Book reviews

PERSPECTIVES IN NEUROPHARMACOLOGY: A tribute to Julius Axelrod Edited by S. H. Snyder. (Pp. 404; illustrated; £7.75.) Oxford University Press: London. 1972.

The concept of chemical transmission began with adrenergic nerves but the major triumphs of its first 50 years were with peripheral cholinergic nerves. In contrast, the most spectacular developments of the past 20 years have been in adrenergic and central transmission. To these, Julius Axelrod has made a unique contribution. This book, a personal tribute to him by former colleagues, comprises articles by these colleagues in the main on adrenergic transmission but extending beyond this to central transmission, and to clinical applications. The importance of the mechanisms described to neurology and psychiatry are self evident; they provide not only a practical appreciation of the mode of action of many drugs used in these specialties but also a speculative basis for the origin of neurological and psychiatric disturbance which may provide the springboard for further advances.

The fundamental nature of the autonomic and central control mechanisms described extends the clinical relevance of the book beyond neurology, neuropharmacology, and psychiatry, in all of which disciplines it should be obligatory reading—for example, to those whose interests lie in the cardiovascular system and the origin of hypertension or to endocrinologists interested in the mode of action of oral contraceptives in the hypothalamo-pituitary complex. To all of these, this book can be recommended as a compilation of articles not only authoritative and up-to-date, but also as a fascinating account of recent exciting developments in clinical science.

J. S. GILLESPIE

HANDBOOK OF SENSORY PHYSIOLOGY, Vol. 3: Enteroceptors Edited by E. Neil (Pp. 233; 91 figures; £9.45.) Springer: Berlin. 1972.

The present volume is part of the Springer *Handbook of Sensory Physiology* and, in six concise chapters, covers the enteroceptors. It provides a very satisfactory unified, comprehensive, and authoritative account of cardiovascular mechanoreceptors by Paintal, chemoreceptors by Neil and Howe, and airway and lung receptors by Widdicome and Fielding, in a manner which reduces to a minimum the confusion and controversy engendered by the technical

difficulties imposed by the small size and general inaccessibility of the afferent fibres and receptors. The histology and physiology of these receptor systems is covered fully, in particular, the situations that lead to excitation and discharge of afferent impulses, with only passing comments on the sensory consequences of activation of the receptors. Abdominal visceral receptors are reviewed by Leek with, because of their general theoretical interest, an extensive account of intramural receptors in the ruminant fore-stomach. The properties of the diverse mechanoreceptors and chemoreceptors in the stomach, intestine, and bladder are detailed, followed by an analysis of the reflexes to which they contribute. The sensory functions of abdominal visceral receptors are more conspicuous than those of the thoracic visceral receptors and accordingly there is a more extensive account of them.

The last two chapters deal with 'central enteroceptors' concerned in thermoregulation and with satiety, hunger, and thirst. Hellon gives an account of the 'central thermoreceptors' in thermoregulation. New results relating to the presence of 'temperature regulating systems' in the hypothalamus and spinal cord are presented, followed by a detailed account of the so-far limited information on unit responses to peripheral and central heating. The sensory responses to heating and cooling of the periphery are reported elsewhere in the *Handbook* series. Finally, the central enteroceptors in the hypothalamus that affect satiety, hunger, and thirst are reviewed by Andersson, followed by a stimulating account of the way in which these central regulatory mechanisms may function.

This book is produced with the usual meticulous attention to detail that characterizes Springer publications. It should be required reading for physicians, neurologists, and related disciplines who are interested in the clinical significance of the ways in which the central nervous system is informed about the viscera and regulates their activity, and particularly to research workers, and graduate students working in physiology and related disciplines.

A. IGGO

NEUROLOGIE By K. Poeck. (Pp. 572; 81 figures; DM. 48.) Springer: Berlin. 1972.

The imminence of the Common Market makes this text good reading as an indicator of the practice of

neurology, as taught at the Technical University of Aachen. Its inclusiveness follows a German tradition which goes back to Oppenheim at the start of the century, and makes this an unsuitable book for students. It would be an even better work for practitioners to consult if it had contained key references to the literature.

The book is stuffed with facts on anatomy, physiology, as well as clinical neurology and methods of investigation. The picture on the whole is reminiscent of practice in the United Kingdom, but there are divergences. In diagnosis it is said that Lhermitte's sign denotes inflammation of the meninges, the grasp reflex diffuse rather than frontal brain damage; no allowance is made for age in loss of vibration sense, sweating is given more emphasis than blood pressure in autonomic testing; contrast radiography is considered harmless, and angiography is apparently so accessible that it is used to diagnose 'brain death'; the dangerous rule of thumb is repeated that lumbar puncture is safe in the absence of papilloedema.

Time and improved communications should show whether Professor Poeck's discrepant treatment proves more successful: surgery at the end of the second week after subarachnoid haemorrhage, energetic barbiturate treatment in status epilepticus, stereotactic surgery on the subthalamic nucleus in Parkinsonism, prolonged bed rest in demyelination, and early mobilization and return to work after concussion. He deviates from British practice by not using corticosteroids in Bell's palsy and shingles, antibiotics in Sydenham's chorea, or surgery in syringomyelia.

It was surprising to read that Parkinsonism is a dominant genetic trait of low penetrance, that sphincter disturbances are anything but the exception in the Guillain-Barré syndrome, that hemifacial myokymia is typical of multiple sclerosis, and hemifacial spasm of angle tumours (calling for vertebral angiography).

The book closes with a useful chapter on neurological side-effects of drugs. Perhaps the next edition will include the contraceptive pill, in addition to the current information that urine from a case of belladonna poisoning in the eye of a rabbit causes the pupil to dilate.

E. H. JELLINEK

CLINICAL NEUROLOGY By Bernard J. Alpers and Elliott L. Mancall. 6th edn. (Pp. 1,072; illustrated; £12.50.) Blackwell: London. 1971.

This is a big book: 1,000 pages of text and 70 pages of index. The authors recommend it for students and general practitioners. It is about the right size for the

non-specialist who is keenly interested in neurology, and it provides a discursive analysis of all the common conditions and many rare disorders. It assumes little previous or practical knowledge. It is, however, much too cumbersome and prolix for the medical student. In the welter of information, the principles and mechanisms of normal and abnormal neurological function do not stand clear.

This is the sixth edition of *Clinical Neurology* and during its lifetime there have been many changes in attitude and practice. The revision of any book presents considerable problems and it would be churlish to dismiss it with some slighting remarks based on one or two details which do not reflect current thought. Some sections are particularly good—for example, the chapter on epilepsy—but in general it has an old-fashioned air. It provides conventional information about most neurological diseases and it would have been thoroughly acceptable five or 10 years ago.

It was not the authors' intention that this book should be a reference for the practising neurologist. Its size and style probably ensure its place in the American pattern of medical education, but for wide acceptance in Britain it has neither the brevity and clarity required by the student nor the comprehensiveness and detail which a neurologist might demand.

IVAN T. DRAPEA

NOTICES

INTERNATIONAL SOCIETY FOR PAEDIATRIC NEUROSURGERY The first scientific meeting of this newly formed Society will be held in conjunction with the World Federation of Neurosurgical Societies, Tokyo, Japan, 1973. Details from Dr. Satoshi Matsumoto, Kobe University, Chairman, Department of Neurosurgery, 12 Kusumoki-cho 7 Chome, Ikuta-ku, Kobe, Japan.

SIXTH SYMPOSIUM OF INTERNATIONAL SOCIETY FOR RESEARCH IN STEREOENCEPHALOTOMY 12, 13 October 1973, Keidanren-Hall, Otemachi, Tokyo, following Fifth International Congress of Neurological Surgeons, 7–12 October 1973, Tokyo. Programme will cover various topics in human stereoencephalotomy and related fields. Official language: English. Details from Professor H. Narabayashi, Neurology Department, Juntendo University, Bunkyo-ku, Tokyo, Japan.