Book reviews

Computed Tomography of the Eye and Orbit. By STEVEN B. HAMMERSCHLAG, JOHN R. HESSELINK, ALFRED L. WEBER. Pp. 267. £43·65. Appleton-Century-Crofts: Connecticut. 1983.

Computerised tomography now dominates the investigation of orbital disease. Except for vascular conditions CT has virtually replaced invasive diagnostic procedures for the investigation of the orbit. Angiography and venography are seldom now necessary to delineate abnormality either within the orbit or in the adjacent anterior or middle cranial fossae. The stated aim of the authors of this textbook is to provide from their accumulated knowledge a concise text to serve as a reference for the occasional diagnostic dilemma encountered by the radiologist or ophthalmic surgeon. The chapters are introduced with a brief description of the pathology, clinical features, and the CT findings of each disease. Illustrated case histories related to the text are then appended at the end of each chapter. This is becoming a favourite format for many North American publications on head and neck radiology, but it makes the work in reality an extended atlas rather than a full textbook.

The text is accurate and concise, and there is an extensive and largely up-to-date bibliography as far as the North American literature is concerned, but, as in many textbooks from the USA, important recent European contributions are not always listed. The illustrations are generally of high standard and are well worth detailed study. However, the imaging of bone detail, particularly with regard to the demonstration of the optic canals, is of indifferent quality on the scans shown and might be improved by using a CT scanner of translate-rotate design. Chief criticism of the work concerns the omission of any detailed description of plain *x*-ray changes in orbital disease. Orbital diagnosis is now based upon a combination of plain *x*-ray changes and computerised tomography. Conventional films are important not only because the cause of unilateral exophthalmos is diagnosible in many patients, but also because they may be necessary for the correct orientation of the CT examination. Despite the fact that this book is concerned only with CT scanning, some illustrations of typical plain *x*-ray features could usefully have been included.

G. A. S. LLOYD

Ophtalmologie. 5th edn. By H. SARAUX. Pp. 220. 78F. Masson: Paris. 1982.

This compact summary of ocular diseases and of general diseases with ocular symptoms or signs has been written, as the author indicates in his preface, for the undergraduate student and the general practitioner. It is intended to provide the reader with a basic appreciation of what is important or urgent among the symptoms and signs which can be observed by a medical practitioner who has had no specialised ophthalmic training. It certainly meets this need.

Unfortunately the quality of the illustrations is somewhat variable, and a number of them are of historic rather than of contemporary interest. However, the text is clearly written, and the book should appeal to the medical student during his undergraduate training period in ophthalmology.

JAMES R. HUDSON

External Eye: Methods of Examination. By MOGENS S. NORN. Pp. 212. $36·00. Scriptor: Copenhagen. 1983.

This book first appeared in 1974 and ran to 199 pages. The second edition is only 13 pages longer, but the text has been reset in a more compact type and the real increase is greater.

The sections remain the same: examination by simple aids, measurement of exophthalmos, slit-lamp examination, examination after vital staining, studies of surface phenomena, measurement of corneal thickness, measurement of corneal curvature, tear function studies, mucus function studies, temperature measurement, measurement of sensitivity, conjunctivo-cytological studies, biopsy of the conjunctiva, and microbiological studies. The text is concise, clear, well illustrated, and full of practical suggestions for the observation and the investigation of the external eye.

Professor Norn corrects the erroneous description of the layers of the tear film which appeared in the first edition; he also expands the section on tear break-up time and describes a technique for slit-lamp estimation of the thickness of the oily layer of the precorneal film. The admirable account of vital stains and their uses is now even more comprehensive. The new section on specular microscopy is disappointing, the opportunity to describe the new generation of large-field instruments having been ignored. The chapter on keratometry remains sketchy, with little mention of the useful technique of photokeratoscopy, and the pachometry chapter still contains no account of either the ultrasonic or the contact specular microscopic methods of corneal thickness measurement. The bibliography, originally usefully arranged under chapter headings, is now a simple alphabetical list.

These criticisms notwithstanding, this book represents a significant improvement on an important text. For the serious observer of the external eye it is indispensable. Two copies would be ideal: one to be kept on the bookshelf and the other conveniently to hand by the slit-lamp.

R. J. BUCKLEY

Congenital Abnormalities of the Optic Nerve and Related Forebrain. By T. E. ACERS. Pp. 75. $16·00. Lea and Febiger: Philadelphia. 1983.

The general ophthalmologist will sigh with relief at this small, concise, and well written book on congenital anomalies affecting the optic nerve. His knowledge of its embryology will be refreshed, and he will be led through the congenital anomalies of the optic disc (cups, craters, colobomas, and crescents), drusen of the disc, and various hamartomas. The systemic conditions that produce optic atrophy are also included in tabloid form. The final 20 pages are concerned with the author's main interest of hypoplasia of the optic nerve. This may be subdivided into three subgroups: (1) optic nerve hypoplasia (simplex); (2) septo-optic dysplasia; (3) septo-optic-pituitary dysplasia.

The book is easy to browse through, illustrations are generally good, and the bibliography extensive and recent

for this slim volume. Dedicated to the memory of Dr Frank B. Walsh, this volume will enlighten all those whose practice includes a fair amount of paediatric work. M. SANDERS

Festschrift Jules François: Retinal and Chorioretinal Pathology. Ed. A. NEETENS. Pp. 152. Dfl.100·00. Aeolus Press: Amsterdam. 1983.

Baron Jules François has been honoured, as is most appropriate, in this little volume which records the symposium held to celebrate his 75th birthday. The tribute by Professor Neetens and the address of the rector of the University of Antwerp, Dr Clara, express beautifully the sentiments of colleagues the world over towards Jules François, and demand to be read in the original.

The subjects chosen for the symposium reflect the wide interests of our honoured colleague, and indeed a number of them have references to his own work in the various subjects. The authors of the papers have been chosen with equal care, and their presentations provide the reader with current information on their selected topics and give many references for further study.

Celebrations such as this symposium are rare, and the Festschrift provides an outstanding report of the occasion.

JAMES R. HUDSON

Mikrostrabismus. By JOSEPH LANG. Pp. 150. DM 44. Ferdinand Enke Verlag: Stuttgart. 1982.

Volume 62 of the on-going series 'Bucherei des Augenarztes' consists of a comprehensive monograph on the subject of microstrabismus. The author discusses the clinical manifestations together with the investigation and treatment of this important but often overlooked condition. There are reports from a series of 120 children with primary convergent microstrabismus, and in at least 40 of these there was evidence of genetic transmission of the defect. The extensive references make this a useful book for those with an interest in the management of all forms of squint.

T. J. FFYTCHE

Walsh and Hoyt's Clinical Neuro-Ophthalmology. 4th edn. Vol. 1. By NEIL R. MILLER. Pp. 381. £41·00. Williams and Wilkins: London. 1982.

The latest edition of a classical textbook is always an occasion for celebration. Frank Walsh initiated *Clinical Neuro-Ophthalmology* in 1947, and in 1969 the third edition was produced in three volumes with the added expertise of Professor W. F. Hoyt; this comprehensive work has presented the subject to ophthalmologists and neurologists for over 10 years. Neil R. Miller, associate professor at the Johns Hopkins, aided by modern computer technology has now produced the first volume of the fourth edition, which deals with the visual sensory system and the optic nerve.

Section I on the visual sensory system is notable for the detailed anatomical descriptions of the visual system from the retinal photoreceptors to the cerebral cortex. The main joy to the reader is the inclusion of numerous electron microscopic pictures from the work of Dr Harry Quigley. The scanning electron micrographs of the vasculature of the optic disc and lamina cribrosa demonstrate better than any previous diagrams the intricacy and complexity of these structures. Axoplasmic transport is considered in some detail, and neuronal topography is realigned on the latest experimental evidence derived from the transport of radioactive aminoacids. A review of the recent work on receptive field patterns is appropriate in view of the recognition afforded this subject by the Nobel Committee in 1982.

These mini introductory chapters are concerned with embryology, followed by the anatomy and physiology of the retina extending backwards systematically to the striate cortex. This is followed by a review of the features that are important in the topical diagnosis of lesions of the chiasm, tracts, and radiations, and finally central disorders of visual integration are reviewed.

Section II is devoted to the optic nerve. The first chapter is on papilloedema, which includes fundus photographs, fluorescein angiograms, and the histological and electron microscopic appearances. An impressive bibliography includes 410 references for this chapter. This pattern is followed throughout the book, and because the author is a proponent of the differentiation between anterior and posterior optic nerve disease entities he tends to have numerous very short chapters. Indeed there are 11 chapters comprising only 100 pages concerned with anterior and retrobulbar optic neuropathies, anterior and retrobulbar ischaemic optic neuropathies, and compressive optic neuropathies with and without disc swelling. This complicated subdivision may not simplify the subject to the inexperienced neuro-ophthalmologist, and indeed one wonders whether the same neurone can be divided so precisely on clinical grounds alone. A terminological dichotomy has been produced between clinical features and histological localisation which time will inevitably resolve. The section on anterior ischaemic optic neuropathy is excellent, but one wonders why papillophlebitis is included in this section, and the further inclusion of 'central retinal artery occlusion as a special form of ischaemic optic neuropathy' needs logical justification. This is followed by a four-page chapter on retrobulbar ischaemic optic neuropathy. The clinical diagnosis is made infrequently and with great trepidation by most neuro-ophthalmologists, hence this chapter includes an assortment of various vasculitides, tumoural infarction, trauma, radiation, opticochiasmatic arachnoiditis, and amyloidosis.

This volume will continue as the main source of information for ophthalmologists and neurologists in the 1980s. It provides an immense and up-to-date bibliography, aided by an increased number of photographs and diagrams. Our congratulations and admiration should be extended to the author for performing this time-consuming task. However some sacrifices have been made, and the style is less readable and less critical, and the emphasis of the text is often orientated towards a new contribution rather than the critical appraisal of that contribution to the subject as a whole. It is a shame that glossy paper was not used to enhance the photographs, and it saddened this reader to find that the fundus photograph of early papilloedema in all its magnificence was exposed so irreverently on its side.

Despite these minor criticisms ophthalmologists, neurologists, and all libraries will be comforted to have this latest magnum opus on their shelves and await the ensuing volumes with anticipation.

M. D. SANDERS