produces cerebral vasoconstriction. The clinical results so far seem disappointing, although the possible value of combining this method with hypothermia was stressed by some surgeons.

This book is a great credit to our American colleagues and should be read by anyone interested in this type of research or in the treatment of cerebrovascular disease.

A. BARHAM CARTER


This diagnostic atlas of tumours involving the central nervous system contains over 160 illustrations based on the examination of 1,368 specimens between the years 1953 and 1962. Black and white is used exclusively and this often enables a higher degree of clarity to be reached than is possible with colour at comparable cost. However, some of the pictures are rather drab, and a few, especially in the sections on ependymomas and medulloblastomas, are not sufficiently sharp. One feels that more use could have been made of inserts to give a wider range of magnification as some pictures are unnecessarily large.

The classification of tumours used holds few surprises for Anglo-Saxon neuropathologists and in the main follows the well-known work of Zulch. Under 'spongioblastoma' there are several examples which in the United Kingdom would probably be labelled differently. The variable histology of the less typical forms of oligodendroglioma is well illustrated. There are helpful tables of differential diagnosis in the text and a thorough reference list.

W. H. MCENEMEY


Mr. Durham Smith has produced an attractive and readable account of modern knowledge of a common and serious congenital malformation which is currently arousing a good deal of interest and research.

Inevitably, some will think that he goes too far in his recommendations for what Ellison Nash has called the 'salvage' of these unfortunate children. Others will regard him as much too conservative. But his suggestions for when to operate and when to leave alone, and the priority as between repair of the spine and control of hydrocephalus are given in a balanced and humane way. Some have their own views on this matter and will adhere to them regardless; but those who follow Mr. Durham Smith will do little harm and much good.

There are a few points to criticize. A third of the text is devoted to observations on the function of the urinary bladder in congenital spinal palsy—Mr. Durham Smith's special interest—which is perhaps excessive; it is doubtful whether drainage of the sac of a myelomeningocele into the peritoneal cavity often (if ever) controls hydrocephalus for long; although the practical classification of degrees of paraplegia is admirable, the detailed neurological examination of spina bifida babies can yield more information than Mr. Durham Smith indicates. Perhaps more important, the social and psychological implications of survival with severe disability could be explored in greater depth in a book the title of which speaks of 'total care'. But these minor faults detract little from the value of a carefully written, well produced and illustrated monograph. Neurologists, neurosurgeons, and neuropathologists, as well as those interested in paediatric medicine and surgery, will all find much to stimulate their interest—and almost certainly at least one aspect of a difficult problem which they had not previously considered.


This book contains papers given at a meeting of the Society for Research into Hydrocephalus and Spina Bifida in 1965 at Groningen and provides a good survey of recent problems in surgical treatment by shunt procedures. A survey by Laurence showed that 16% of cases of spina bifida cystica and encephalocele survive without surgery. In Rickham and Mawdsley's Liverpool series of infants with early operation (within 24 hours of birth), at least 56% survived.

In 31 necropsied cases with ventriculo-atrial shunts, Erdohazi, Eckstein, and Crome found evidence of pulmonary embolization in no fewer than 17 instances and suggest that pulmonary hypertension may prove to be a late complication of this method of treatment.

The volume includes interesting post-mortem angiographic studies by Emery and Levick of the displacement of the basilar and posterior inferior cerebellar arteries in the Arnold-Chiari deformity and also a valuable embryological study of this condition by van Hoytema and van den Berg.

R. M. NORMAN


This is the sixth annual issue of this excellent series, in which neurophysiologists from all over the world, many of them people of international repute, have written general accounts of their own recent investigations. The printed articles are the substance of special lectures originally delivered to young scientists at the Sorbonne. They are compact, interesting and readable, and their authors, and the public, certainly owe a great deal to the editorial care of Professor Laget and Madame Monnier. Neurologists who wish to know how neurophysiologists choose subjects for investigation, and how they set about their work, could do worse than become regular subscribers to Actualités Neurophysiologiques.

Volume VI covers a wide range of topics, including (among others) ultrastructure of axon membranes, metabolism of nervous tissue, blood-brain barrier, properties of single brain cells, organization of neural circuits in spinal cord and thalamus, special senses (vision and taste), nature of the E.E.G., selective arousal from sleep, and, for good measure, a neurologist's view of the brain-mind problem in terms of 'coding' and a neurophysiologist's commentary on it.
A page from the document with text:


This volume consists of careful and readable translations of papers written by Santiago Ramón y Cajal at the turn of the century. These classic studies still contribute to current knowledge and research on the diencephalon.


This is a useful book for neurologists, but the consideration of ocular muscles and movements is excluded, as the author has considered them in another text. The pages are built round the writer's personal experience and yet over 1,600 references are listed. The chapters on retina, optic nerve and tract are particularly authoritative, while those on cerebral mechanisms and disease of the carotid arteries and other great vessels are not so impressive to the neurologist.


Presented in this volume are the papers given and the discussion which took place at the International Symposium of Neurological Research held in Buenos Aires in 1963 in conjunction with the 10th Latin American Congress of Neurosurgery.

The central preoccupation was with the neuroglia and outstanding among the contributions for conciseness and clarity was that of Polak on the morphology of these cells. Inevitably discussion of neuroglia led to a consideration of the many problems concerning the extracellular space. Electron microscopy seems to have narrowed the gap between the views of physiologists and morphologists on this subject. The suggestion that there may be two extracellular compartments, one in the periaventitia and communicating with the vascular bed, and a second which does not so communicate was interesting but the impression given is more of what we do not know rather than of what we know. Certain emphases were of value as guides to future work, namely, the importance of distinguishing between the various methods of inducing oedema, between protein-free and protein-rich oedema fluid, and between conditions in grey and white matter.

The book will be of value to those working in this field though the gap of two years between the symposium and publication must inevitably reduce this to some extent.


This account of the third symposium on research in muscular dystrophy, which was held in London in 1965, maintains the high standard of its predecessors. Much of the work is new, and although most contributions include some work already published elsewhere, it is extremely valuable to have this authoritatively reviewed and openly discussed. The Research Committee of the Muscular Dystrophy Group is to be congratulated on this volume which is in itself an important contribution to further research in this field. If the reviewer were to make any criticism, it would be that the discussions which followed individual papers are inadequately edited; in some places this detracts from their value.

R. W. GILLIATT


succinct and comprehensive summaries of a specialized subject for the benefit of readers working in related professions are notoriously difficult to achieve, if indeed ever to be attempted. Dr. Williams' handbook on diagnostic clinical testing is addressed to physicians, teachers, and social workers who will perhaps find its first section on intelligence most relevant to their work. It gives an lucid description of some of the most widely used tests, problems of standardization, scales of measurement, and the ubiquitous source of error.

The second section—which personality—reflects the lack of widely accepted theory or consistent practice in that diffuse field. It would possibly have been useful to mention here the Maudsley personality inventory, the Osgood semantic differential test, and the repertory grid technique, tests in current use in clinical research in Britain, at the expense of a rather lengthy account of the Rorschach mystique.

The sections of most scientific interest are those on 'Speech and language' and 'Memory and learning', both fields to which the author has contributed work, closing the gap between experimental procedure on the one hand and clinical experience on the other. Her own studies, relating the development of language to the stages of dysphasic breakdown and analysing some of the conditions required for successful learning and recall, are of particular interest.

It is the section on 'Perception and orientation' that illustrates the hazards of translating a technical subject into condensed, high-frequency prose. Readers, unfamiliar with experimental method and brain anatomy, will not be able to evaluate the data on localization of a lesion. The vexed subject of the so-called agnosias is unsuitable for a precis which does not refer to the specific prerequisite of such a diagnosis nor can the occurrence of right hemisphere lesions in left-handed persons be associated invariably with symptoms of dominant hemisphere dysfunction.

However, the book is short, well-printed and well-written. It could be used by extramural students of psychology who are prepared to qualify or extend its generalizations by appropriate technical reading.

INTRODUCTION TO PSYCHOLOGY by J. O. Whittaker. (Pp. xxiii + 631; illustrated. 52s. 6d.)

STUDENT'S WORKBOOK TO ACCOMPANY 'INTRODUCTION TO PSYCHOLOGY'. (Pp. viii + 224. 23s.)

ABNORMAL PSYCHOLOGY by E. Rosen and I. Gregory. (Pp. vi + 553; illustrated. 58s.)


These three volumes, the first two of which belong together, are obviously candidates for 'course-adopted'