Book reviews

Clinical Light Damage to the Eye. Edited by DAVID MILLER. Pp. 225. DM. 178.00. Springer-Verlag: Berlin. 1987.

This is a book I would love to say I enjoyed reading—but I did not. Its problems start with the title, which conveyed to me the impression that I was going to discover within its covers the eye damaging potential of exposure to various types of clinical instruments incurred during examinations, operations, or therapeutic procedures. This, however, is not the case, as the book is really a pastiche of subjects vaguely related to light and its potentially harmful effects, written by a number of authors of varying style, interest, and expertise. Its lack of objectivity and or logic is further highlighted by a glance at the titles of its four major subdivisions. These are: the nature of light and light damage to biological tissues; light damage to the eye; protecting the eye from light damage; and finally, and somewhat obscurely, an overview of light damage to the eye. This last section, though one of the best, almost seems an afterthought occasioned by a guest author responding to a late invitation. While I am sure this is not the case, it is the impression gained by reading the title and the volume of material repeated in this section that appears elsewhere in the book.

I certainly feel that this book addresses a subject that needs critical attention by clinical audiences in view of the current trends in using both specialised and intense sources of optical radiation for diagnosis and therapy throughout ophthalmology. Unfortunately I think that these authors have not fulfilled their self appointed task. In part I suspect that this is because the pressures of modern publishing have not allowed them to view each other's contributions and, on reflection, delete repetitions and attend to group omissions. Multiauthored texts of this type need far firmer editing than this volume has received.

The initial section on light is an excellent idea and at its best when discussing philosophical aspects of optical radiation and its interactions with various biotic and inanimate systems within the biosphere. It is least helpful, however, when it should be most practical, that is, in trying to explain to non-physicists the problems of measuring light sources and defining the dose delivered to the biological target. Further, it should be far more comprehensive in explaining the confusion that exists as a result of experts in this field using two systems of measurement—radiometric and photometric. This is a perennial area of misunderstanding and confusion, and although some attempt is made to address the problem it lacks comprehensibility, and most of all it lacks explicit diagrams.

A systematic approach is also lacking in the treatment of the interactions of light and the eye. I think it would have been helpful to review briefly the concepts of transmission, scatter, and absorption of radiation and from this basis discuss the spectrum of incident radiation presently at each of the media or tissues within the globe. Having related these data the authors would have provided helpful orientation by giving some indication of action spectra of induced effects due to endogenous pigments. Finally I would like to

have seen an overview of the mechanisms by which light may damage tissues and in particular a clear recognition of the distinctions between photothermal and photochemical damage. In contrast the synergistic interactions between these two mechanisms in relation to damage induced by high irradiance clinical sources such as operating microscopes would also have been helpful. This topic is not emphasised in the text, and, although the wavelength dependence of photochemical damage is indicated, it is emphasised in the ultraviolet, with respect to the lens, but not in the blue region of the visible spectrum, where we are now aware of the well characterised 'blue light hazard' for the retina.

Instead of a panoramic approach the book jumps directly from light to tissues, and for some obscure reason leaps straight to the angle. As an informed reader I commend the authors for including it as a sector of the globe usually ignored in texts on light induced damage, but why before the cornea, lens, or retina? Surely in these latter structures the basic principle of photon-tissue interactions are far better understood and more easily explained than in the trabecular meshwork.

The section on retina and its aging process is a highlight but again is marred, this time by the poor quality of the illustrations. Throughout the book the colour plates are not of high quality and some are very poor indeed.

In summary this book was a disappointment to me, but I am sure it will grace many book shelves, as it is a useful source of reference material.

JOHN MARSHALL

Manual of Cataract Surgery. By ROBERT M SINSEY and Jay V PATEL. Pp. 88. £24.95. Churchill Livingstone: Edinburgh. 1987.

This is one of a series of manuals in ophthalmology produced by Churchill Livingstone and the principal author, Robert Sinskey, is an internationally renowned cataract surgeon. The first four of his 12 chapters deal with general considerations of anaesthesia, instrumentation, and preoperative preparation. The last chapter is concerned with postoperative care, and the intervening seven chapters deal with the various aspects of the surgery itself. Separate chapters are devoted to incisions, anterior capsulotomy, planned extracapsular extraction, posterior chamber phacoemulsification, the insertion of the intraocular lens, prevention and management of complications, and closure of the wound. The text of each chapter is divided into short, lucid sections, and the layout with plenty of headings of bold typeface and many uncluttered line drawings makes the manual easy to use.

Inevitably with descriptions of precise surgical techniques any reviewer is unable to agree with everything that is described, but the manual serves the purpose of giving a clear account of how to manage a cataract by extracapsular means in a way which should keep a beginner out of serious difficulties. Sinskey is most renowned for phacoemulsification, and it is therefore not surprising to find that of this short book the largest chapter deals with posterior chamber phacoemulsification. The opening sentence of the chapter describes the technique as 'the method of choice for cataract extraction'. Clearly that comment continues to be arguable.

If one has any complaint about this chapter it is that the description of the technique of phacoemulsification makes it seem far simpler to carry out than it is in practice. The chapter on intraocular lens implantation deals only with the lens of Sinskey style. Apart from the Sinskey lens, the Sinskey forceps and Sinskey hook also feature in the text at this point.

As the preface indicates, this book has been written for a surgeon beginning surgical training, and as a clear account of extracapsular cataract technique it serves this purpose nicely.

ARTHUR D MCG STEELE

Progress in Clinical and Biological Research. Vol 247. Degenerative Retinal Disorders: Clinical and Laboratory Investigations. Eds JOE G HOLLYFIELD, ROBERT E ANDERSON, MATTHEW M LA VAIL. Pp. 606. US\$ 98.00. Liss: New York. 1987.

This volume is the latest in a series which publishes the proceedings of the Symposia in Clinical and Biological Research. It covers the proceedings of a symposium on retinal degeneration held in Japan in September 1986. It is divided into three sections, the first of which deals with retinitis pigmentosa and other inherited retinal degenerations in man. Because of the time lag in publication much further basic research has occurred and been published since the symposium was held, and the section, while covering the latest developments up to 1986, is deficient in the latest genetic studies, particularly in retinitis pigmentosa. Most of the section deals with retinitis pigmentosa, but the coverage, as one might imagine, is patchy.

The second section deals with inherited retinal degenerations in laboratory animals and would be of great use to those who might become involved in animal research in this field, since it outlines 10 different animal models in six different species. This section is well written and provides very helpful background information for researchers in the field.

The last section deals with induced retinal degenerations in laboratory animals, mainly in relation to the toxicity of light and taurine deficiency. Again, this section is patchy, but the papers in it are of a high quality.

The volume as a whole suffers from differences in typeface between papers and indeed different types of paper within the volume also, giving it a curiously unprofessional air and a lack of literary continuity. It is expensive and of limited value except to those in the field and, in particular, workers involved in animal model research.

A L CROMBIE

Uveitis: A Colour Manual of Diagnosis and Treatment. By JACK J KANSKI. Pp. 114. £29.50. Butterworth: Guildford. 1987.

Jack Kanski is now the most versatile and prolific ophthalmic author since Sir Stewart Duke-Elder. This latest book is a further product of his co-operation with Butterworths and is beautifully produced. The binding is good, paper excellent quality, illustrations lavish, the colour photographs superb, and the layout clear and pleasing.

A short book of just over 100 pages, it starts with an introductory chapter on definitions, classification, and physical signs of uveitis and then divides specific conditions into groups, each of which forms a chapter. These are arthritic syndromes, non-infectious systemic disease, chronic systemic infections, parasites, viral and fungus infection, common idiopathic uveitis, and rare idiopathic syndromes, with the final three chapters on treatment, cataract surgery, and glaucoma.

The text is aimed at resident level. The descriptions of syndromes are brief and subdivided into symptoms, signs, differential diagnosis, treatment, etc, which makes the description clear and concise but does not lead to any discussion. A feature of the book that I found slightly irritating was a catch phrase or important clinical point put in a box as a 'note'. Although these highlight interesting or important points, they give the text a rather glib appearance and in some ways detract from its seriousness. This is a didactic book. Suggestions for further reading rather than references are given in each chapter. There is little or no discussion, so that it is sometimes difficult to place observations on clinical features or management into clinical context. Some growing points in uveitis such as seroconversion of toxoplasmosis during pregnancy or the management of patients on cyclosporin are hardly mentioned, and immunology is mentioned only where it has a diagnostic relevance; this illustrates how little it contributes to the management of routine patients.

The book aims to provide a good solid clinical basis for junior doctors interested in uveitis, and in this role it is probably the best available.

DAVID SPALTON

Radial Keratotomy: Surgical Techniques. Edited by DONALD R SANDERS. Pp. 137. £45.00. John Wiley: Chichester. 1986.

This small hard cover book by six authors, apart from the editor, is designed to describe a number of simple approaches to incisional refractive surgery, for the management of both myopia and astigmatism.

The text is divided into three sections, each of two chapters. The first section deals with spherical correction by radial keratotomy using single depth incisions. The second section deals with spherical correction by radial keratotomy using multiple depth incisions, and the third outlines incisional approaches to the correction of astigmatism. The authors, all American, are well known for their interest in refractive surgery and they present their subject, presumably under the guidance of good editing, in a clear and uncomplicated manner. The text is illustrated with black-and-white photographs and uncluttered drawings.

This book illustrates most effectively the extraordinary variability of this procedure in the hands of different practitioners, and each of the authors reaches the inevitable conclusion that the procedures described will achieve different results in different hands. It is therefore somewhat tiresome to find that some of the authors have been tempted to include pages of individual results of surgical procedures. The author has hoped when doing this to illustrate the value of his own adjustments and modifications, but for the