

mology, one is bound to seek it out in the library from time to time.

Recent Developments in Retinoblastoma (J. Hungerford) is also clear and helpful: it is the best clinical review of retinoblastoma I have seen. One should not be put off by the first three words in the title: there has been a lot of much more recent research on the RB1 gene and its product, and its rôle in regulation of the cell cycle, but for clinicians this is pretty impenetrable, and one can be grateful that it has been omitted as it has no bearing yet on diagnosis or treatment.

Colour Doppler Imaging of the Eye (T. Williamson) reviews a handful of cases of this and that, but this technique seems to make no difference to clinical management, and to offer no new insight into disease processes. There is a pointer to a possible research application: assessment of the effect of pharmacological agents on the autoregulation of retinal blood flow.

The chapter with the highest proportion of recent citations is *Ocular Imaging: Computerised Corneal Modelling* (M. W. Belin, S. B. Hannush). This is a commendably concise introduction to rapidly evolving technology. It will be useful to anyone contemplating indulging in this past-time, though before spending any money it would be as well to seek up-to-the-minute information, particularly on how the rasterphotogrammetry system, and the method of laser holographic interferometry, are measuring up to the longer-established videokeratoscopes.

Magnetic Resonance Imaging and the Eye (I. Moseley, D. Hadley) confirms the prevalent view that MRI of the eyeball has little to offer. A new technique of Magnetization Transfer Contrast is referred to: it offers far better resolution in studies of animal eyes (1991), so perhaps this will find its way into clinical use.

The review of *Scanning Laser Ophthalmoscopy and Tomography* (R. O. W. Burke, H. E. Völcker) is beautifully illustrated and readable. It deals with the story up to 1992–3, including psychophysical functional testing of the macula, 3D imaging, and retinal pigment densitometry and reflectometry. I shall be interested to see whether cutting the cost of SLO hardware will enable this technology to find a place in clinical practice: will this be a case of 'The Emperor's New Clothes', as was wisely said of automated perimetry?

To anyone with even a passing interest in retinitis pigmentosa, *Recent Developments in Psychophysics* (F. W. Fitzke) will be the highlight of this book. The research described here has not been driven by any commercial interests, and there is no question of any of this being applied outside a big specialist centre. But what wonderful insights into the pathogenesis of this fascinating group of diseases!

The final chapter, *Recent Advances in Clinical Visual Electrophysiology* (G. B. Arden), requires, and fully rewards, detailed reading and re-reading. It is by the Master himself.

David Mansfield

Ophthalmic Ultrasound: A Practical Guide

Hatem R. Atta

Churchill Livingstone, 1996

ISBN 0 443 04773 1

At last! A 'Practical Guide' which really is full of practical tips and useful examples. This is an excellent book: every eye department should have one.

All of us rely on A-scan ultrasound for biometry before lens implantation, but when one turns one's hand to do the occasional B-scan of an eye with a suspected retinal detachment or tumour, a certain lack of confidence creeps in. Major clinical decisions can depend upon the conclusions drawn, but few ophthalmologists have been taught to use the ultrasound scanner to make a systematic and thorough examination, and few can be sure of extracting all the relevant information as they do a scan. However, this is not an investigation one can easily delegate to a radiologist. Still pictures give only part of the story: interpretation of a scan is easier if one sees it being done or, better still, does the examination one's self.

The aim of this book is to help one establish a 'sound' technique, and it is full of simple practicalities. Tips such as the use of a reclining chair with the patient's eye close to the monitor, putting up overhead fixation lights, and applying the probe to the globe not the lids, can all help to get one off to a good start. Other helpful suggestions include covering the probe tip and gel with 'clingfilm' in infected cases, and choosing high gain for detecting vitreous opacities and posterior vitreous detachment and low gain for obtaining a detailed view of the retinal and choroidal layers, for checking for extrascleral extension of tumour, demonstrating optic disc drusen, and looking for calcification.

The section of the book which will be thumbed through most often is that part on methods of examination of the globe. It gives a clear explanation of the method of systematic scanning of all parts of the globe, with the probe applied at the limbus, the equator, and posterior to the equator, at selected clock-hours. This 'transverse' method of scanning is seldom recommended to beginners, but it clearly avoids the strong sound attenuation by the lens, and the artefacts caused by scanning through a lens prosthesis. It also makes it much easier to describe the position of a lesion. Further useful tips include choosing a plane of section through the optic nerve

for clarification of retinal detachments, and rotating the globe within the plane of the section. Due emphasis is given to the particular benefits of A-scanning, including the demonstration of 'after-movement' rippling of a retinal detachment, and the fast vertical oscillation of spikes which indicates vascularity in a lesion.

For most practising ophthalmologists, two clinical differential diagnoses will dominate the application of ultrasound, and these are quite rightly emphasised: retinal versus choroidal versus posterior vitreous detachment; and melanoma versus metastasis versus haemangioma of the choroid. These are used as illustration of the principle that maximum clinical information is gained from separate attention to each aspect of a lesion: topographic, kinetic, reflectivity, internal structure, and sound attenuation. This discussion leads into an encyclopaedic reference manual on sonographic appearances of diverse unusual lesions which is extremely useful. There is even room for some fascinating 'small print' which will please the connoisseurs, such as the change in internal reflectivity of choroidal melanomas after irradiation.

The later part of the book campaigns for recognition of the value of ultrasound (particularly *standardised* A-scanning) in demonstration and diagnosis of orbital lesions. It is a rear-guard action: CT and MRI scanning are so entrenched now that there is not very much incentive to master the art of orbital ultrasound for rather marginal benefit, unless one works in a tertiary referral centre where orbital disease is commonly encountered. Ultrasound may be better at demonstrating optic nerve sheath distension and engorgement of orbital veins, but CT and MRI are surely better at finding the causes of these secondary effects. It must also be said that although ultrasound can give a result immediately, it is often helpful *not* to have to make an instant judgement on the results.

Biometry is another topic well covered. Special techniques such as Doppler studies and Duplex scanning get a mention, though as curious devices for curious people, rather than as useful clinical tools – which is fair enough. I found nothing on the new methods which allow high-resolution tissue scanning with almost 'histological' precision.

Experts must always have something to pick at: 'Very good but?' . . . It is the definition of an expert. This review is not by an expert in the field, but by one who will find this book an enormous asset in the oncology and retinal services, a help in routine biometry, and a godsend for teaching undergraduates and postgraduates.

David Mansfield

Ophthalmic Photography: A Textbook of Retinal Photography, Angiography and Electronic Imaging

Patrick J. Saine and Marshall E. Tyler

Butterworth Heinemann, London

ISBN 0-7506-9793-8

This is quite possibly the most informative and comprehensive text on the field of retinal photography yet produced – concisely written and beautifully illustrated. The authors take you from the origins of retinal photography and angiography, through in-depth discussions of fundus photography theory and practice, as well as retinal and choroidal angiography techniques. There are many practical suggestions from the fundamentals of camera position and producing sharp retinal photographs, through to advanced stereo imaging. The chapters on angiography deal with physical and chemical properties of fluorescein sodium and indocyanine green dyes, adverse reactions, angiographic procedure and interpretation. The authors go on to unravel the sometimes confusing world of electronic imaging, discussing principles, cameras and instrumentation, and the practicalities of working with a digital angiography system.

In conclusion, this book should be required reading for anyone embarking on retinal photography or angiography, an invaluable source of reference for the experienced ophthalmic photographer and a useful revision aid for pre-Fellowship candidates.

Christopher H. Mody

ProVision: Preferred Responses in Ophthalmology

A self-assessment program from the American Academy of Ophthalmology, 1996

This set of three volumes is the second series published by the American Academy of Ophthalmology as part of LEO (Lifelong Education for the Ophthalmologist), a programme of continuing medical education for ophthalmologists. Five hundred questions are set in Volume I, fifty in each of ten subspecialty areas. The preferred responses are fully documented in the Discussions (Volume II), where the excellent illustrations are reprinted and key references are given. The third volume is an evaluation and response form, which can be filled in and sent off for confidential marking or simply used for self-assessment. The layout, typesetting, colour reproduction and general presentation make this set very readable and a pleasure to either browse through or sit down with and formally test oneself.

From a British trainee's viewpoint, the kind of questions asked are not used in any of the postgraduate Fellowship examinations. There is a stem (clinical photograph, illustration, case history,