

Book reviews

Atlas of the Peripheral Retina. By FRANK C BELL AND WILLIAM J STENSTROM. Pp. 232. £73.50. Saunders: London. 1983.

This book is an extensive atlas combined with the relevant text to describe most of the ocular conditions affecting the retinal periphery. There are chapters on basic anatomy, peripheral retinal appearances and degenerations, retinal detachments, benign and malignant tumours, infective and inflammatory retinal diseases, retinal vascular diseases (particularly diabetic retinopathy), the phakomatoses, and medical retinal diseases.

The production is to a very high standard; pictures of the retinal paintings are fairly diagrammatic. The authors have indicated that it is their intention to prepare a book for the general ophthalmologist. One wonders whether such a book is in fact useful to such a practitioner, or whether it would have been better to include in an atlas of this type the more common disorders, affecting primarily the posterior pole of the eye, particularly those that have a profound effect on vision (e.g., the macular degenerative group). The avoidance of purely central retinal lesions makes for an odd balance in the book. For example conditions mainly affecting the central retina, but which do have some peripheral extension, are included (e.g., diabetic retinopathy and angiod streaks). I felt that the chapters dealing with peripheral retinal degeneration and basic anatomy were particularly effective and those dealing, for example, with retinal detachments less so (it was surprising to see three diagrams dealing with giant retinal tears).

This book is extremely expensive and will not find a place on the bookshelf of the general ophthalmologist, for whom it is intended. However, residents in training with access to hospital libraries will find that it will be a useful addition, as a ready means of familiarising themselves with some of the fascinating complexities of the retinal periphery.

ANTHONY CHIGNELL

Bücherei des Augenarztes. Vol. 98. Pathophysiologie des Sehens. Edited by VOLKER HERZAU. Pp. 244. DM 58.00. Stuttgart. 1984.

This volume, the 98th in the series 'Bücherei des Augenarztes,' comprises a collection of 28 papers presented at the symposium on the pathophysiology of vision held at Tübingen in May 1983. The edited version contains some of the discussion also.

There are four sections dealing with the retina and optic nerve, supragenicular pathways, clinical electrophysiology, and binocular vision. The emphasis in most of these contributions is on experimental rather than clinical ophthalmology, and the book is therefore more likely to appeal to the research worker. The articles are in German but are provided with short summaries in English. With such a varied subject matter and authorship it is hard to single out any distinctive features of this volume, but the section on the retina and optic nerve covers a number of interesting pathophysiological topics which have clinical relevance.

T J FFYTCHÉ

Bücherei des Augenarztes. Vol 99. Theorie und Praxis der modernen Schielbehandlung. Eds. GERD MEYER-SCHWICKERATH AND KLAUS ULLERICH. Pp. 315. DM 76.00. Enke: Stuttgart. 1984.

The 99th volume in the series 'Bücherei des Augenarztes' is devoted to the subject of squints and is to be warmly recommended for postgraduate reading. The editors have commissioned 24 contributions from various authors on all aspects of ocular motility, including chapters on history, anatomy, physiology, diagnosis, investigation, and therapy. These blend together very satisfactorily to form a comprehensive book on the subject.

The book is well illustrated with diagrams and black-and-white photographs, and the references are extensive. All chapters are in German, but although each is provided with a short English summary the full impact of the book can be realised only by reading the text itself. For this reason this volume is unlikely to have a wide readership among ophthalmologists who do not understand German, and this is unfortunate in view of its excellence.

Once again this popular series of ophthalmic textbooks has produced a volume of very high standard, and the editors are to be congratulated. One looks forward eagerly to the next century of contributions.

T J FFYTCHÉ

Neurology and Neurobiology. Vol. 9. Development of Visual Pathways in Mammals. Eds. JONATHAN STONE, BOGDAN DREHER, DAVID H RAPAPORT. Pp. 489. £52.00. Alan R Liss: New York. 1984.

This is a collection of 31 papers given at a symposium on visual development held in Sydney in 1983. The papers cover a wide spectrum of topics representing the current research on visual pathway development, and although many of the results are already familiar the book provides a useful summary of the field.

The first section, entitled 'Development of the retina and optic nerve,' is concerned mainly with the development of retinal topography in the ganglion cell layer. The authors come to the interesting conclusion that the development of regional specialisation depends on differential growth and transformation of cell types rather than cell death and generation. In the second section, on the development of visual connections and neuronal structure, physiological and anatomical studies are described which show broad patterns of visual projections contracting during maturation to the specific differentiated patterns in the adult. The papers also deal with plasticity where the normal differentiation and contraction is modified—for example, by an unusual pattern of visual stimulation. Studies on the normal development of the lateral geniculate nucleus provide evidence for the differential rates of maturation of relay cells and the reduction of retinal synaptic contacts which occur during development. The third section, dealing with the reorganisation of visual pathways following damage or transplantation, describes both degeneration and reorganisation, showing the plasticity of visual pathways. The results of these studies show that the degree of compensation which will occur after damage to the pathway depends on the age at which the damage has occurred. The final section of the book deals with the environmental modifica-