

Book reviews

helping all kinds of clinicians to diagnose and treat patients with sleep problems. The lectures are summarised in this booklet. Some of the speakers were recognised authorities on the subject, others perhaps could not politely be left out.

GA Schoenenberger summarises from a partisan vantage the state of play on delta-sleep-inducing-peptide. GA Groos usefully discusses the suprachiasmatic nucleus as a central pacemaker for the body's ubiquitous near-24 hour rhythms. J Schouten writes on the important topic of disturbed sleep in the elderly, on the roles of environmental disturbance, organic brain deterioration, depression, pain, dyspnoea and nocturia. He concludes that it is best to avoid sleeping pills and (my eyebrows going up) that: "Tying up patients worsens the restlessness as a rule" (my italics). A professor of anatomy, J Voogd, discusses the neuro-anatomy of sleep-waking regulation and I warned to him as he wrote: "Systems such as the monoaminergic connexions have received perhaps undue emphasis," but then he promised a new network of anatomical connexions from the advance of immuno-histochemistry.

Overall, it has to be said that the lectures are of a quality that is variable; the necessity of publication somewhat doubtful; and the English brave.

IAN OSWALD

Stereotactic and Functional Neurosurgery. Vol 9 of Advances in Stereoccephalotomy. Edited by PhL Gildenberg and J Siegfried. (Pp 554; SFr 155, DM 186, \$93.00 soft cover.) Basel: S Karger, 1982.

In this book there are approximately one hundred papers concerned with neural prosthesis and neurostimulation, involuntary movements and technical advances, many of which deal with the use of CT with stereotaxis. The use of prostheses for vision and hearing is still in its infancy, but is now becoming a practical possibility for certain cases of incontinence. There is little new about the management of movement disorder, spasticity and chronic pain, although there are a number of papers dealing with these topics. An interesting paper by Tasker and colleagues indicates the apparent contradiction that stimulation in the Vim (VL) and its neighbourhood, may either suppress or increase tremor and dystonia, an experience shared by others

working in this field. As other contributors agree, a surgical lesion in this nucleus, perhaps extending into the fields of Forel below, is the optimum site for the control of tremor. Chronic deep brain stimulation for the condition is an attractive alternative, but more complicated to perform than a simple lesion and perhaps less predictable in outcome. Location by electro-physiological means is desirable in view of the anatomical variability.

JOHN ANDREW

Histology and Histopathology of the Nervous System Vols 1 and 2. Edited by Webb Haymaker and Raymond D Adams. (Pp 2597; \$295.00 (2 vols).) Illinois: Charles C Thomas, 1982.

Books on the normal or diseased nervous system fall into three categories. In the first group we find books, usually with "basic", "essential" or "concise" in their titles, which give the illusion that all knowledge necessary to the understanding of the nervous system can be acquired during a long train journey. These are popular with students and with those who are in a hurry to pass an examination. The second category contains the classical textbooks, thumbed every day by professionals and placed near to the microscope to be within easy reach. The third group has an exclusive membership of thick tomes which attempt to embrace all aspects of the normal and morbid neural tissue. These are the books which make us realise how rewarding the study of the nervous system is. It is amongst this last group that this book belongs. The publishers claim of "monumental" work on the dust jacket is in this case true: it is a monumental book in both concept and scope. The statistics are nothing less than phenomenal: 37 authors, 2,597 pages, 1,800 illustrations and a price to match.

The book has its impeccable predecessor in Wilder Penfield's *Cytology and Cellular Pathology of the Nervous System* published in 1932: it was indeed Penfield who initiated the work and to whom the book is dedicated. Penfield's work gained impetus from the achievements of the classical German School of neuropathology which first defined many diseases of the nervous system and from the Spanish School of neurohistology which revealed, by the use of metallic impregnation techniques, the cellular complexity of the neural tissue. This

book reflects the progress of the last 50 years in the understanding of the structure and function of the normal and diseased nervous system and charts the developments made possible by technical innovations of electron microscopy, biochemistry, autoradiography, histochemistry and tissue culture.

The scope of the 25 chapters is comprehensive, covering most aspects of the nervous system in the best tradition of cellular and histological pathology. The description of the normal structure of a particular cell type, tissue element or brain area is followed by a full list of pathological conditions affecting them. Development and myelination of the central nervous system; neurons and neuroglia and their reactions; origins and reactions of microglial cells; meninges, choroid plexus and ependyma; normal and diseased blood vessels are all subjected to detailed study. Separate chapters are devoted to the blood-brain barrier, cerebral oedema and, somewhat surprisingly, to glycogen. The most substantial part of the book deals with diseases of the grey and white matter. Tumours receive a short, but masterly treatment. The more peripheral parts, including the autonomic nervous system, peripheral nerves, sensory end organs and muscles are also well represented; the chapter on the autonomic system is particularly illuminating.

It is a welcome change to see a chapter on the neglected circumventricular organs and a full and modern account on the pineal gland. The endocrine connection represented by an excellent chapter on the hypothalamo-hypophyseal system, while the adeno-hypophysis is dealt with somewhat summarily. The sensory organs of hearing, vision and olfaction, outposts of the nervous system and frequently ignored by neuropathology textbooks, are explored in separate chapters.

Even if the standard of various chapters is unavoidably uneven, the overall effect is that of a stimulating, modern and comprehensive book. To aid the reader visually, a wealth of illustrations has been provided: drawings, diagrams, light and electron micrographs, and macroscopic pictures have all been incorporated to good effect. Had the editors failed in their original intention to produce a worthwhile successor to Penfield's book, it would have been an honourable defeat, for their task was enormous. They have, however, conquered most difficulties and succeeded in giving us a book of outstanding value.

PL LANTOS