Book reviews

Advances and Technical Standards in Neurosurgery Vol 2 By H. Krayenbühl. Pp. 217; illustrated; \$3.30.) Springer: Wein. 1975.

This is the second of a series of publications edited by a group of distinguished European neurosurgeons. The object of the series is an attempt to overcome the lack of any organised common European postgraduate training system for young neurosurgeons and to make use of the English language as a means of communication of scientific information between Europeans. The second volume, like the first, admirably fulfils these ambitions. The first section on 'Advances' considers in very adequate detail three important topics. Computerised axial tomography with the EMI-scanner is dealt with in a concise but comprehensive fashion by the group at the National Hospital, Queen Square, who have been associated with this technique from the start. Professor Samii of the University of Mainz gives a clear account of modern aspects of peripheral and cranial nerve surgery, and there is an excellent account of the treatment of traumatic cavernous fistulas from the Neurosurgical and Neuroradiological Department of Hôpital Lariboisière, Paris.

The Technical Standards section consists of three topics of frequent and continuing interest to neurosurgeons dealt with by experts. Yasargil, Fox, and Ray describe every aspect of the operative treatment of aneurysms of the anterior communicating artery; Valentine Logue deals with the difficult problems associated with parasagittal meningiomas; and Siegfried and Vosmansky describe the technique of controlled thermocoagulation of the trigeminal ganglion and of spinal roots.

All these specialties are dealt with excellently and this handsomely produced volume should find space in the libraries of neurosurgeons and neurosurgical departments everywhere.

JOHN HANKINSON

Surgical Pathology of the Nervous System and its Coverings By P. C. Burger and F. S. Vogel. (Pp. 623; illustrated; \$45.) Wiley: New York. 1976.

This new book is an account of the

many disease processes that affect the nervous system and which are encountered as a result of biopsy or excision. Lest some people misinterpret the title of the book, it probably should be emphasised that it is not intended to be a conventional textbook of neuropathology, or even of neurosurgical pathology, and therefore does not deal, for example, with the pathology of raised intracranial pressure, head injuries or cerebrovascular disease.

The nine chapters are organised anatomically and include individual chapters on the skull and related soft tissues, the spine and epidural space, the region of the sella turcica, and peripheral nerves. This anatomical approach means that diverse neoplastic and non-neoplastic lesions occurring in a particular region are dealt with together rather than widely separated, and the reader will find this approach very helpful when seeking information about some lesion in the skull, for example, or one occurring near the pituitary fossa or in the pineal region. But this approach also produces certain problems: thus there is some repetition—for example, meningioma appears in several chapters, while intracranial Schwannomas appear in the chapter dealing with peripheral nerves. These minor anomalies are, however, of no real consequence since the authors have produced a really excellent and informative book that will undoubtedly be a valuable source of information to clinicians, general pathologists and neuropathologists alike for many years to come. The illustrations throughout also attain a very high standard.

HUME ADAMS

Epilepsy after Non-Missile Head Injuries 2nd edn By Bryan Jennett. (Pp. 179; illustrated; £5.00.) Heinemann: London. 1975.

This is the second edition of a work which has become a classic in medico-legal work. That is not to say that it is any the less of basic scientific value in relation to the behaviour of the injured brain. This edition includes an increased number of cases from the Glasgow area, and the opportunity of confirming the general conclusions in relation to a

somewhat different population. The statistical analysis is very detailed but presented in a comprehensive and intelligible fashion so as to make the book an essential source of information where practical decisions have to be made. The problem of epilepsy following head injuries is fully defined with illuminating reference to the literature and previous views on the subject. This book is necessary reading, and an invaluable reference for all those interested in the treatment and prognosis of head injuries, which will include not only surgeons and those in training, but our colleagues in the legal profession.

JOHN HANKINSON

Vision and Circulation Edited by J. Stanley Cant. (Pp. 338; illustrated; £8.50.) Kimpton: London. 1976.

This volume commemorates the 3rd William Mackenzie Memorial Symposium held in Glasgow in July 1974. The opening section is devoted to the cerebral circulation with particular emphasis on the control of blood flow. This is followed by consideration of ocular blood flow and the study of experimental ocular ischaemia. The major clinical topics include manifestations of retinal and choroidal ischaemia and the important subject of retinal vein occlusion. The memorial lecture by Professor Anders Bill considers tissue fluid dynamics in the eye in relation to the circulation of both aqueous humor and blood.

This book is well produced with excellent printing and photographic reproduction, though it suffers from the omission of an index. Much of the work has been published elsewhere but readers will find this a manageable and informative book covering in breadth and depth a subject of major importance for all ophthalmologists.

MICHAEL SANDERS

Spina Bifida for the Clinician Edited by G. Brocklehurst. (Pp. 195; illustrated; £5.50.) Heinemann: London. 1976.

Assisted by Sharrand, Forrest, and Stark—orthopaedic surgeon, paediatric surgeon, and paediatric neurologist—

spectively—Gordon Brocklehurst, the Hull neurosurgeon, has produced a very lucid and succinctly topical account of aspects of hydrocephalus and spina bifida cystica, and some of the associated minor syndromes (diastematomyelia, myelodysplasia). The critical evaluation by Lorber of systematic and relatively unselected commitment to active surgical treatment of hydrocephalus and spina bifida cystica has allowed a more discriminating application of technical skill in these conditions, and this book provides a most valuable account of the management of the array of problems commonly found. The whole book is not, however, concerned with problems of management. The first five chapters are devoted to pathological and historical reviews, a clinico-pathological correlation, and an outline of the epidemiology of spina bifida. Wisely, the authors resist the temptation to be discursive about cerebrospinal fluid hydrodynamics, but the account of antenatal diagnosis by alpha-fetoprotein assay is rather too cursory for the many paediatricians who will find this book of special value, and for whom the prevention of open neural tube deformities has the highest appeal. Nevertheless, this monograph can be unhesitatingly recommended to all who are involved in the care of patients with major neural tube deformities.

JOHN WILSON

Pediatric Neurology Handbook 2nd edn. By J. T. Jabbour, D. A. Duenas, R. G. Gilmartin, and M. I. Gottlieb. (Pp. 521; illustrated; £9.50.) Kimpton: London. 1976.

The *Pediatric Neurology Handbook* is literally a small book to be carried in the hand rather than the exhaustive work normally associated with this title. Its aim is to present the information in a compact and immediately accessible form. With it, an instant opinion or line of treatment for most neurological disorders of childhood can be formulated. This is not the place to seek the well-reasoned argument or the different aspects of controversy.

Much of the data is presented in tabular form, enabling the reader to make a rapid check of facts and probabilities. There are more than 200 photographs but I found these disappointing in that they were little more than illustrations of points already

well made in the text. There is a proper concentration of detail upon the conditions which are virtually limited to childhood—for example, the genetic and metabolic disorders—and upon those conditions which although common in adults differ considerably when they occur in children. For instance, 45 pages are devoted to convulsive disorders, with analysis and guidance on the management of neonatal and febrile convulsions. Brief descriptions of the commonly used intelligence and psycholinguistic tests enable a clinician to appreciate the relevance of psychological reports. The assessment of neurological emergencies and the grading and management of coma are dealt with in an orthodox and thorough way. The detailed table of contents does not fully compensate for the absence of an index, but anyone who gets to know and who uses this book will find it to be a valuable and reliable standby.

I. T. DRAPER

Normal and Pathological Development of Energy Metabolism Edited by F. A. Hommes and C. J. van den Berg. (Pp. 246; £7.50.) Academic Press: London. 1975.

In October 1974 a symposium was held in the Netherlands on various aspects of energy metabolism in relation to normal and pathological development. The papers given at the meeting and relevant discussion is the subject of this book. Gross interference with energy supply is incompatible with life, so that quite subtle changes are to be expected in metabolic disorders. The inborn errors of metabolism provide good illustrations of non-lethal enzyme deficiencies and there are contributions on galactosaemia, the aminoacidurias, fructose intolerance and pyruvate dehydrogenase deficiency. Such errors have widespread effect as in methionine adenosyltransferase deficiency. The physiological significance and development of the transferase involves transmethylation reactions, biosynthesis of polyamines and enzyme regulation.

However, despite recognition of the biochemical pathways involved, knowledge of the pathogenetic mechanisms operating *in vivo* is scanty, particularly where they affect the developing brain. One critical aspect affecting brain development is the continuing need for energy. General aspects of fetal and

neonatal energy metabolism are described, especially in relationship to the role of mitochondria.

The fine control of glucose supply and utilisation of alternative substrates such as ketone bodies are of special relevance to the pathology of the developing brain. In addition, extracerebral regulation of glycogen metabolism and gluconeogenesis is of importance. These biochemical topics are well discussed, for example, in a chapter which includes a great deal of valuable data on systems relationships and the control of metabolic pathways in developing brain. Complementing this is an account of regulatory factors in glucose and ketone body utilisation in rodents' brain and the effects of hyperketonaemia in children. However, the problems of neonatal hypoglycaemia or hypoxia are not fully dealt with.

Other contributions relate to the main theme as in a chapter on metabolic spaces and heterogeneity in the developing brain or the article on changing pattern of brain mitochondrial substrate utilisation. It is of interest that crude mitochondrial fractions from adult rat brain can be separated into more than two subpopulations and their proportion of changes during development.

By present standards this is a reasonably priced book. It will be especially useful to research workers with a basic science rather than clinical bias.

A. N. DAVISON

VIIth International Congress of Neuropathology Edited by St. Kornyei, S. Tariska, and G. Gosztanyi. (Pp. 690; illustrated; \$116.75.) Excerpta Medica: Amsterdam. 1975.

Three main themes—inflammatory and immunological diseases, hereditary metabolic disorders, neuro-oncology—and a shorter section on hydrocephalus comprise this record of neuropathology in 1974. Over 130 contributions from all over the world provide the casual reader with ample scope from which to pick items of specific interest.

The pathologist's concern with histogenesis of tumours is tempered by concern for correlation with clinical behaviour and prognosis, as emphasised by an eminent neurosurgeon who comments on the relative lack of progress in this direction since Bailey and Cushing. By contrast, the increasing