

## BOOK REVIEWS

**Prevention of Eye Disease.** Edited by Mitchell H Friedlaender. Pp 192. No price given. Mary Ann Liebert: New York, 1988.

The Francis I Proctor Foundation, University of California, and its affiliate the Alta California Eye Research Foundation, have pioneered research and training in the important and increasingly recognised field of prevention of eye disease. This publication is a welcome addition to a slowly increasing library which attempts to include a wider world view. Thirty-one authors present contributions on many subjects, including bacterial, viral, fungal, and parasitic infections, ophthalmia neonatorum, ocular injuries, contact lens-induced disease, uveitis, endophthalmitis due to drug abuse, iatrogenic drug-induced eye disease, and vaccines. Each chapter concludes with references and some of these give comprehensive lists for referral. Some contributions reflect more particularly the North American and developed world scene. However, the shared experience of improved ophthalmic practice and care, for example in prevention of ocular injuries and iatrogenic eye disease, has significant application worldwide. Other chapters, such as those on nutritional blindness and prevention of blindness, have special reference to the developing world.

It should be noted that for children aged 1 to 6 years with vitamin A deficiency the World Health Organisation recommends 200 000 IU of vitamin A orally on day 1 and day 2, with a further single dose four weeks later (half doses are given to children under 1 year old). Women of reproductive age, whether pregnant or not, with night blindness or Bitot's spot, should have only 10 000 IU daily for no more than two weeks. Ivermectin (Mectizan) is bringing fresh hope and impetus in the treatment of onchocerciasis. Trials are at present being conducted.

The text of this book is easily read, informative, and provides recent advances and views on a variety of topics, with the constraint of prevention of ocular disease as the main theme in presentation.

D D MURRAY McGAVIN

**Ophthalmic Clinical Debates.** By Thomas A Deutsch. Pp 348. £30.50. Wolfe Medical: London, 1989.

In this imaginatively written book the author presents a number of case histories of hypothetical patients with common problems whose treatment is often controversial. He then invites a number of well known authorities to discuss the cases and to suggest the best line of management. Not surprisingly, the reader is treated to differing, and at times diametrically opposed, opinions. For example, an ophthalmologist with an acute central serous retinopathy would receive immediate laser photocoagulation from Schatz, whereas Yannuzzi would follow up such a patient conservatively. A myopic librarian with bilateral cataracts would receive an 8-dioptre implant from Sinskey, whereas Jaffe would use

an 18-dioptre implant. Although such conflicting recommendations may on the face of it seem confusing, the contributors both explain and argue their respective points in an informative and entertaining fashion.

This is an unusual and very readable book. I learnt a great deal from it.

Z GREGOR

**Contact Lenses in Ophthalmology.** By Michael S Wilson and Elisabeth A W Millis. Pp 152. £39.50. Butterworths: Guildford, Surrey, 1989.

This concise and readable book succeeds in its aims as an introduction both for ophthalmologists who want to know more about the applications of contact lenses and for those wishing to start fitting lenses. The introductory chapters, with frequent use of summary tables, give a clear description of contact lens terminology, the biology of contact lens wear, and lens types and hygiene. They are useful reading for newcomers to the field and will take the mystique out of contact lens practice. These chapters, taking only minutes to read, can be recommended to anyone working in general ophthalmic clinics. The optics of contact lenses are barely discussed, and, though many ophthalmologists view this subject with trepidation, a fuller discussion might further clarify indications for different lens types. Subsequent chapters on the equipping of a practice and the choice and fitting of different lenses are good but emphasise the use of polymethyl methacrylate (PMMA), which is now rarely prescribed. The complications of lens wear are dealt with separately for each lens type. This leads to duplication and loss of consistency in an area where more guidance in the diagnosis and management would be helpful. The final chapters deal briefly with the medical applications of lens use. There are useful references at the end of each chapter and a bibliography to guide the reader to alternative sources. These are well chosen and compensate for the lack of references in the body of the text. Despite these reservations it is one of the best introductory texts on contact lenses for the ophthalmologist.

JOHN DART

## LETTER TO THE EDITOR

### Use of viscoelastic agents to aid visualisation during ocular surgery

SIR,—The viscoelastic agents have been used primarily as tools facilitating surgical manipulation of tissues, tissue displacement, or as methods of filling intraocular volume. We wish to describe additional uses of these agents as optical devices to aid visualisation during surgery.

1. *To prevent opacification of the corneal epithelium.* A clear view through the cornea is essential for successful cataract and retinal surgery. It is not uncommon for the view to be obscured owing to changes in the corneal epithelium. Regular wetting with a physiological solution helps, but this may further damage the epithelium, requiring ever more frequent wetting. In addition this wetting has

to be performed regularly by an assistant. Application of a thin layer of hydroxypropylmethylcellulose (HPMC) at the start of the operation makes the use of wetting solutions unnecessary and also protects the corneal epithelium from the changes associated with regular wetting. This application needs to be repeated only once or twice during the operation. Full strength sodium hyaluronate is not suitable for this purpose, as it is too elastic and does not spread out over the cornea.

2. *As a temporary magnifying aid.* A collection of viscoelastic substance forms a dome shaped elevation, creating the effect of a plus/convex lens. This is useful for magnifying images from the eye. The retinal view can be improved if the pupil is small or if the only good view is through clear gaps in a cataractous lens. For this particular use sodium hyaluronate is more useful than HPMC, as it maintains its elevation for longer periods.

3. *To displace oil droplets from the cornea.* After a vitrectomy with fluid/silicone oil exchange, droplets of oil on the cornea may obscure the retinal view during indirect ophthalmoscopy. HPMC readily displaces these droplets of oil and improves visualisation.

4. *To reduce the distortion caused by a gas/fluid interface behind a posterior capsule in a pseudophakic eye.*

In addition to these uses HPMC can also be used to evacuate substances from the anterior chamber<sup>1,2</sup> and to reduce the distortion caused by folds in Descemet's membrane, particularly in an aphakic eye during fluid/gas exchange.<sup>3</sup>

In summary we wish to draw attention to the value of viscoelastic substances as optical aids during ophthalmic surgery.

MICHAEL J LAVIN  
Moorfields Eye Hospital,  
City Road,  
London EC1V 2PD  
PENG T KHAW  
Institute of Ophthalmology,  
Cayton Street,  
London EC1V 9AT

- 1 Bartholomew RS. Viscoelastic evacuation of traumatic hyphaema. *Br J Ophthalmol* 1987; 71: 27-8.
- 2 Kirkby GR, Gregor ZJ. The removal of silicone oil from the anterior chamber in phakic eyes. *Arch Ophthalmol* 1987; 105: 1592.
- 3 Landers MB III, Robinson D, Olsen KR, Rinkoff J. Slit-lamp fluid-gas exchange and other office procedures following vitreoretinal surgery. *Arch Ophthalmol* 1985; 103: 967-72.

## NOTES

### Wilmer Institute endowed lectureship

Professor Fred C Hollows, chairman, Department of Ophthalmology, University of New South Wales, will deliver the third Mohammed Aziz memorial annual lecture on blindness of the tropics on 30 March 1990, at the Wilmer Institute at Johns Hopkins Hospital. The title of the lecture will be 'The prevention of blindness in the tropics'.

### Perimetric Society

The IXth International Perimetric Society Meeting will be held in Malmö, Sweden, on 17-20 June 1990. Further information from: IXth Meeting Secretariat, Department of Ophthalmology, University of Lund, Malmö General Hospital, S-214 01 Malmö, Sweden.



## Use of viscoelastic agents to aid visualisation during ocular surgery.

M J Lavin and P T Khaw

*Br J Ophthalmol* 1990 74: 192

doi: 10.1136/bjo.74.3.192-c

---

Updated information and services can be found at:

<http://bjo.bmj.com/content/74/3/192.4.citation>

---

### Email alerting service

*These include:*

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

---

### Notes

---

To request permissions go to:

<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:

<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:

<http://group.bmj.com/subscribe/>