Book reviews

Visual Electrodiagnostic Testing: A Practical Guide for the Clinician. By RONALD E. CARR and IRWIN M. SIEGEL. Pp. 126. US\$32.00. Williams and Wilkins: Baltimore. 1982.

It is claimed that this is a complete practical guide to visual electrodiagnostic testing and that there is no other text available. Neither claim is true. This book is essentially a description of the authors' method of electroretinography and its application to the study of degenerative choroido-retinal disease.

There are 2 main sections. The first deals with basic concepts and methods. The relevant points of anatomy and physiology in relation to the electroretinogram (ERG) are described very well. In the chapter on the clinical ERG it is not stated whether or not the pupil is to be dilated, but the illustrations imply that it is. The Burian-Allen lens is recommended. This advice is regrettable, especially as the gold foil electrode is mentioned in the chapter on foveal responses. One of the most important concepts of the foveal ERG is not mentioned in this chapter but is tucked away on p. 98. The use of skin electrodes in the awake child is not mentioned, but it is claimed that ketamine has no effect on the visually evoked response (VER). The authors have obviously little use for the electro-oculogram (EOG). Their reasons are fair comment on the length of the test, its variability, and the need for patient co-operation. However, the test does have more merit than they concede.

The chapter on the visually evoked cortical potential (VECP is but one of the many acronyms) is extremely disappointing. Perhaps this is because the authors have been unable to find a reliable clinical application for the many exuberant experimental claims. The very restricted use of the flash VER is rightly noted; an adequate examination of the pupil response is often as good. The complexities of the pattern evoked response are ignored. There is no mention of the difference between a steady state and transient response, although the authors seem to prefer the former. The fact that the mode of presentation of a pattern changes the form of the response and even its laterality is not noted. Midline electrodes are used. This excludes the study of lesions behind the optic nerve. Details of instrumentation are referred to chapter 9 but the reader will seek in vain.

The second section is clinical. It starts with a diagnostic guide showing the 4 main types of ERG abnormality, listing the conditions likely to cause these changes and a note of the retinal sensitivity abnormality to be expected. The various choroidoretinal disorders are then considered in more detail according to the authors' classification. The relative merits of the various tests in a clinical situation are discussed, and it is in this section that the oscillatory potentials of the ERG are described. Their value in the assessment of diabetic retinal disease is not confirmed. There is a brief mention of the use of the tests in opacities of the media with the warning that focal lesions, especially of the macula, will not be detected. There is a final section concerning apparatus and patient protection, colour vision, retinal sensitivity, and dark adaptation.

The book is neither a balanced guide to visual electro-

physiological tests nor a critical review of the literature. It is a description of the methods used by 2 very experienced workers in this field and as such it can be thoroughly recommended.

J. H. KELSEY

Eye Disease in the Tropics. By F. C. RODGER. Pp. 127. £6.00. Churchill Livingstone: Edinburgh. 1981.

It takes a rare courage to cover major blinding diseases in the tropics, eye diseases commonly found in the tropics, ocular complications of the common tropical diseases, and rare tropical eye conditions in a mere 120 pages of print. Certainly so when this is sandwiched between 2 introductory chapters on planning and information and a concluding chapter on laboratory aids to diagnosis. The objective to be both short and comprehensive has been achieved at the cost of a very concentrated text requiring of the reader a strong digestion.

The book is well written and exciting, full of little gems and sound advice. The preparatory information of chapter 2 is well presented and essential reading for any doctor new to the tropics. Major blinding diseases are adequately covered, cataract having only brief attention, but nutritional ophthalmia is particularly well done. There is a very balanced selection of topics in the other chapters. The discussion on the many causes of optic atrophy in the tropics, a recurring problem and puzzle, is illuminating and practical.

The account of rare tropical eye conditions, optimistically described as a chapter for quick reference, contains a wealth of detail on disease groups covering infectious diseases, the zoonoses, parasitic infestations, and mycotic infections, all of which may confront and confuse the tropical doctor. Simple laboratory techniques are clearly described in a valuable concluding chapter, which could be further improved by a list of essential equipment.

Fifty-four beautiful plates and some line drawings illuminate the text. What a pity that some, at least, are not in colour.

The author, with his customary aplomb and wide practical experience of the tropics, has produced a valuable book of reference. It will certainly be found on my clinic table if not by the bedside.

G. G. BISLEY

Current Concepts in Cataract Surgery. Selected Proceedings of the Seventh Biennial Cataract Surgical Congress. Eds. JARED M. EMERY and ADRIENNE C. JACOBSON. Pp. 338. £44.05. Prentice/Hall International: Hemel Hempstead, Herts. 1982.

This excellent book contains the selected proceedings of the Seventh Biennial Cataract Surgical Congress held in 1980. Dr Robert Walsh conceived and produced the first Biennial Cataract Surgical Congress in Miami in 1969. This original symposium and the subsequent 6 have been recorded in a series of annual volumes. The sixth volume was edited by Dr Jared J. Emery and in this the seventh volume he has been assisted by Adrienne C. Jacobson.

The present volume reflects the revolutionary advances in cataract surgery that have occurred during the last decade.

In 1969 the surgical microscope enjoyed sparing use, but by 1977 it was used by most of those attending the fifth Biennial Cataract Surgical Congress. Phacoemulsification was presented in one undiscussed paper in 1969, was deemed too controversial to be included in the published proceedings of the third congress in 1973, but by the sixth congress had attained peaceful coexistence with the 'establishment.' Likewise the intraocular lens has emerged from brief mention in 1969 to be a dominant force in the ophthalmological world. Intraocular lenses in the United States of America now overshadow contact lenses, aphakic spectacle lenses, and keratorefractive procedures as corrections for aphakia.

This most comprehensive book is subdivided into 14 parts. Part one contains general considerations in cataract surgery and sets the standard of current thinking that is followed throughout the rest of the book. In indications for intracapsular or extracapsular surgery the one instance in which the intracapsular cataract technique is held to be superior is when dealing with a subluxated lens. A whole section is devoted to phacoemulsification, and another to the simplified extracapsular cataract extraction. These sections are of enormous help to the beginner in these techniques, as they are well supported by excellent diagrams. Other parts are devoted to the various styles of lens implant currently used, and once again comprehensive instructions on their insertion are given. The main emphasis is on monoplane posterior capsule open flexible loop lenses, but the new anterior chamber lenses are also reviewed.

Complications of all types of cataract surgery are very fully discussed. The then current status of intraocular lenses power calculations does not include the more recently published SRK formula. There is a useful section on the correction of aphakia with contact lenses, and the final part of the book deals with keratorefractive surgery. All parts of the book are enlivened by witty and interesting panel discussions by the participants.

At this Seventh Biennial Cataract Surgical Congress the MacManee gold award lecture was instituted and given by Dr A. Edward MacManee, and is fully recorded in this book. There is a very large list of contributors, and it is perhaps a little unfortunate that it is totally American. Although the book has only just reached publication the meeting concerned was held in 1980 and thus the most recent advances in the Yag laser and the thinking on ultra-violet irradiation are not included.

This volume is dedicated to ophthalmologists in private practice but like its predecessors should be on every ophthalmic institute and hospital library shelf, as it contains a wealth of useful information for practising ophthalmic surgeons.

E. J. ARNOTT

New Directions in Ophthalmic Research. Ed. MARVIN L. SEARS. Pp. 358. £21.00. Yale University Press: London. 1981.

This is an interesting and useful book in which recent research techniques have been applied to a variety of problems associated with the eye. The first 3 chapters deal with immunological responses of the retina and lens, and the problems of ocular surveillance are discussed. The next four chapters deal with the problems of aging and cataract.

A particularly interesting chapter is the use of clonal DNA to obtain information about the pathogenesis of cataract. The following 3 chapters are concerned with the regulation of intraocular pressure. Cholera toxin was used as a model for the activation of membrane receptors, a specific protein being found that mediates the synthesis of cyclic AMP induced by cholera toxin. The next 4 chapters deal with the molecular basis of vision. Subjects discussed are: the role of guanine nucleotides, the control of cyclic AMP phosphodiesterase, esterification of vitamin A in the retina, and a theory of central retinal disease. The final chapter deals with diabetes, amblyopia, and neuropeptides in the eye.

R. F. FISHER

Obituary

G. G. Penman, MD, FRCS Eng

Gerard Giles Penman died in November 1982 at the age of 83. He was honorary consulting surgeon to the Ophthalmic Department, St Thomas's Hospital, and to Moorfields Eye Hospital, and had earlier been consultant ophthalmic surgeon to the Royal Northern Hospital, the Hospital for Sick Children, Great Ormond Street, and the Royal Hospital and Home for Incurables, Putney. He was a member of the executive council of the Royal National Institute for the Blind.

Born in Port Elizabeth, South Africa, Penman was educated in England at Sherborne. On leaving school he went straight into the Royal Field Artillery at the end of 1917 and spent the last year of the war in the Army of Occupation in Cologne. On demobilisation in 1919 he went to Pembroke College, Cambridge, and then to St Thomas's Hospital, where he qualified in medicine in 1923 and became FRCS in 1926.

He chose to specialise in ophthalmology and was house surgeon and later registrar to Fisher, Hudson, and Doyne. As was the case with many of his generation his training was somewhat curtailed in order that the gaps which had appeared in every profession as a result of the losses in the war could be made good as quickly as possible. It was not long before he was appointed to the staff of the Royal Westminster Ophthalmic Hospital, which later merged with Moorfields. In his registrar period he co-operated with Professor Le Gros Clarke and later Eugene Wolff in animal experiments on the visual pathways of the brain, but apart from this he did not contribute greatly to ophthalmic literature.

Like many others Penman was greatly impressed by the teaching of A. C. Hudson, whose methods and operative technique he endeavoured to emulate throughout his career. Though he did sound and steady work for his patients, his retiring nature made him hide his light under a bushell and few perhaps appreciated fully his professional and personal virtues. He was a quiet, gentle man.

Though he lived to a great age Penman had health problems which made him decide to take early retirement. He went to live in Sherborne, where he did much good work for his old school and for the Abbey and enjoyed gardening and golf. His wife died a few years before him and they left 3 sons, one of whom is a consultant pathologist.

HAROLD RIDLEY