. Jampel, a member of the AAO Preferred Practice Patterns Committee, Glaucoma Panel and Professor of Ophthalmology, Wilmer Eye Institute, presented a review of the evidence supporting primary open angle glaucoma, age-related macular degeneration, and dry eye syndrome PPPs. Dr. Friedman, Associate Professor of Ophthalmology, Wilmer Eye Institute, presented a sample case of management of co-existing cataract and glaucoma, including the level of evidence to support current treatment modalities, and the impact of evidence on clinical practice.

Approximately 60 vision care researchers participated in the Special Interest Group. Discussion topics included the interface between Cochrane systematic reviews and evidence-based healthcare, and effective dissemination of Cochrane reviews to clinicians, including co-publication of Cochrane reviews in journals.

Handsearching – Roberta Scherer

In 2002 the National Eye Institute of the U. S. National Institutes of Health provided funds to support U.S. activities of the CEVG over the next seven years. A portion of these funds was designated to handsearch the vision science literature, especially U.S. based. First, we prioritized which journals to search, with a view to achieving balance in the number of ophthalmology and optometry journals and choosing those vision science journals previously identified as having the most reports of randomized controlled trials. We also identified which conference proceedings to search and chose the American Academy of Ophthalmology, the American Academy of Optometry, the Association for Research in Vision and Ophthalmology, and the American Glaucoma Society.

To date, we have completed searching 30 years of conference proceedings:

- American Academy of Ophthalmology, 1990 through 2003;
- American Academy of Optometry, 1990 through 2004;
- Association for Research in Vision and Ophthalmology, 1990, 1991, 1994, and 1999 through 2005;
- American Glaucoma Society, 1997, 1999 through 2005.

We also completed searching 125 years of journals:

- American Journal of Ophthalmology - 1948 through 2005;
- Archives of Ophthalmology - 1980, 1982 through 1984, and 1998 through 2005;
- CLAO Journal - 1997 through 2002;
- Ophthalmic and Physiological Optics - 1995 through 2002;
- Ophthalmology - 1994 through 2005;
- Optometry - 2000 through 2002;
- Optometry and Vision Science - 2000 through 2005.

Overall, we found 5,132 reports of clinical trials. The majority of these (4247/5132; 82.8%) had not been indexed as either randomized controlled trial [Publication Type] or controlled clinical trial [Publication Type] in MEDLINE, and so provided a substantial number of previously unidentified trials to the CEVG Trials Register and to CENTRAL. We expect to continue handsearching about 50 journal or conference-years each year we have funding. This support by the National Eye Institute is significantly increasing the comprehensiveness of the CEVG Trials Register.

Searching for trials for inclusion in a Cochrane systematic review (CSR); notes for new review authors – Karen Blackhall

When embarking on a Cochrane systematic review, once the clinical question has been decided upon, the next and very important step is that of identifying studies for inclusion.

The CEVG is in the fortunate position of having a full-time Trials Search Co-ordinator (TSC). This means we are able to provide support from the editorial base to help develop search strategies for the review and run some of the electronic database searches, which are so essential to the identification of relevant material.

Electronic database searches are only part of the search for information that needs to be carried out when working on a review.

It is important to realise that the search for trials should spread widely. The following considerations should be kept in mind when planning sources to search:

- much research is never published;
- not all research is published in journals;
- not all research published in journals is indexed on the main databases;
- not all research indexed on databases can be easily retrieved.

Methods to address these issues can be put in place and the following can help identify any trials not picked up with an electronic bibliographic database search:

- searching the web;
- handsearching;
- scanning reference lists of relevant articles;
- personal communication;
- searching specialised databases and web sites;
- searching citation databases.

The quality of the literature search can have important implications on the quality of the completed review. Bias in a review can be avoided if you remain aware of certain biases within the available literature. Positive results are generally more likely to get published. They are also more likely to be published in the English language and in journals produced in 'The Western World'. Ways of avoiding such biases can be addressed by searching beyond published articles, by using the internet to browse suitable trials databases and searching for suitable websites to locate ongoing research or experts in the field.

When running electronic searches it is useful to break down the search question into individual components or concepts. This can be done by using the PICO method as follows:

- **P**opulation (e.g. adults with glaucoma);
- **I**ntervention(s) (e.g. non-penetrating filtration surgery);
- **C**omparison(s) (e.g. versus trabeculectomy or no treatment);
- **O**utcome(s) (e.g. reduced ocular hypertension).

There is no strict rule as to how many of the concepts you incorporate in your search as this very much depends on how much literature is available within the field of your review or whether the population is dictated by the condition (e.g. age-related macular degeneration).

It is important to gather terms which accurately describe each of the components of the search strategy and build this up to a comprehensive and useful list before attempting to enter them into the search box. This may seem straightforward but keep in mind that authors may use synonyms, abbreviations and sometimes other related terms to describe the subject you are looking for. Transatlantic differences (e.g. oedema/ edema) will also need to be identified and allowances made.

Limits can be added to a search in order to search for specific elements in an electronic record such as dates, study designs or population (e.g. children). Search filters can also be useful for 'narrowing down' a search and can help to retrieve specific types of articles such as those which report randomised controlled trials (RCTs). Much debate surrounds the designing of a search filter to identify RCTs but most will include terms such as; random, double-blind, single-blind, placebo, control, comparison, comparative or crossover.

Running a search on one of the citation indexes can be a useful place to find a collection of papers on a particular topic. You can begin by using the 'general search' facility to look for topics. Once relevant papers have been found, a good way to build on this material is to run a search using the 'Cited ref search'. Cited reference searching enables you to find articles that have cited previously published work.

However the search for literature is approached it must be remembered that all methods used in a Cochrane review must be transparent and be able to be replicated whenever necessary. In order to achieve this, comprehensive records should be kept of:

- all sources searched;
- the search strategies used;
- the dates the search covered;
- the date the searches were carried out; and
- the number of references that were retrieved.

In the case of personal communication it is important to record who was contacted, why they were contacted (for what information), the method of communication and when. Although recording this information is an important part of the review methodology it can also highlight gaps and can help to ensure that the search is as comprehensive as possible.

Upcoming Activities

A peer review distance education course is under development and will be available soon on the CEVG website.

- 23 – 26 October 2006: XIV Cochrane Colloquium - Dublin, Ireland
- 4 November 2006: Evidence-Based Ophthalmology Workshop, Baltimore, USA
- 8 December 2006: AAOptomety - Evidence-Based Glaucoma Course, Denver, USA
- 26 – 28 January 2007: Systematic Review Workshop, Sarasota, USA

You can find more information about upcoming workshops and web-based training on our website: <http://www.cochraneeyes.org/>. You may also contact us by email, uscevg@cochraneeyes.org, or telephone (410) 502 4631.

Farewell for the present

We say an informal goodbye to **Katherine Henshaw** who left the Group in May 2006. Kate was the first RGC employed by the Group when it was set up in 1997 and we owe a lot of the efficient organisation of the Group to her. Kate hopes to return in the future as an editor for the Group.

Swaroop Vedula who had been working with CEVG@US for the past year as a methodologist left the group in June. Swaroop has been great to work with. Hard working and always going that extra mile to make sure things get completed on time. Swaroop is starting a surgical residency at the University of Pennsylvania. He will continue to work with the Group as he is co-author on a number of protocols as well as a methodological peer reviewer. We wish him all the best and he will be sorely missed.

Earlier this year, with money provided by Sightsavers International, we employed one of our Editors, **Sarah Hatt** to assist in completing or updating some of our reviews.

Completed reviews were:

Interventions for stimulus deprivation amblyopia;
 Surgical interventions for trichomatous trichiasis;
 Screening for the prevention of glaucomatous optic nerve damage (review to be published in *The Cochrane Library*, Issue 4, 2006).

Updated reviews were:

Interventions for intermittent exotropia;
 Surgical interventions for bilateral congenital cataract;
 Screening of school age children for correctable visual acuity deficit.
 Sarah has now moved on to work at the Mayo Clinic in the USA for a year but she hopes to continue in her role as Editor once she has settled down.

Karen Blackhall who has been working with the Group for 4 days a week since 2004 will also be leaving us at the end of August 2006. Karen joined the Group when we were in need of help bringing the Trials Register back up to date as well as updating all our search strategies. Karen has been a great help in bringing the group up to date and her contribution and bubbly personality will be missed in the office. Luckily, Karen is not leaving neither the Collaboration nor the London School of Hygiene & Tropical Medicine, but increasing her hours with the Cochrane Injuries Group (where she started). Karen will remain linked to the Group that she is co-authoring a joint review between CEVG and the Injuries Group on 'Interventions for the prevention of eye injuries'. Karen's replacement will be full-time and will start at the beginning of September.

Published protocols and reviews on *The Cochrane Library*

Status	Cornea and external disease
Reviews	Antibiotics for trachoma
	Antibiotics versus placebo for acute bacterial conjunctivitis
	Environmental sanitary interventions for preventing active trachoma
	Interventions for herpes simplex virus epithelial keratitis
	Interventions for trachoma trichiasis
	Ivermectin for onchocercal eye disease (river blindness)
	Patching for corneal abrasion
	Photorefractive keratectomy (PRK) versus laser assisted in situ keratomileusis (LASIK) for myopia correction
Protocols	Interventions for Mooren's ulcer
	Interventions for recurrent corneal erosions
	Medical interventions for fungal keratitis
	Medical interventions for traumatic hyphaema
	Oral antihistamines for seasonal and perennial allergic conjunctivitis
	Surgical interventions for pterygium
	Topical corticosteroids as adjunctive therapy for bacterial keratitis
	Topical non-steroidal anti-inflammatory drugs for treating traumatic corneal abrasions
	Topical steroids versus placebo for allergic conjunctivitis
	Topical steroids versus placebo for atopic keratoconjunctivitis

	Topical steroids versus placebo for giant papillary conjunctivitis
	Topical steroids versus placebo for vernal keratoconjunctivitis
Glaucoma	
Reviews	Aqueous shunts for glaucoma
	Interventions for normal tension glaucoma
	Intraoperative Mitomycin C for glaucoma surgery
	Lens extraction for chronic angle closure glaucoma
	Medical versus surgical interventions for chronic open angle glaucoma
	Needling for encapsulated trabeculectomy filtering blebs
	Postoperative 5-Fluorouracil for glaucoma surgery
Protocols	Acupuncture for glaucoma
	Beta-irradiation for glaucoma surgery
	Interventions for improving adherence to ocular hypotension
	Laser trabeculoplasty for open angle glaucoma
	Medical interventions for open angle glaucoma
	Medical interventions for primary chronic angle closure glaucoma
	Peripheral iridotomy for pigmentary glaucoma
	Screening for prevention of optic nerve damage due to open angle glaucoma
	Surgical interventions for congenital glaucoma
Lens and cataract	
Reviews	Day versus in-patient surgery for age-related cataract
	Multifocal versus monofocal intraocular lenses after cataract extraction
	Surgical interventions for age-related cataract
	Surgical interventions for bilateral congenital cataract
Protocols	Antioxidant supplementation for preventing age-related cataract
	Interventions for preventing posterior capsule opacification after cataract surgery
	Site of incision for reducing surgically induced astigmatism after sutureless cataract surgery (phacoemulsification)
Medical retina	
Reviews	Antiangiogenic therapy with interferon alfa for age-related macular degeneration
	Antibiotics versus control for toxoplasma retinochoroiditis
	Antioxidant vitamin and mineral supplements for preventing age-related macular degeneration
	Antioxidant vitamin and mineral supplements for slowing the progression of age-related macular degeneration
	Ginkgo biloba extract for age-related macular degeneration
	Interventions for acute non-arteric central retinal artery occlusion
	Laser photocoagulation for choroidal neovascularisation in pathologic myopia
	Non-steroidal anti-inflammatory agents for treating cystoid macular oedema following cataract surgery
	Photodynamic therapy for neovascular age-related macular degeneration
	Radiotherapy for exudative age-related macular degeneration
Protocols	Antiangiogenic therapy with anti-VEGF modalities for neovascular age-related macular degeneration
	Blood pressure control for the management of diabetic retinopathy
	Haemodilution treatment for retinal vein occlusion
	Interferon alfa therapy for AMD
	Interventions for acute retinal necrosis
	Intravitreal steroids for macular edema in diabetes

	Laser photocoagulation for neovascular age-related macular degeneration
	Surgical implantation of steroids with antiangiogenic characteristics for treating exudative macular degeneration
Neuro-ophthalmology	
Reviews	Interventions for idiopathic intracranial hypertension
	Surgery for nonarteritic anterior ischemic optic neuropathy
	Surgery for traumatic optic neuropathy
Protocols	Corticosteroids for optic neuritis
	Steroids for traumatic optic neuropathy
Ocular adnexal	
Reviews	Interventions for involutional lower lid entropion
Protocols	Corticosteroids for thyroid eye disease
	Interventions for blepharitis
	Laser versus non-laser endonasal dacryocystorhinostomy
Paediatric ophthalmology	
Reviews	Screening for correctable visual acuity deficits in school-age children and adolescents
Protocols	Contact lenses for reducing myopia progression in children
	Interventions for preventing ophthalmia neonatorum
	Interventions for the treatment of retinoblastoma in children
	Ocular interventions excluding refraction for reading difficulties
	Surgical interventions for uveitic cataract in children
Squint and amblyopia	
Reviews	Adjustable versus non-adjustable sutures in surgery for strabismus
	Interventions for infantile esotropia
	Interventions for intermittent distance exotropia
	Interventions for stimulus deprivation amblyopia
	Screening for amblyopia in childhood
Protocols	Interventions for refractive amblyopia
	Refractive correction for amblyopia
Visual impairment and rehabilitation	
Reviews	Community screening for visual impairment in the elderly
	Orientation and mobility training for adults with low vision
Protocols	Optical aids for visually impaired children
	Reading aids for adults with low vision
Vitreo-retinal	
Reviews	Interventions for asymptomatic retinal breaks and lattice degeneration for preventing retinal detachment
Protocols	Tamponade in surgery for retinal detachment complicated by proliferative vitreoretinopathy

Peer reviewers wanted

We are always on the look out for peer reviewers to comment on our protocols or reviews. If you have specialist knowledge in any ophthalmic field and would like to peer review for us, please contact [Anupa Shah](#). We usually give 2 – 3 weeks for peer review feedback and acknowledge contributions in the protocol and review.

We are looking for peer reviewers for the following protocols:

- Acupuncture for myopic children
- Autologous serum eye drops for dry eye syndromes
- Chinese herbal medicine for diabetic retinopathy
- Fish oils and vitamin A for retinitis pigmentosa
- Laser treatment for drusen in age-related macular degeneration
- Multidisciplinary rehabilitation versus monodisciplinary rehabilitation for visually impaired adults
- Pharmacotherapy for prevention proliferative vitreoretinopathy in retinal detachment surgery
- PRK versus LASIK for hyperopia correction
- Surgery for post-vitreectomy cataract
- Topical corticosteroids for adenoviral keratoconjunctivitis