

*Book reviews*

entering areas of controversy—for example, on arteriovenous anastomoses—while highlighting deficiencies in knowledge.

The text is complementary to the superb photographs and drawings of representative examples which the author has chosen from his examination of 150 human brains obtained within 12 hours of death. The carotid and vertebrae arteries were cannulated and injected with Indian ink and gelatine mixtures. The superficial brainstem vessels were dissected and examined using a stereo dissecting microscope. The courses of the larger internal vessels were followed in 0.5 cm slices after Spalteholz clearing in 10 brainstems with careful examination of the consistency of recorded methods of distinguishing between arteries and veins at this low level of magnification. The first part of the book dealing with the superficial vessels and the courses of the larger internal vessels, clearly shows the arterial and venous relationships of all the notable functional units in the brainstem, and will be of great value to anatomists, physiologists, pathologists, and clinicians.

The second part of the book deals exclusively with the capillary architecture as seen in 300 μm transverse, coronal, and sagittal sections. The injection technique has been sufficiently successful in many of the preparations to allow magnificent photographs to be presented at magnifications between 6 and 36. Although studies on the architecture at this level have been published many years ago for specific structures, there is probably no comparable series of illustrations of the capillary beds of the whole brainstem with clear delineation of the many named nuclear areas and tracts.

This is a very valuable work which anatomy departments will want to have and many will wish to consult. It will probably become a standard work of reference in the new period of interest in functional neuroanatomy.

DAVID DOYLE

**The Acute Facial Palsies** By Erlo Esslen. (Pp. 163; illustrated; DM 48, \$21.20.) Springer-Verlag: Berlin, Heidelberg, New York. 1977.

This monograph presents the author's cumulative experience of the clinical and electrophysiological aspects of facial

palsy acquired over the past 10 years. He describes his methods for assessing the degree of degeneration of nerve fibres in the facial nerve using an electrophysiological technique, and has established useful electrophysiological indices of both the degree of degeneration and the time at which it is usually complete. An important contribution to the concept of the pathophysiology of the facial palsies has been obtained from the author's co-operation with the otological surgeon by the examination and stimulation of the facial nerve during trans-temporal opening of the internal auditory canal. He has shown that the usual site of compression of the nerve is at the entrance to the Fallopian canal and not more distally as was previously believed. No doubt some of these findings will be regarded as controversial, but the evidence produced by the author seems quite conclusive. This, albeit rather short, book does not make light reading. It is a detailed treatise on facial nerve anatomy and physiology, and covers the subject very comprehensively. There is a useful two page summary of conclusions. This book will appeal particularly to the clinical electrophysiologist who has the problem of assessing and predicting the outcome of idiopathic facial palsies at an early stage. It can also be recommended to the clinical neurophysiologist in particular and the general conclusions should be known to clinical neurologists.

J. P. BALLANTYNE

**Neuro-ophthalmology** By Joel S. Glaser. (Pp. 364; illustrated; \$35.00, £26.25.) Harper and Row: Hagerstown, Maryland. 1978.

This new textbook from Miami reflects the evolution of neuro-ophthalmology as a diagnostic speciality in North America. It is part of a five volume series on Clinical Ophthalmology edited by Duane.

The first half of the book deals with methods of clinical diagnosis of lesions of the visual pathway and is comprehensive. Several of the tests described, such as the use of photostress to distinguish retinal lesions from optic nerve disease, will be unfamiliar to neurologists. The section on eye movement (Dell'Osso, Daroff, and Todd Troost) begins with an exposition in terms of systems analysis. A glossary is provided

for those who are unversed in the language of "open loop," "integrator leak," "step ramp," and "transfer function." Clinical disorders of eye movement are then described in detail. The last two chapters cover migraine (Todd Troost) and arteriovenous malformations (Todd Troost and Glaser).

The 364 pages are packed with text, illustrations of patients, visual field charts, fundus photographs, anatomical diagrams, radiographs, and copious references including many from the European literature. The production is of high quality and the text both authoritative and readable. Little is said about electrodiagnostic methods; fluorescein angiography is dismissed briefly; and the section on drugs in relation to vision is short. Treatment is not covered and, for example, the reader must look elsewhere for help in the management of ocular myasthenia. It is strange to find homely advice on the relief of ocular discomfort (p. 42).

The book is at its best when discussing the differential diagnosis of such problems as optic atrophy, drusen, and the relationship of pupil responses to visual function. It is weakest in dealing with cortical disorders of vision and the neurological aspect of several conditions. Overall it is a useful volume and is strongly recommended to the expert rather than the beginner.

BRYAN ASHWORTH

**Reviews of Neuroscience Volume 3**

Edited by Seymour Ehrenpreis and Irwin Kopin. (Pp. 238; illustrated; \$25.35.) Raven Press: New York. 1978. The need for neurobiologists to be kept up to date is currently met by reviews in monthly journals, by the publication of proceedings of conferences, and by collected essays or reviews. From these *Reviews in Neuroscience* stands out as being a well-produced and authoritative series, making a more lasting contribution to the subject than many other topical reviews.

The main theme of volume 3 concerns identification of neurotransmitters in the brain and their localisation within specific neurones. Thus, there is an excellent short review on the distribution of a number of representative neurotransmitters within the mammalian CNS. There are separate diagrams showing the various pathways, with concise discussion of the techniques used in