Book reviews

Advances in Neurology vol. 15 **Neoplasia in the Central Nervous System**
Edited by R. A. Thompson and J. R. Green. (Pp. 382; illustrated; \$35.50.) Raven Press: New York. 1976.

This multi-author volume is based on the Proceedings of the Second Annual Barrow Neurological Institute Symposium held in Phoenix, USA between 23-25 January 1975. It is a well-presented and comprehensive book, and incorporates many excellent illustrations, figures and tables and a full bibliography.

There are 24 chapters, which include review articles on recent concepts in neuro-oncology and the viral and chemical induction of brain tumours, topics that are fundamental to the better understanding of neoplasia of the nervous system. Other contributors describe how advances in brain scanning and the advent of computerised axial tomography have assumed pre-eminence in the investigation of patients who have, or are suspected of having, brain tumours. Chapters on patient care, anaesthesia for intracranial surgery, and techniques using microsurgery for the exploration and removal of tumours growing in the pituitary fossa and base of the skull are also included. New developments in the fields of radiotherapy, immunotherapy, and chemotherapy are discussed and offer some hope in the treatment of malignant gliomas. There are also three chapters on the remote effects of tumour on the nervous system—the encephalopathies, neuropathies and neuromuscular disorders, all of which though authoritative, seem inappropriate in a book entitled neoplasia of the central nervous system.

In compiling this volume the editors have obtained a good balance between the laboratory and clinical aspects of the subject and in so doing have achieved their principal objective of updating the clinician's knowledge of recent developments in neuro-oncology. The book is, therefore, recommended to all those who are concerned in the management of patients with brain tumours.

D. I. GRAHAM

Clinical Neuropharmacology vol. 1
By Harold L. Klawans. (Pp. 225; illustrated; \$22.00.) Raven Press: New York. 1976.

This is the first of a series of volumes on neuropharmacology. It starts, courageously, with the pharmacology of schizophrenia and includes chapters on Gilles de la Tourette's syndrome (chronic multiple tic), on tardive dyskinesia and the use of physostigmine in neurology and psychiatry. On a less esoteric plane are the chapters on spasticity, increased intracranial pressure, migraine, and the use of anti-convulsants in the treatment of pain. For the reader seeking new solutions to old problems the book may not fulfil his hopes, for many chapters after reviewing the evidence do not point the reader in any particular direction. For the reader, however, who wishes for such a review, a detailed introduction to the literature and some pointers for future research, the book will prove valuable.

J. M. K. SPALDING

Brain Metabolism and Cerebral Disorders. Edited by H. E. Himwich. (Pp. 384; illustrated; price not stated.) Spectrum Publications: New York. 1976.

The publication in 1951 of Himwich's first edition of *Brain Metabolism and Cerebral Disorders* was a landmark in the development of neurochemistry. This second edition was completed just before his death and its publication is a posthumous tribute to one of the founders of the discipline. Himwich himself contributes six of the 12 chapters, including those on cerebral glucose and ketone metabolism, metabolic changes during growth, the effects of anoxia and hypoglycaemia, and autonomic function. Other contributors discuss human brain metabolism *in vivo* (Sacks), the blood-brain barrier (Oldendorf), the cerebral circulation (Baptista) and blood flow (Ingvar and Lassen). Cerebral metabolism and blood flow in disease (Meyer, Mathew, and Hartmann) and L-dopa and Parkinson's disease (Barbeau). The pace at

which neurochemistry advances makes it noticeable that the references cease after 1974. Inevitably, there are gaps in a volume of this size, notably the absence of amino acid neurotransmitters and acetylcholine metabolism, cerebral lipids, vitamins and trace metals and, surprisingly, the relevance of neurochemistry to psychiatric illness. Nevertheless, the chosen topics are reviewed authoritatively. Neurochemists will want this book in their library, but it will be of interest only to those clinicians whose special interests are encompassed.

C. D. MARSDEN

Advances in Sleep Research vol. 2
Edited by E. D. Weitzman. (Pp. 236; illustrated; £12.30.) Spectrum Publications: New York. 1976.

Here is the second in a proposed series and one that certainly reflects the world-wide pursuit of knowledge about sleep, in that over half its pages are by Japanese writers.

The chapters are individual essays about selected, specialist topics. One and Dement review the neurophysiology of respiration during sleep and describe studies of firing patterns of respiratory neurones. In sleep, fewer brain stem cells are active in driving respiration, while episodes of neuronal silence occur during REM sleep, and the authors link this with the clinical disorders of respiratory drive that are peculiar to sleep.

Muscle activity during sleep, tone, the role of afferent stimuli, and the nature of movements during sleep are reviewed in a useful chapter that struck me as revealing how little is really known about these matters, owing in part to problems of technique for making measurements—the present chapter should serve as a stimulus for more adequate research in the future.

Brain amines, pontogeniculo-occipital spikes, sleep deprivation in rats, alcohol withdrawal delirium in man, human electrodermal activity, and the detection of dreams in home surroundings come under scrutiny in chapters that are really individual project reports.

IAN OSWALD