Prevention of visual field defects after macular hole surgery

Editor,—We read with interest the article by Culliance and Heap on the method of prevention of visual field defects after macular hole surgery. In their series, one group of 82 eyes received conventional pars plana vitrectomy surgery with mechanical induction of posterior vitreous detachment (PVD) around the optic disc followed by complete posterior cortical vitreous removal. Twenty two per cent of these eyes had certain postoperative visual field defects. There again, another group of 20 eyes received pars plana vitrectomy with peeling of posterior hyaloid confined to the inferotemporal region. None of them had any postoperative visual field defects. The authors proposed that vitreoretinal traction around the optic nerve head during the mechanical separation of the posterior hyaloid is responsible for the formation of the observed postoperative inferotemporal visual field defects. The microcirculation at the optic nerve head may be damaged during the induction of PVD as the posterior cortical vitreous is most adherent at the superonasal aspect of the optic disc. However, we are concerned about the standardisation of the method of removing the remaining peripheral cortical vitreous in these two groups of eyes, as peripheral vitreous may act as a protective cushion from dehydration during fluid-air exchange. Yang et al had shown that no significant correlation was found between intraocular detachment of vitreous cortex and postoperative visual field defect, but all patients who had postoperative visual field defect had undergone fluid-air exchange in their series. Similarly, Ohji et al had demonstrated that using humidified air for fluid-air exchange in macular hole surgery could prevent postoperative visual field defect. Others had demonstrated that the visual field defect was dependent upon the site of the air infusion port. All these reports suggest that air dehydration of the peripheral retina may be a very important factor in causing postoperative visual field defect after macular hole surgery.

In conclusion, we congratulate Culliance and Heap on their study describing the prevention of visual field defects after macular hole surgery by limited posterior hyaloid peeling. However, the exact mechanism behind this success needs further evaluation.

Yau Wing Lee
Alvin K H Kwok
Deniss C Lam

Table 1 Visual acuity at listing for cataract extraction

<table>
<thead>
<tr>
<th>Audit date</th>
<th>No of cases in audit</th>
<th>Type of surgery</th>
<th>Percentage of patients with a given visual acuity when decision to operate was taken</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>6/60 or worse</td>
</tr>
<tr>
<td>1982</td>
<td>39</td>
<td>ICCE and no lens</td>
<td>76.9</td>
</tr>
<tr>
<td>1984</td>
<td>68</td>
<td>ECCE and IOl</td>
<td>70.6</td>
</tr>
<tr>
<td>1985</td>
<td>56</td>
<td>ICCE and PC IOl</td>
<td>67.9</td>
</tr>
<tr>
<td>1989</td>
<td>29</td>
<td>ECCE and PC IOl</td>
<td>62.1</td>
</tr>
<tr>
<td>1992</td>
<td>23</td>
<td>ECCE and PC IOl</td>
<td>21.7</td>
</tr>
<tr>
<td>1998</td>
<td>56</td>
<td>Phaco and IOl</td>
<td>16.1</td>
</tr>
<tr>
<td>1999</td>
<td>85</td>
<td>Phaco and IOl</td>
<td>14.1</td>
</tr>
<tr>
<td>2000</td>
<td>41</td>
<td>Phaco and IOl</td>
<td>19.0</td>
</tr>
</tbody>
</table>

This table provides an analysis of visual acuity at listing for cataract extraction, showing the percentage of patients with various visual acuities when the decision to operate was taken.

W H Church

BOOK REVIEWS


This book provides an excellent basic guide of modern cataract surgery for the ophthalmologist in training. It considers management of the patient starting with his first visit to the ophthalmologist. It stresses the importance of setting realistic goals in the context of the lifestyle of the patient. It describes pre-assessment and biometry and mentions the available lens formulas. It does not go into detailed discussion of phacoemulsification systems. With the aid of clear diagrams it describes the surgery step by step. In these diagrams the instruments are not always at the same scale as the eye. Inevitably it shows an American slant on procedures and techniques. Local anaesthesia intravenous sedation is detailed, whereas there are only brief notes on general anaesthesia and no mention of positive pressure ventilation to help control intraocular pressure. The use of a blunt sub-Tenon cannula for placement of local anaesthetic is not mentioned. Intracameral vancomycin is not used routinely in the UK whereas 5% aqueous povidone-iodine is instilled into the conjunctival sac 5 minutes before surgery commences. As in most textbooks a few sections may seem a little dated. The use of commercially available capsular dyes probably makes the can opener capsulotomy obsolete even with the white cataract. Brief notes on paediatric cases, uveitis, and glaucoma add to the scope of the book.

W H Church


I was very impressed with this small and concise textbook which benefits from having a single author. The publishers have produced...

Many of us, although not quite there yet, dream of clinical practice and specifically what we will do with all the time. Doctor van Duinen came up with an interesting solution—to review a relatively rare condition of relevance to neurosurgeons but also of interest to ophthalmologists. The topic he selected was that of the transorbital intracranial penetrating injury (TIP). He reviewed all the cases in the literature including two dissertations and came up with 347 cases.

The rarity of the condition is supported by the author conceding that in his 35 years of clinical practice as a neurosurgeon, he did not see a single case. Interest was stimulated by an intriguing press report of an accident or attempted murder in which the necropsy revealed an intracranially positioned ballpoint pen, the pen having entered through the orbit. (For “attempted” read “suspected” and this highlights one of the problems with the text.) An attempt is made to divide the monograph into chapters. Credibility is frequently stretched, for example, in the chapter on the “History of the condition”, it is given that David slew Goliath with a stone that penetrated the brain stem having passed through the orbit. Henry II of France sustained a similar injury while jousting. The various classic causes of the injury are umbrellas, pencils, knives, and chopsticks. There are other collectors’ items like a kangaroo tooth and a needlefish. Most have in common a sharp tip with a fairly thin piece thereafter. Certain points recur; that this is an easy injury to miss even with appropriate imaging; the history is not uncommonly unreliable; fragments of wood entering intracranially often have a bad prognosis. Other chapters deal with antibiotic therapy, complications, and the role of imaging.

This is a flawed book. It is extraordinary that a publisher allowed it to slip through what must be a very wide meshed net. The translation does not help. Where the text is acceptable, the more complex medical matters are in many instances rendered incomprehensible—for example, “acute blindness after orbital penetration has an unfavourable prognosis for vision.” There is a lack of uniformity throughout the text in the style of presentation, the photographs, and indeed the topic covered; at various points transoral and transnasal injuries feature in the text. Ultimately this leads to confusion. Unfortunately, the main conclusion is that the pursuit of academia in retirement is best avoided.

PETER M KYLE


One of the main aims of the junior ophthalmologist in training is to purchase a single textbook which will provide them with stimulating reading and the armamentarium to pass the dreaded postgraduate examination. Most of us have embarked on this journey full of hope that there must be someone, somewhere, who knows exactly what we need from a textbook in order to progress effortlessly through ophthalmology training. This journey has proved almost invariably fruitless, as generally excellent books have failed to meet our requirements in one or two important areas.

Richard Parrish II has edited this textbook with an authorship that reads like a who’s who of international ophthalmology. The text is divided up into fairly standard chapters covering most aspects of general ophthalmology. I found the first section on diagnostic examination and testing to be both imaginative and informative. Just the right amount of information is given on subjects such as electrophysiology, ultrasound, and corneal topography. Newer techniques such as optical coherence tomography and scanning laser technology are also discussed. The main body of the text devotes a large section to anterior segment disease and consequently the space devoted to other areas is limited. There is an excellent discussion of cataract surgery and of the different types of lens implant. The text is well referenced, and important papers of the past few years are discussed at length. The section on intraocular inflammation is a bit limited and there is no significant space given to therapies involved in the management of these patients. I found the chapters on the indications and limitations of systemic immunosuppression may have added more balance to this section.

As an atlas this book excels with beautiful illustrations and a well laid out presentation. It is very difficult to find any fault with what will surely become a classic ophthalmic reference in time. Is this the single textbook to answer all the junior ophthalmologists’ prayers? Almost, but not quite.

ALASDAIR PURDIE


This book is of very attractive design. The generous format, matt paper, and uncrowded layout immediately invite attention. It has copious illustrations of generally excellent quality. Detail in a few of the photographs is a little unclear, but that is a reflection of the difficulty of imaging subtle ocular pathology.

The book opens with a “Tabular summary of contact lens complications” Some of the “conditions” listed sit rather uncomfortably in the first column because they are not caused by, although they may be relevant to, lens wear. They deserve their place because of their potential influence on lens wear, but a more appropriate description might have been better.

Also, anterior segment specialists have been trying to replace the earlier descriptions of eyelid margin disease because they are ambiguous. The simplified classification of “anterior lid margin disease” (ALMD), “posterior lid margin disease” (PLMD), and “mixed anterior and posterior lid margin disease” (ALMD/PLMD) has been introduced to ease the confusion. It would have been good to see this terminology perpetuated here.

Aside from these points there is nothing much to criticise. The content is accurate, well researched, well referenced, and is presented in a way that draws attention.

Coverage of medical matters is limited, but then it would be unreasonable to expect the book to excel in this domain too. Readers can embrace the work for its excellent handling of aetiology, pathogenesis, and contact lens related care.

The last chapter, and the appendices, are devoted to the author’s grading system for contact lens related disorders. Grading systems can be useful to achieve consistency in description, particularly between observers, if used conscientiously, but they can be too time consuming to apply in routine clinical practice.

The author’s scheme follows a fairly universal format of four levels of severity of signs from “0” (minimal) to “4” (most severe). His novel contributions are to define the grades using a set of splendiferous paintings rendered by Terry Tarrant and to include a dual format compact disk carrying morphs of the illustrations. Morphs are computer generated animations that flow from one end of the descriptive scale to the other. Viewed side by side with the patient they could assist greatly in the making of consistent records.

Professor Efron has given us a rare work—a fine and comprehensive production with several unique features. It deserves to be studied by any clinician with an interest in contact lens work.

C STEVEN BAILEY

www.bjophthalmol.com
NOTICES

Vision 2020: the cataract challenge
The latest issue of Community Eye Health (34) discusses cataract blindness and surgery with an editorial by Allen Foster. For further information please contact Community Eye Health, International Centre for Eye Health, Institute of Ophthalmology, 11-13 Bath Street, London EC1V 9EL. (Tel: (+44) (0) 20-7608 6909/6910/6923; fax: (+44) (0) 7250 3207; email: eyeresource@ucl.ac.uk). Annual subscription £25. Free to workers in developing countries.

Residents’ Foreign Exchange Programme
Any resident interested in spending a period of up to one month in departments of ophthalmology in the Netherlands, Finland, Ireland, Germany, Denmark, France, Austria, or Portugal should apply to: Mr Robert Acheson, Secretary of the Foreign Exchange Committee, European Board of Ophthalmology, Institute of Ophthalmology, University College Dublin, 60 Eccles Street, Dublin 7, Ireland.

Singapore National Eye Centre 10th Anniversary International Congress
The Singapore National Eye Centre 10th Anniversary International Congress will be held in conjunction with 3rd World Eye Surgeons Society International Meeting on 1-4 December 2000 at the Shangri-La Hotel, Singapore. Further details: Ms Hua Meng Lee, The Organising Secretariat, Singapore National Eye Centre, 11 Third Hospital Avenue, Singapore 168751 (tel: (65) 3228374; fax: (65) 2277290; email: snecc@pacific.net.sg).

The Hong Kong Ophthalmological Symposium ‘00
The Hong Kong Ophthalmological Symposium ‘00 will be held 4-5 December 2000, in Hong Kong, China. Further information: Miss Vicki Wong, Room 802, 8/F Hong Kong Academy of Medicine, 99 Wong Chuk Hang Road, Aberdeen, Hong Kong (tel: (852) 2761 9126; fax: (852) 2715 0089; email: cohk@netvigator.com).

American Institute of Ultrasound in Medicine—Millennium Ultrasound Course Series
A course entitled “Obstetrical Ultrasound” will be held in Marina del Rey, CA, on 12-14 January 2001. Further details: Stacey Bessling, Public Relations Coordinator, AIUM, 14740 Sweitzer Lane, Suite 100, Laurel, MD 20707-5906, USA (tel: 301-498-4100; email: sbessling@aium.org).

Optometry Study Tour to Kenya, Tanzania, and Zanzibar
The tour offers a wonderful opportunity to optometrists and ophthalmologists to examine eye care in East Africa. It will take place from 28 January to 10 February 2001. Further details: Master Travel, Croxted Mews, 288 Croxted Road, London SE24 9BY (tel: 0208 678 5320; fax: 0208 674 2712; email: tours@mastertravel.co.uk).

First International Congress on Non-Penetrating Glaucoma Surgery
The First International Congress on Non-Penetrating Glaucoma Surgery will take place in Lausanne, Switzerland on 1-2 February 2001. Further details: Dr Tarek Shaarawy, Organising Committee, University of Lausanne, Hospital Ophtalmique Jules Gonin, Avenue de France 15, 1004 Lausanne, Switzerland (tel: 41 21 626 88 66; fax: 41 21 626 88 88; website: www.glaucoma-lausanne.org).

Call for papers—6th European Forum on Quality Improvement in Health Care, 29-31 March 2001, Bologna, Italy
Further details: BMA/BMJ Conference Unit, BMA House, Tavistock Square, London WC1H 9JP, UK (tel: +44 (0) 20 7383 6409; fax: +44 (0) 20 7383 6869; email: quality@bma.org.uk; website: www.quality.bmj.com).

Optometry 01
Optometry 01 will take place on 21-23 April 2001 with more than 100 events—lectures and workshops—at the Atrium Gallery, NEC, Birmingham, UK. Further details: tel: 0207 261 9661; email: info@Optometry01.co.uk; website: www.optometry01.co.uk.

14th Annual Meeting of German Ophthalmic Surgeons
The 14th Annual Meeting of German Ophthalmic Surgeons will be held in the Meistersingerhalle, Nuremberg, Germany on 17-20 May 2001. Further details: MCN Medizinische Congress-organisation Nuremberg AG, Zerzabelshofstrasse 29, 90478 Nuremberg, Germany (tel: +49-911-5931621; fax: +49-911-5931620; email: doerflinger@mcn-nuernberg.de).

European Association for the Study of Diabetic Eye Complications (EASDEC)
The next meeting of the European Association for the Study of Diabetic Eye Complications (EASDEC) will be held in Paris, France, on 19-20 May 2001. Further details: Colloquium, 12 Rue de la Croix Faubin, 75006 Paris Cedex 11, France (tel: +33-1-44 64 15 15; fax +33-1-44 64 15 10; email: s.mundler@colloquium.fr).

American Institute of Ultrasound in Medicine—Millennium Ultrasound Course Series
A course entitled “Obstetrical and Gynaecological Ultrasound” will be held in New York City, NY, on 24-26 August 2001. Further details: Stacey Bessling, Public Relations Coordinator, AIUM, 14750 Sweitzer Lane, Suite 100, Laurel, MD 20707-5906, USA (tel: 301-498-4100; email: sbessling@aium.org).

4th International Conference on the Adjuvant Therapy of Malignant Melanoma
The 4th International Conference on the adjuvant therapy of malignant melanoma will be held at The Royal College of Physicians, London on 15-16 March 2002. Further details: Conference Secretariat, CCI Ltd, 2 Palmerston Court, Palmerston Way, London SW8 4AJ, UK (tel: +44 (0) 20 7720 0600; fax: +44 (0) 20 7720 7177; email: melanoma@confcom.co.uk; website: www.confcom.co.uk/Melanoma).