Prevention of visual field defects after macular hole surgery

EDITOR,—We read with interest the article by Culliance and Cleary1 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 vitreoretinectomy with peeling of the posterior hyaloid confined to the macular area with sparing of the peripapillary region. None of them had any postoperative visual field loss. The authors proposed that vitreopapillary traction around the optic nerve head may be damaged during the induction of PVD as the posterior cortical vitreous is most adherent at the superoposterior region. 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. Yan et al2 had shown that no significant correlation was found between iatrogenic 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 al3 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.4 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.

Concluding, we congratulate Culliance and Cleary1 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
DENNIS S 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>ECCE 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>ECCE and PC IOL</td>
<td>67.0</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>1995</td>
<td>56</td>
<td>Phaco and IOL</td>
<td>16.1</td>
</tr>
<tr>
<td>1998</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 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 preassessment 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

BOOK REVIEWS


I was very impressed with this small and concise textbook which benefits from having a single author. The publishers have produced...
Trust should a practitioner consider expanding accounts of these inspires a certain level of reader. Although not many people will have found the clinical comments valid and the text blepharoplasty, blepharoptosis, and brow ptosis; on page 155, there appeared to be a sinister less than perfect results that would improve. Many of the sections displayed evidence of tive illustrations were economical and were ages consistency of data collection.

V under treatment. Examples of consent monitoring equipment for the patient while undergoing intracranial penetrating injuries (TIPI). He reviewed all the cases in the chapter on the transorbital intracranial penetrating injury, 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 too long. 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” (severe). His novel contributions are to define the grades using a set of splendid 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
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, 11–43 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 Achee, 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 10th Anniversary International Congress, 11 Third Hospital Avenue, Singapore 168751 (tel: (65) 3228374; fax: (65) 2277290; email: eyesecretariat@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@navigator.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, 14750 Sweitzer Lane, Suite 100, Lauder, 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 2 February 2001. Further details: Master Travel, Croxton Mews, 288 Croxton 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, Hopital Ophthalmique Jules Gonin, Avenue de France 15, 1004 Lausanne, Switzerland (tel: 41 21 626 88 88; website: www.glaucomalausanne.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 7335 6409; fax: +44 (0) 20 7335 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, Zerabelshofstrasse 29, 90478 Nuremberg, Germany (tel: ++49-911-3931621; fax: ++49-911-3931620; 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, 75 57 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@confcomm.co.uk; website: www.confcomm.co.uk/Melanoma).