Book reviews

Brain's Clinical Neurology Fifth edition Revised by Sir Roger Bannister (Pp. 509; illustrated; £10.00.) Oxford University Press: Oxford, 1978.

The author in his preface outlines his aim to preserve Lord Brain's original intention of producing a small book essentially for the nonspecialist giving the diagnosis and treatment of common neurological disorders. In this, the fifth edition in 18 years, the book has expanded and a large amount of Lord Brain's original material has been superseded but still familiar illustrations and pictures remain. The book has been enhanced by the addition of sections on the disconnection syndromes, drug-induced dyskinesias, visual evoked responses, as well as bringing other sections generally up-to-date. There is also a well-illustrated section on computerised axial tomography, showing common abnormalities. The traditional format of the book remains and serves as an excellent introduction to the understanding of the basic pathophysiology of diseases of the nervous system. There are several points, however, particularly on the therapeutic side, which will need attention in further editions if this book is to maintain its place among the valuable primers in neurology. The classification of epilepsy is out-of-date, and the section on management here does not give a balanced account of treatment, particularly with reference to the drugs now most commonly used. I was surprised also at the statement that "surgical reconstruction of atheromatous cerebral vessels represents one of the most striking advances of the past decade." I would also have liked to know which patients with transient ischaemic attacks the author would wish to investigate. This certainly is a question nonspecialists are constantly asking. There is no mention of antifibrotic drugs in the management of subarachnoid haemorrhage nor plasmapheresis in myasthenia gravis or pizotifen in migraine. The advice regarding the timing of the use of steroids in Bell's palsy is also debatable.

The value of this book is undisputed with regard to the basic principles of diagnosis and manifestations of nervous system disease. I trust that the therapeutic

side will improve in further editions to give the nonspecialist a good account not only of nervous diseases, but also of the treatment of the most common ones. The book remains, however, warmly recommended.

I. BONE

Recent Advances in Clinical Neurology

2 Edited by W. B. Matthews and Gilbert H. Glaser. (Pp. 199; illustrated; price not stated.) Churchill Livingstone: Edinburgh, London and New York, 1978.

The second of the new series of Recent Advances, presented as an Anglo-American venture with contributors from Great Britain, the United States, and Australia, is a microcosm of many of the most interesting ideas in contemporary neurological practice, bearing in mind that epilepsy, Parkinson's disease, and cerebrovascular disease were reviewed in the last volume. It is interesting to see that cerebral blood flow studies have not affected clinical practice to a significant extent, whereas EEG in its recent development of evoked potentials is back in the centre of the stage with two excellent chapters by Halliday and Rudge, the latter also including a valuable summary of vestibulo-ocular disorders. Rowland has written an excellent review of some of the advances in myasthenia gravis with appropriate reservations about the value of steroid and immunosuppressive treatment. Old problems reviewed in refreshingly new ways are adenohypophyseal tumours (Collins), migraine (Lance), aphasia and apraxia (Benson), all worth reading for their fresh insights as much as for new facts. Fishman discusses the pathophysiology of brain edema (chapters use British or American spelling according to source) with trenchant criticism of indiscriminate use of steroids, and Briggs gives a well-balanced survey of recent work on raised intracranial pressure with particular reference to normal pressure hydrocephalus. There is an excellent review of CAT scanning (du Boulay) organised according to the clinical problem. The editors give short but valuable reviews of trends in multiple

sclerosis and treatment of acute ischaemic stroke (Matthews), progressive dialysis encephalopathy, and brain death (Glaser).

This is a book to read from cover to cover and retain for reference. It is well produced and adequately illustrated. Even ultramicrograph and CAT scan prints are reasonably reproduced. Only the reference lists let it down. Some dates do not match the text reference and a magnum opus appears as the Handbook of Clinical Neurology—not a Freudian slip I hope.

J. A. SIMPSON

The Year Book of Neurology and Neurosurgery, 1978 Edited by Russell N. De Jong and Oscar Sugar. (Pp. 488; illustrated; price not stated.) Year Book Medical Publishers: Chicago and London, 1978.

This annual publication presents a literature review up to April 1978. It is prefaced by an innovative 60 questions for Clinicians, comprising a stimulating (and punishing) self-assessment course. As in previous years, the editors provide brief observations as footnotes to the abstracts, in some cases providing a helpful condensation of opinion, as well as data. The compressed presentation of the statistics, however, remains difficult to digest.

In the neurological introduction Russell De Jong selects for special mention Gadjusek's work on these degenerative diseases of the brain which may arise from slow virus multiplication; the diagnostic revolution brought about by the computerised tomographic technique; the improvement in the drug treatment of Parkinson's disease; and the contributions by geneticists and immunologists to the continuing riddle of multiple sclerosis.

Oscar Sugar in his editorial introduction expresses American neurosurgeons' concern about possible government intervention and direction in psychosurgery, describing "the threat to the doctor-patient relationship implicit in the Psychosurgical affair." He asks why patients with mental disease every bit as real as basal ganglion disease should not have the same surgical oppor-

tunities to improve while research on better techniques continues. His argument sounds reasonable and not over-reactive.

The following abstracts seemed to me to be worthy of special mention—the prognosis of hyperactivity in children and the prognosis of childhood seizures, the improvement brought about by chronic cerebellar stimulation in epilepsy but the doubts cast on the treatment on humanitarian grounds, the sensory symptoms in Parkinson's disease, the treatment of the tardive dyskinesias, an interesting review on excessive daytime sleepiness, neuro-psychological manifestations in divers, the myelopathy of Eales disease, a study of lesional topography in medullary infarction, the microsurgical treatment of hemifacial spasm, and a controversial and stimulating neuro-surgical look at various spinal conditions.

Not unexpectedly the neurosurgical section has many abstracts concerning the use of CAT scanning. There is the usual call for an "aggressive" diagnostic approach when the neurological status in stroke is rapidly changing. There is, however, consensus that angiography and carotid surgery should be avoided in acute severe stroke, in those with fixed neurological deficits, and in total carotid occlusion. Thus surgical enthusiasm in occlusive arterial disease remains; the assessment of the surgical results remains as difficult as ever.

IAN D. MELVILLE

Modern Pharmacology Toxicology Series Volume 11 Receptors in Pharmacology Edited by John R. Smythies and Ronald J. Bradley, Jr. (Pp. 516; illustrated; Sw fr 128.00.) Marcel Dekker: New York and Basel. 1978.

Drug receptors, once the sole province almost of the pharmacologist, were until recently known only indirectly through the nature of the drugs which interacted with them and the effect this had on the activity of the tissue. In recent years new and powerful biochemical and biophysical tools have provided a wealth of new information at the cellular and even molecular level. Some receptors, like enzymes, have been isolated and their molecular structure identified. Many of these drug receptors are the natural target for hormones and neurotransmitters, and their study has on occasions led to the

discovery of a whole new class of naturally occurring compounds as with the opiate receptor and the endorphins.

In such a rapidly developing field there is value in a book which provides a collection of reviews on receptors in which progress has been particularly rapid. Ideally such reviews should avoid concentration on any particular line of research (particularly the author's own) in favour of a broad definition of our present knowledge and an indication of the most important remaining problems. The chapters in this book, if unevenly, do serve this purpose. The authorship is mainly American but the coverage both in the opening chapter on general drug-receptor interaction and in subsequent chapters on the steroid, insulin, acetylcholine, β -adrenoceptors, opiate and brain amino-acid receptors, is international. Important remaining problems, such as the influence of the membrane lipid environment on the functions and properties of receptors and the mechanism of coupling receptor interaction with cell activity, are emphasised.

For a pharmacologist it is rather sad to note that of the 23 authors only two have as their address a department of pharmacology. On a brighter note the addresses of the remaining 21 in departments of cell biology, biochemistry, psychiatry, pathology, medicine, and neurosciences, illustrate the wide range of readers who will find much of value and of interest in this book.

J. S. GILLESPIE

Modern Pharmacology Toxicology Series Volume 12 Noncatecholic Phenylethylamines Edited by Aron D. Mosnaim and Marion E. Wolf. (Pp. 536; illustrated; Sw fr 135.) Marcel Dekker: New York and Basel. 1978.

This book consists mainly of research papers given at two scientific meetings in 1975 and 1976 with some additional material to update and improve the balance of the presentation. Phenylethylamine is well known to pharmacologists as a molecule possessing all the basic requirements for sympathomimetic action but is probably unfamiliar to clinicians for the very good reason that, until recently, it was not believed to occur naturally in the body. In recent years there has been increasing

recognition that the enzymes involved in the production of noradrenaline and adrenaline may, by acting on unusual substrates or by missing out some stage in the synthetic pathway, produce other biologically active amines. Dopamine, as a transmitter in its own right, is the most firmly established of such compounds, and now there is the possibility that octopamine and phenylethylamine may also be of importance, especially in pathological conditions. Phenylethylamine rather than noradrenaline is the amine formed from phenylalanine when the early synthetic steps of introducing hydroxyl groups to form first tyrosine, and then dopa, are omitted. These papers describe the laboratory evidence that the amine occurs normally in the brain and can be released by electrical stimulation, that its levels are altered by drugs known to alter mood such as antidepressants and tetrahydrocannabinol, and that both it and its precursor phenylalanine have powerful effects in animals. Some clinical papers describe the use of phenylalanine in the treatment of depression. For those with a specific interest in this area of research, either as neuropharmacologists or psychiatrists, the book would be a useful research reference. For the more general pharmacologist, psychologist, biochemist, or for clinicians involved in mental illness, the importance of the amine is still so speculative and the standard of the contributions to this collection so variable that it is doubtful if it could be recommended either as an appropriate time in the research or a suitably condensed and balanced assessment of the problem.

J. S. GILLESPIE

Muscle Disorders in Childhood By Victor Dubowitz. (Pp. 282; illustrated; £15.00.) W. B. Saunders: London. 1978. This book is aptly titled and is a comprehensive survey of muscular problems in childhood. The first of the 12 chapters is concerned with the clinical and laboratory diagnosis of muscular disease in infancy, and thereafter the muscular dystrophies and myopathies, diseases of the lower motor neurone, myasthenia gravis and inflammatory myopathies are presented. The commentary is rounded off by the four final chapters which cover the floppy infant syndrome, conditions with muscle con-