Diabetes and Ocular Disease: Past, Present and Future Therapies

H.W. Flynn Jr and W.E. Smiddy Ophthalmology Monographs 14 American Academy of Ophthalmology, San Francisco, 1999, \$115.00 (nonmembers), \$80 (members)

This is an excellent distillation of the literature on diabetic eye disease and I have no hesitation in recommending it to all budding medical retina specialists. It will also be a useful addition to the personal libraries of established medical retina experts and a useful reference volume for general ophthalmologists and diabetologists.

The authors are leading lights in the field and this is reflected in the high quality of the text. The book draws on their experience and conveniently summarises the findings of relevant studies for the reader. Well-chosen references round off the chapters, providing pointers to further exploration for the interested reader who wants to delve into the subject. Abstracts of all major trials are provided as an appendix. Patient counselling is often a neglected aspect of medical care in specialist medical texts. Happily this is not the case here. Handy guidelines are provided about issues which should be discussed with the patient before laser photocoagulation.

A minor complaint is that although the colour illustrations are well chosen, reproduction could be better. Some of the pictures are noticeably pixellated.

The history of the development of treatments for diabetic retinopathy is a leading example of the application of evidence-based medicine; this is well highlighted in this book. However, the evolution of the indications for treatment of diabetic maculopathy also reveals the limitations of strictly implementing the results of randomised clinical trials to clinical practice. While we have treated clinically significant macular oedema in eyes with good vision for years on the basis of evidence provided by the ETDRS reports,¹ many clinicians have felt that this was not warranted. Recent re-analysis of the ETDRS data have given respectability to this 'non-evidence based' view; on the basis of the revised assessment it is now acceptable to closely follow eyes with good vision and clinically significant macular oedema, performing photocoagulation only when the retinal thickening affects or imminently threatens the centre of the macula.²

While the recommendations of the ETDRS are presented in the book and proclaimed as one of the best examples of evidence-based patient care, the later review of the data and changed emphasis of the recommendations for treatment are not highlighted.

Minor quibbles aside, I wholeheartedly recommend this book to all those who have an interest in diabetic eye disease.

References

- Early Treatment Diabetic Retinopathy Study Research Group. Photocoagulation for diabetic macular edema. ETDRS report no. 4. Int Ophthalmol Clin 1987;27:265–72.
- Ferris FL III, Davis MD. Treating 20/20 eyes with diabetic macular edema [editorial]. Arch Ophthalmol 1999;117:675–6.

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The Pupil: Anatomy, Physiology and Clinical Applications (2 vols.)

I.E. Loewenfeld

Butterworth-Heinemann, Oxford, 1999, £180.00, ISBN 0 7506 71432

The author's name and the size of this textbook, 1590 pages of text with a separate volume for the bibliography, promise much! However, high expectations are seldom fulfilled and one has to use this book bearing in mind the information given in the preface. It is a historical work, which was started with the idea of producing a summary of the work of Lowenstein and Loewenfeld. However, soon it evolved further into a comprehensive work on the pupil. Some of the text is based on Lowenstein's manuscript written before his death in 1965. Loewenfeld, a physiologist, enrolled help from people from various specialties to complete the work. The book was originally published in 1993 by the Iowa State and clearly listed and each chapter are clearly listed and each chapter starts with a summary, the length of which varies. Part 1 covers anatomy and physiology and takes up over one-third of the book. Eleven chapters cover the iris; stimuli for pupillary changes (including one on effects of extraocular movements upon the pupil); integration of reflexes; and injury and repair in the nervous system.

Part 2 is entitled 'Special fields in pupillary physiology' and the first of these, 'The pupil as a paradigm example of a neurological control system: mathematical approaches in biology', is written by Lawrence Stark. Psychology and pharmacology each have a chapter devoted to them. The former looks at aspects such as conditioning of the light reflex; attitude research (which gives the origins of research into pupil size during the viewing of pictures of different subject matter); and cognitive effects. In the latter, neuro-chemical mechanisms and drug actions are covered.

Part 3 contains only one chapter: methods of pupillary testing. Here history really hits, with several of the methods used in the 1800s being described. How can such a work have omissions? It does: for example in this chapter, the method for quantifying the defect in the swinging flashlight test by the use of neutral density filters, written by Thompson and others and published in the *Survey in Ophthalmology* in 1981, is omitted.

'Pupillary pathology: symptomatology' is covered in part 4 and the final part is 'Pupillary pathology: pupillary signs in various diseases.' These sections study anything and everything from anisocoria to dazzle; glaucoma to demyelination. At times the style of the writing is problematic, in that references are seldom mentioned in the text. Lists of relevant articles to a given topic are listed in table form. This can leave the reader having to look through a long table to find pertinent articles to a statement made in the text. (This comment also applies to earlier chapters.)

Volume 2 contains the bibliography and references. The author states in the introduction to this volume that in recent years her reading has not been as systematic as earlier and only the abstract may have been read, for example. Symbols are used to denote whether a full text, abstract or just title has been read! The sources of verification are given and the systems of listing explained.

The dedication for this book is: 'To those who came before us and to those who follow. May this book form a bridge between them.' This book will give the origins of the facts we take for granted today about the pupil and the background to modern-day research. It will not, however, replace a literature search on a topic pertaining to the pupil. The author states that with a text of this length a point is reached where only the most important new research can be incorporated. Any text book may be considered out-of-date when it is published, none more so than this one. Consider it a historical text and the enormity of the work and what it offers can then be appreciated.

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