

Book reviews

Walsh and Hoyt's Clinical Neuro-Ophthalmology. 4th edn. Vol. 2. By NEIL R MILLER. Pp. 1133. £76.00. Williams and Wilkins: Baltimore. 1985.

The second volume of the fourth edition of this book is welcome. The first volume covered the visual sensory system and the optic nerve, and the present volume comprises three sections. These are on the autonomic nervous system, the ocular motor system, and sensory innervation of the eye and the orbit.

The section on the pupil is extensive (270 pages), informative, and superbly illustrated. The clinical section has not altered in substance since the previous edition, though the bibliography is brought up to date, and the authoritative eyes of Lowenfeld and Thompson have cast their sign of approval. The pupil remains of interest and of clinical importance to the ophthalmologist. Thus Horner's syndrome is extensively covered, and its relevance to ophthalmologists is emphasised by the fact that a preganglionic Horner's syndrome carries a mortality of 55%. The afferent pupillary defect and the tonic pupil are also fully considered. On the anatomical side the illustrations are exquisite; some are culled from Hogan and Alvarado, others are either original or from recent papers. The illustrations of sprouting after axonal injury are impressive, and the appearances they show may be visualised within 24 hours of nerve injury.

The ocular motor system (inappropriately referred to as the oculomotor system on the page headings) has been written with the collaboration of Dr David Zee. The opening chapter on embryology and anatomy contains remarkable diagrams and electron micrographs. The neural control of eye movements has been an area of 'shifting' interpretation over the past decade, as the new micro-recording techniques have rewritten conventional connections.

Similarly the use of retrograde tracing techniques—namely, horseradish peroxidase, wheat germ agglutinin—have shown how complex neural connections can be. Thus Warwick elaborated third nerve nuclear organisation using degenerative techniques, but injection of tracers into the medial rectus, for example, has shown three different subgroups in the ipsilateral nucleus, which might indicate different areas for adduction and convergence control. The clinical evaluation of ocular movement disorders remains largely unchanged, though emphasis has been placed on the value of the vestibulo-ocular reflex (VOR). In addition useful sections on Duane's syndrome and other congenital innervational disorders are well described. This section is a mammoth task and includes a bibliography of over 1400 references. The final chapters on ocular muscle disorders and nystagmus are again comprehensive and update ophthalmologists on the biochemical nature of ocular myopathy (PEEO) and the current immunology of myasthenia gravis.

The section on the trigeminal nerve is extensive enough to grace the pages of any textbook of neurology. The subject is of interest to ophthalmologists, though large sections on glossopharyngeal neuralgia and the Ramsay Hunt syn-

drome seem to widen rather unnecessarily the diagnostic horizons of clinical neuro-ophthalmology.

This volume therefore follows the pattern of its predecessor in providing an up-to-date review, supported by ample and excellent illustrations and the most extensive bibliography. The aim of the book has been altered, to provide the 'ultimate reference book' rather than the 'ultimate clinical opinion'. An ophthalmologist's library would be a sadder place without these volumes, and the author is to be congratulated on his amazing achievement. M D SANDERS

The Interphotoreceptor Matrix in Health and Disease. Eds. C. DAVID BRIDGES AND ALICE J. ADLER. Pp. 287. £37.00. Alan R. Liss: New York. 1985.

Who would have thought a few short years ago that the glycoprotein matrix surrounding the outermost components of the photoreceptor cells would find itself the subject of an entire book. Until relatively recently the interphotoreceptor matrix was almost ignored, and there were even those who did not believe it existed. In this book we find not only that it exists but that it may well have profound implications in the study of the pathobiology of retinal disease.

David Bridges and Alice Alder have done the ophthalmic and vision research community a great service in commissioning the authors whom they have persuaded to write so expertly in each part of this book. But their contribution extends further, in that they have obviously paid much attention to the way in which the volume is laid out and also to sustaining logic and concepts between the contributions of the individual authors.

The book is arranged in two parts with the first being further subdivided. Part 1 deals with the normal function of the interphotoreceptor matrix and is subdivided into two sections, the first covering morphology and the second biochemistry and cell biology. The second and final part of the book deals with various parameters of the diseased state. In dipping into the volume therefore we are given a historical review of the early years and debates on the interphotoreceptor matrix by Lynette Feeney-Burns. Hers is a delightful chapter and one which covers many of the misconceptions in relation to this extracellular system. We are then taken through the modern concepts of morphology of the interphotoreceptor matrix as revealed by rapid freezing techniques. The morphological section concludes by highlighting the heterogeneous nature of this system in relation to specialisations juxtaposed to cone photoreceptor cells. The normal biochemistry and cell biology are introduced by an extremely useful review of the matrix by Elaine Berman. Her colleagues then become progressively more and more specialised, explaining such complexities as specific phosphodiesterases in the matrix and the importance of interstitial retinol binding proteins in this region.

After reviewing the normal aspects of this tissue the authors give us a mechanistic review of the various potentials of faults in this system in relation to photoreceptor cell diseases. In a series of chapters the role of specific chemical subcomponents in the matrix in relation to inherited retinal diseases are highlighted and a number of examples are given.

I found this book an absolutely delightful volume and one that was extremely hard to put down. It is short enough to be read in just a few sittings and unlike most specialist texts this is not one the reader should dip into selectively. It is a model of clarity and to my mind a superb example of what every multi-author work should strive to be. I thoroughly recommend it to all with an interest in the underlying aetiology of retinal diseases.

JOHN MARSHALL

Manual of Ocular Diagnosis and Therapy. 2nd Edn. Edited by DEBORAH PAVAN-LANGSTON. Pp. 494. US \$17.95. Little, Brown: Boston, Mass. 1985.

The second edition of this book is welcome as an updated version of a ready reference manual. Although the preface claims it is written for a wide readership, it can be used effectively only by established ophthalmologists and residents in ophthalmology, as considerable clinical knowledge in ophthalmology is an essential prerequisite. There are 15 short chapters written by a panel of 11 ophthalmologists and one neurologist mainly from the Boston hospitals and Harvard Medical School, USA.

The standard selection of chapters covers the field of ophthalmology and neuro-ophthalmology. Clear headings and a concise text are an excellent feature of this manual, though there are very few illustrations indeed, and all black-and-white diagrams. Hence previous clinical knowledge in ophthalmology is essential for the readership. The comprehensive lists of causes and differential diagnosis are very helpful, especially to residents taking examinations and thinking widely on a topic. Established ophthalmologists will find these lists valuable also, making sure they have not forgotten any aspect of a patient's investigations. The lists in chapter 14 of ocular manifestations of systemic disease are comprehensive, and the appendixes A and B on common dosages of ophthalmic drugs and antibiotic dosages and routes of administration are especially useful.

The manual is published in soft cover with a spiral binding and may be regarded as an excellent and convenient ready reference book for ophthalmologists and particularly those engaged in postgraduate teaching. The editor and the panel of writers have provided a remarkably concise and comprehensive addition to postgraduate ophthalmic literature.

JAMES L. KENNERLEY BANKES

Notes

OSUK Annual Congress

The Annual Congress of the Ophthalmological Society of the United Kingdom will be held on 8-10 April 1987 at St David's Hall, Cardiff. Applications to present free papers are invited. Details from Mr Z J Gregor, FRCS, Honorary Secretary, Ophthalmological Society of the United Kingdom, 35-43 Lincoln's Inn Fields, London WC2A 3PN.

Multiple sclerosis

A conference will be held on 3-5 September 1987, at Lyon, France, on 'Trends in European multiple sclerosis research'

by the Congress of the European Committee for Therapeutic Research in Multiple Sclerosis (ECTRIMS). Further information from Dr C Confavreux, Hôpital Neurologique, 59 Boulevard Pinel, 69003, Lyon, France.

IX International Course of Ophthalmology

This will be held at Barcelona on 24-29 May 1987. Details from Instituto Barraquer, Laforja 88, E-08021 Barcelona, Spain.

Epidemiology and biostatistics

The National Eye Institute of America will hold a Clinical Vision Research course on 'Epidemiologic and Biostatistical Approaches' at Longboat Key, near Sarasota, Florida, on 29 April to 2 May 1987. Details from Catherine M Beinhauer, Conference Management Associates Inc., 127 Brook Hollow, New Hampshire 03755, USA.

British Contact Lens Association

Applications are invited for the 1987 Dallos Award, whose object is to support contact lens orientated research. Applications will be accepted only from paid up members of the BCLA. Further details from the association's General Secretary, 14 Perceval Avenue, London NW3 4PY.

Talking newspapers

Tape recordings from daily newspapers and weekly and monthly magazines are available on tapes playable in ordinary tape players. For £5 the subscriber receives a 90-minute tape every week for a year. No postage is required if the subscriber is a registered blind person. Details from Talking Newspaper Association of the UK, 90 High Street, Heathfield, East Sussex TN21 8JD.

Correction

In the article by L P Fong, C J Hunt, M J Taylor, and D E Pegg on 'Cryopreservation of rabbit corneas: assessment by microscopy and transplantation' (*Br J Ophthalmol* 1986; **70**: 751-60) an error occurred in the second paragraph (page 751). The last three sentences of it should read as follows: 'A similar solution has been proposed for cryopreservation of the cornea.^{13,14} It contains the buffer N-tris (hydroxymethyl)-methyl-2-aminoethane sulphonic acid (TES) and is designated CPTES. Specular microscopy has been used to demonstrate that rabbit corneas will tolerate the introduction and removal of 1 and 2 molar Me₂SO in this solution at 0°C.' We greatly regret this error, which was due to the transposition of two lines of type.