Cataract lens extraction and posterior chamber lens implantation in Korean subjects

EDITOR,—We read with interest the article by Kee and Moon1 who provided interesting data on the effect of cataract removal on outflow facility and intraocular pressure (IOP). We have been interested for some time in the effect of ocular surgery upon measured IOP. Previous studies have shown a reduction in IOP after cataract surgery2 and have suggested implications for combined cataract and filtering surgery.

To assess change in outflow facility Kee and Moon utilised pneumotonomometry. However, this technique has been shown to give low reproducibility3 as a tonography, a non-significant (p=0.28) reduction may have been more accurate. The investigators may have had technical reasons for their choice of instrument; however, no justification was provided, nor was diurnal variation in IOP accounted for in this study.

The authors’ extrapolated ciliary muscle response to pilocarpine from measurements of the outflow facility before and 1 hour after 2% pilocarpine instillation. To specifically investigate the effect of the lens on ciliary muscle contractility the authors repeated the measurement 2 months after phacoemulsification surgery. Interestingly, these latter assessments may not have allowed sufficient time for IOP and outflow facility to stabilise and the hypertensive effect of topical corticosteroids to wane. In general, published 1 year follow up studies demonstrate mixed results in this context.

We have carried out a prospective observational study of phacoemulsification (phaco) surgery performed at a major teaching hospital. In 393 consecutive small incision (3.2 mm) phaco procedures performed over a 5 month period we also demonstrated a significant (Student’s t test p<0.001) drop of measured IOP comparing preoperative and 4 weeks post-phaco IOP (1.28 (SD 3.10) mm Hg). Furthermore, analysis of the data revealed the drop in IOP was significant for both clear corneal incision (n=318) and scleral tunnel incision (n=77) phaco techniques, being 1.5 (3.16) mm Hg (p<0.001) and 0.9 (2.9) mm Hg (p=0.015), respectively. However, with those with a history of glaucoma (n=39) were analysed separately to adjust for the confounding effects of ocular history. Association between Goldmann applanation tonography and Schiotz tonography. J Cataract Refract Surg 1995;21:158–9.


BOOK REVIEWS


LASIK requires meticulous planning and rigorous attention to detail in preparation as the technology is very precise and there is little room for improvisation within the practice of the procedure. To learn such a technique can be challenging, especially when it is to be performed upon a group of patients demanding perfection, and also under the pressure of a time limit. It is, therefore, most gratifying to see a book published by authors who have a strong track record in LASIK and refractive surgery, and who have published their own learning curves in peer reviewed journals.

The book is presented in two sections. The first deals with the machinery, patient selection, performance of the surgery, and perioperative management. The second is the authors’ selection of case reports of patients who were less than straightforward and provides an instant (pictorial) glimpse of real life experience. Section 1 begins with a brief history of excimer lasers and microkeratome technology, including the individual foibles of each instrument. Patient selection (who is suitable and, importantly, who is not), examination, and documentation are well covered, and examples of appropriate data collection forms, to permit the essential audit of one’s own data, are presented.

The individual parts of the LASIK procedure are well documented with clear and helpful colour photographic illustrations. Advice is presented in a style that is direct and reasoned. You, the reader, are in the hands of an experienced supervisor keen to impart knowledge. There are subtle tips on, for example, positioning of the hands or drapes, which will be invaluable. Chapters describing complications from the microkeratome, excimer laser, errors in refractive result, and individual patient’s biological response are all classified and dealt with logically. The condition “sand of the Sahara” is dealt with twice, if slightly differently, by “guest” contributors and highlighted in special boxes. While the information was most interesting, their pasted position within the main text was distracting and I had to flick back a number of pages to find what I had been interrupted reading about in the first place!

Another team of guest contributors discusses the photoablative treatment of LASIK complications, which will be of more interest to the advanced LASIK surgeon. Topics include techniques to deal with ablation microirregularities, errors caused by patient head movement, and narrow transition zone. The penultimate chapter of section 1 discusses LASIK retreatment and special clinical scenarios—for example, after penetrating keratoplasty (PK), photorefractive keratectomy (PRK), and radial keratotomy (RK). While the experience of Shiotz presented here is useful information is provided for anyone contemplating these newer indications. The last chapter draws it all together with a run through of a typical procedure, perhaps acting as a “dress rehearsal” for the reader.

Section 2 comprises 31 cases in which there were complicating factors or unusual patient characteristics—for example, the effects of pupil size, occult preoperative keratoconus, and other unmasked corneal topographical anomalies. The authors advise on other modalities of refractive surgery which may be more appropriate. Surgical complications such as free caps, thin flaps, incomplete passes of the microkeratome, etc are included. Individual case reports of LASIK in patients who previously underwent epikeratophakia and penetrating keratoplasty are included as worked examples. I felt the cases were most helpful, but the layout of the refractive/visual data might have been more tabulable if tabulated—there is plenty of space.

In summary, I think this is a most valuable book for both the aspiring and experienced LASIK surgeon, and will help in the early learning curve and “getting used to the instrument”. Advice is well directed so that the reader may make correct patient selection, counsel patients realistically, acquire a slick technique, and deliver thoughtful aftercare. It is the intention to put the surgeon and, thus, the patient at ease.

The text addresses the surgical minutiae that are most important to success. The techniques and tips are apposite, and expectations realistic given the limitations of the technique in its current form. The avoidable difficulties is particularly strongly stressed but, in the event, the management is dealt with simply and without embarrassment—after all every one has a learning curve. The book therefore acts as a reliable tutor during this period. Nevertheless, there is no true substitute for hands-on experience, although it can be reassuring that the book provides support and knowledge that someone has been there before and can provide some reassurance, and evidence based advice in adversity.

I did not think that this book was especially directed at the advanced surgeon, although they will find useful material and techniques with which they are not directly addressed. However, the book is clearly presented and therefore will be of value to all surgeons, particularly the surgeon with a special interest in refractive surgery.
It is clearly presented and readable with plenty of relevant information without being too dry. There are good illustrations and references. The extended characters set proofing errors (≤ "£" for ≤"<" substitutions) within the guest contributor section are not too confusing. The non-recommend this book to those wishing to take up LASIK, and for the general reader who wants to know what this surgery involves. Would it, however, be a substitute for a supervisor/trainer during your first few cases? I am not sure. Anyway, for your own confidence, read it before you start and you will not go far wrong.

J A SCOTT


To a non-ophthalmic oncologist this book was a delight to read. The script, illustrations, and format made for light work, without losing emphasis, on referencing statements made and using correlative imaging (particularly enjoyable the emphasis on echography) and histology. The book begins with basic examination techniques, and then covers each tissue from conjunctiva to retina with the attention to detail that occur at these sites (starting logically with the most common first!). There are, additionally, dedicated chapters on lymphoid tumours, metastasis, and paraneoplastic syndromes. An enjoyable effort for the non-specialist are the chapters on treatments including radiotherapy, surgery, and phototherapy. This book needs no further review except to say I think it meets its aims in digestible chapters, covering psychophysics, examination strategies, alternative perimetric tests, extraneous factors affecting the visual field, visual pathways, differential diagnosis, glaucoma, screening, defect quantification, practical advice, and instrumentation. The author urges novice perimetrists to start at the beginning when they are first given access to our equipment to learn the skills at their leisure. A short glossary is available to help interpret perimetric jargon.

Revisions made from the 1993 edition deal with new developments that are now commercially available: newer thresholding strategies (Swedish Interactive Thresholding Algorithms, Tendency Oriented Perimetry, FASTPAC), new instrumentation, alternative techniques (short wavelength automated perimetry, frequency doubling technology perimetry), and well thought out information and clinical advice on monitoring for progressive visual field loss. Of particular interest are the screening and defect quantification sections that present a thorough, balanced synopsis of facts that can take years to assimilate from abundant perimetric literature. The most disappointing aspect is that the author does not comment on the wealth of perimetric research designed to provide insight into mechanisms of cell death in early glaucoma.

In summary, this revised edition is a highly readable text that provides useful information for all involved with assessment of the visual field.

PAUL G D SPRY


This relatively short single authored book states that its aim is to “survey the major concepts underlying many of the findings of the basic sciences relating to the processing of visual stimuli”. The justification for this is given that the explosion of information in the field of basic eye and vision research prevents eye clinicians, students, and scientists from other fields being aware of the advances. The author is quite clear that he intends to use everyday language to describe theoretical and laboratory concepts. The book is divided into two major parts, the first is entitled “The Eye”, in which the subchapters are “The Young Eye”, “The Image Of The Adult Human Eye, Eyes Of Different Animals, The Healing Eye, Refractive Errors Of The Human Eye: A Sociologic Viewpoint, and Eye Communication”. The second section is aimed at both perimetrists and “readers” of visual field test results. It succeeds where other texts fail by providing relevant information for both the uninstructed and the highly experienced. The relaxed but concise writing style makes the book a delightful continual read that serves equally well for quick reference. Considerable detail is provided that will satisfy all but the most curious, who are provided with comprehensive and well selected references.

The text is intuitively divided into 11 digestible chapters, covering psychophysics, examination strategies, alternative perimetric tests, extraneous factors affecting the visual field, visual pathways, differential diagnosis, glaucoma, screening, defect quantification, practical advice, and instrumentation. The author urges novice perimetrists to start at the beginning when they are first given access to our equipment to learn the skills at their leisure. A short glossary is available to help interpret perimetric jargon.

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In summary, this revised edition is a highly readable text that provides useful information for all involved with assessment of the visual field.

PAUL G D SPRY
Office of Continuing Medical Education

A symposium “Randomised trials in ophthalmology: past, present, future” will be held 2–3 April 2001 at the Thomas B Turner Building, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA. For further details: Johns Hopkins University School of Medicine, Office of Continuing Medical Education, Turner 20, 720 Rutland Avenue, Baltimore, MD 21205-2195, USA (tel: (410) 955-2959; fax: (410) 955-0807; email: cmene@jhmi.edu).

American Institute of Ultrasound in Medicine—Millennium Ultrasound Course Series

A course entitled “Obstetrical and Gynecological 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[a]aium.org).

31st Cambridge Ophthalmological Symposium

The 31st Cambridge Ophthalmological Symposium will be held 3–5 September 2001 at St John’s College Cambridge. The subject is Retinal Detachment. Further details: COS Secretariat, Cambridge Conferences, The Lawn, 33 Church Street, Great Shelford, Cambridge CB2 5EL, UK (tel: 01223 847464; fax: 01223 847465; email: b.ashworth[e]easynet.co.uk).

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[a]confcomm.co.uk; website: www.confcomm.co.uk/Melanoma).

International Society for Behçet’s Disease

The International Society for Behçet’s Disease was inaugurated at the 9th International Congress on Behçet’s Disease. Professor Shigeaki Ohno represents the ophthalmology division (Department of Ophthalmology and Visual Sciences, Hokkaido University Graduate School of Medicine, Sapporo, Japan: tel: +81-11-716-1161 (ext 5944); fax +81-11-736-0692; email: sohno[a]med.hokudai.ac.jp).

Further details: Professor Ch Zouboulis (email: zoubbere[a]zedat.fu-berlin.de).
Cataract lens extraction and posterior chamber lens implantation in Korean subjects

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