

Book reviews

Motor Neurone Disease Edited by F. Clifford Rose. (Pp. 147; illustrated; £7.00.) Pitman Medical Press: Tunbridge Wells. 1977.

It is now some five years since the last symposium on motor neurone disease at the Johns Hopkins Hospital. The present volume is a report on the proceedings of the latest symposium on this condition. The editor has produced a balanced presentation from clinical and epidemiological, pathological and electrophysiological disciplines. The 13 chapters are contained in 140 pages including the references so that each is a fairly short and, in all cases, readable review of a particular approach to the problem. The reader already familiar with the problems of motor neurone disease may find little new information in this book but it does summarise usefully the present state of knowledge of the condition. Some pointers for further research are outlined, the application of studies of axonal transport to motor neurone disease, and the question of slow viruses in the aetiology of the condition. I think, however, that the reader will be left with the impression that, despite the accumulation of much information on the disease, there is as yet little evidence that we are much nearer to an understanding of its aetiology.

This is a clear summary of the present state of knowledge of motor neurone disease and it should certainly be read by everyone who has an interest in that condition.

J. P. BALLANTYNE

Somatic and Visceral Sensory Mechanisms Edited by G. Gordon. (Pp. 182; illustrated; £4.50 in UK, £5.00 elsewhere.) Medical Department, The British Council: London. 1977.

The Medical Department of the British Council has a genius for recognising when a subject is ripe for review because of progress which may not be familiar to the busy practitioner. The planning committee for this number, Professor G. S. Bradley, Professor A. Iggo, and Dr T. P. S. Powell under the chairmanship of the Scientific Editor Dr Gordon, have produced a most interesting account of changing views

and new evidence on sensory mechanisms. Muscle afferent nerves are re-established for kinaesthesia whereas gate control (though still accepted in many aspects) is no longer the dominant theme for pain sensation. Corticofugal control of sensory input is stressed at all levels. Henry Head is recognised for his ideas and insights though his interpretations are not always valid. The exciting advance is the recognition of opioid peptides and morphine receptors. Described only three years ago, the explosion of research in this new field is already such as to require a summary. The possible therapeutic implications are enormous.

Some of the papers are, by reason of condensation, difficult to read, but all repay careful study. A few evenings spent in doing so will be a rewarding refresher course for neurologists.

J. A. SIMPSON

Pathology of Tumours of the Nervous System By D. S. Russell and L. J. Rubinstein. (Pp. 448; illustrated; £25.00.) Edward Arnold: London. 1977.

A new edition of Russell and Rubinstein—still in my opinion the best published account of tumours of the nervous system—is always welcome. There is inevitably a sensation of *déjà vu* while browsing in the new edition, but there are many subtle changes throughout; often only one or two sentences but they all provide some further relevant information. There are also some more obvious changes. Thus the section on the pathogenesis of tumours of the nervous system is considerably larger, and draws attention to the progress that has taken place in recent years in the field of experimental oncology. Some might have wished more detail in this section but the authors, correctly I think, have restricted themselves to a concise but lucid overview of the current situation, and all the important references are there. There are new illustrations; there are, where relevant, more electron micrographs and scanning electron micrographs: and observations on tissue culture are now incorporated in individual chapters. One of my complaints about the third edition was the absence

of any useful account of the so-called intracranial haemangiopericytoma but current views on the nature and existence of this tumour are now clearly presented.

There is little else one can say. The book remains excellent value, despite the increase in its price, and I suppose that the greatest compliment one can pay its distinguished authors is that the fourth edition is even better than the third.

J. HUME ADAMS

The Fine Structure of the Nervous System: The Neurons and Supporting Cells By A. Peters, S. L. Palay, and H. de F. Webster. (Pp. 406; illustrated; £25.25.) W. B. Saunders: Philadelphia, London, Toronto. 1976.

This is much more than a second edition of the work which became classic in its first form. The three authors put two years into the revision of their review of the subject and in so doing culling the advances up to 1976 produce this new and magnificently presented *nonpareil*. Advanced techniques of freeze fracturing and scanning electron microscopy, autoradiography and histochemistry are critically discussed from a strong platform of personal experience. Chapters on ependyma, choroid plexus, blood vessels, and peripheral nerve sheath have been included in the new text. About half of the photographs from the original, smaller volume have been retained. The 118 illustrations (with only four diagrams) are magnificent EM plates which define structure and relate it to accepted physiological facts in an economical but thorough text. Where functional relationships are not yet clarified, the authors express the problems with the support of about 1500 well chosen references contained in the final 50 pages.

The layout of the book is logical, beginning with the nerve cell body then its processes and the synapses within the central nervous system and beyond, including the neuromuscular synapses. The section on synapses can hardly be singled out as more valuable than others but the descriptions of the chemical interneuronal synapses will be