Book reviews

A Clinician's View of Neuromuscular Diseases By Michael H. Brooke. (Pp. 225; illustrated; \$18.95.) Williams and Wilkins: Baltimore. 1977.

In this well-written and readable book Dr Brooke has achieved a comprehensive clinical review of the whole spectrum of neuromuscular disorders. The tone and pace of the book are well set by the epithet to the first chapter on symptoms and signs—"Please listen to the patient, he's trying to tell you what disease he has," and by the opening sentence—"It often seems that the urgency with which physicians rush their patients off for laboratory studies has its historical equal only in the migration of lemmings. . . ." Individual chapters are devoted to systematic descriptions of disorders of the motor neurone, peripheral neuropathies, diseases of the neuromuscular junction, muscular dystrophies, myotonia, inflammatory myopathies, metabolic muscle diseases, abnormal muscle activity, and ending with "congenital (more or less)" muscle diseases.

The descriptions are concise but comprehensive and interspersed with clinical photographs and an occasional biopsy photomicrograph. The bibliography is intentionally selective and often recent rather than historical or original. This is a highly individual work which should find appeal with a wide audience of clinicians at all levels.

VICTOR DUBOWITZ

Treatment of Neuromuscular Diseases Advances in Neurology Volume 17 Edited by R. C. Griggs and R. T. Moxley. (Pp. 384; illustrated; \$31.20.) Raven Press: New York. 1977.

Not surprisingly, a book with this title has to be padded out with material which is not strictly "treatment." Indeed more than half of the chapters are on pathology, "research trends," metabolic, genetic, and EMG studies. Nevertheless, it is gratifying that there should be so much useful therapeutic information to report on a group of diseases still widely believed outside the cognoscenti to be untreatable. The introductory chapter by one of the editors is a succinct account of the scope of treatment. The

review of treatment for dermatomyositis and polymyositis is well balanced and justifiably reserved on the relative merits of immunosuppressive drugs and steroids. Professor Rowland and his colleagues consider that dermatomyositis and polymyositis should be regarded separately in clinical trials as their experience indicates significant differences. They advise initial use of prednisone but when "steroid resistance" occurs, immunosuppressive treatment is justified when the disease is incapacitating or life-threatening. The treatment of myasthenia gravis is largely confined to the use of steroids, with some conventional remarks on thymectomy. Plasmapheresis is not mentioned. There is an interesting chapter on disorders of glycogen and lipid metabolism with some preliminary observations on treatment, and the account of myotonic disorders and periodic paralyses is a useful summary.

The chapter on neuropathies properly concentrates on "treatable" types and is suitably reserved with regard to the role of corticosteroids. The chapter on amyotrophic lateral sclerosis is well balanced and gives a good account of ameliorative measures which are commonly neglected. There are rewarding sections on orthopaedic measures and on cardiorespiratory problems. Despite some flat spots (including an impossible diagram of the stretch reflex) the book is a worthwhile compendium.

J. A. SIMPSON

Dementia Second edition Edited by Charles E. Wells. (Pp. 284; illustrated; \$22.00.) F. A. Davis Company: Philadelphia. 1977.

The description of normal pressure hydrocephalus by R. D. Adams and S. Hakim in 1965 was a turning point in the attitude to dementia. That a biochemical disorder such as myxoedema or deficiency of vitamin B12 was reversible was reasonable, but that shunting of CSF from ventricles to theca in the absence of an abnormal pressure gradient could lead to rapid restoration of mental function seemed almost incredible. Even if the first flush of enthusiasm has subsided, the striking improvement in some patients means that careful assessment must be offered to every demented

patient. A non-invasive technique, computerised axial tomography, must be available more widely, even if isotope cisternography and infusion manometry are still required to confirm the diagnosis.

The first edition of this well-known monograph, only seven years ago, played a major role in alerting neurologists and psychiatrists to the changing situation for the demented patient. This second edition enlarges and updates topics previously covered but has some new chapters and new contributors. The emphasis is changing—vascular disease of the brain is being downgraded and viral infection considered more seriously with kuru and Creutzfeldt-Jakob disease as influential models, but biochemistry is marking time and immunology is not even indexed. Surely there will be changes in the third edition. The possible relationship of aluminium to Alzheimer's disease; neurotransmitter disorders which can be changed pharmacologically; drugs which influence memory, storage and recall; already tentative contributions are reaching the journals. Meanwhile this splendid book is a valuable guide in difficult territory which all must enter, because this is the neurology of the next decade.

J. A. SIMPSON

Interactions Between Putative Neurotransmitters in the Brain Edited by S. Garattini, J. F. Pujol, and R. Samanin. (Pp. 415; illustrated; \$33.00.) Raven Press: New York. 1978.

This book is a collection of papers presented at a Symposium at the Mario Negri Institute in Milan. In such publications the editors ask speakers to cover agreed topics but have little influence on the content. The resultant quality of such compilations is frequently very heterogeneous and this book is no exception.

The general subject covered here is complex and important: now that many neuronal pathways have been mapped and their neurotransmitters tentatively identified, some understanding of their interactions is vital to the neuroscientist. This is particularly so in view of the cascade of events (behavioural and biochemical) likely to result from

the use of one pharmacological agent, the specificity of which may be in doubt.

Some co-ordinating introductory or summarising chapter would have enhanced the appeal of the book. Many of the contributions are pharmacological and involved with pathway mapping in selected brain regions. The papers dealing specifically with neurotransmitter interactions are in the minority. Among valuable contributions to this are the chapters on interactions between pathways involving acetylcholine and catecholamines, and particularly the emphasis on a non-passive role for dendrites in neurotransmission. One small irritation is the contribution to jargon: terms such as "GABAergic" and "peptidergic" should be avoided.

Many of the chapters will prove of interest to neuropharmacologists rather than biochemists or physiologists, and I doubt if the book has much appeal for the clinician.

H. S. BACHELARD

Progress in Clinical Neurophysiology Volume 1—Attention, Voluntary Contraction and Event-Related Cerebral Potentials. Volume 2—Auditory Evoked Potentials in Man. Psychopharmacology Correlates of Evoked Potentials Edited by J. E. Desmedt. (Pp. 256 (vol. 1), 212 (vol. 2); illustrated; DM 98, \$37.75 per volume.) S. Karger: Basel, 1977.

With some notable exceptions, epilepsy and leucoencephalopathies, most neurologists and psychiatrists will admit to disappointment with the clinical application of electroencephalography, and many have advocated closer study of stimulus-response relationships of the EEG. It is, accordingly, frustrating to the many clinical neurologists active in this field that the major advances of the last decade are largely unfamiliar to the clinicians apart from the recent acceptance of latency prolongation of visual evoked potentials in the diagnosis of retrobulbar neuritis. The impossibility of keeping abreast with the literature during its formative years is certainly a reason for this paradox, though the bibliography of the books noticed here makes it clear that most of the useful papers have appeared in *Electroencephalography and Clinical Neurophysiology*. (They are rarely offered to this Journal though we would welcome a

state-of-the-art review for clinicians.) Clearly the time has come to review the event-related potentials of the brain. Professor Desmedt of Brussels is to be congratulated for undertaking the difficult task of editing a series under the general title of *Progress in Clinical Neurophysiology*, and the first two volumes augur well for its future. Volume 1 is concerned with the neurophysiological mechanisms underlying selective attention, slow potential shifts in the brain, and the cerebral potentials associated with voluntary movements. The chapters are, by and large, contributions of personal studies rather than the reviews anticipated. They are all worth reading but give the impression of expanded symposium proceedings, and one is left in some doubt regarding the borderline between accepted fact and speculation. Editorial policy seems tentative—for instance, the useful introductory chapter on publication criteria is regularly flouted in later chapters, and a footnote on the first page of volume 2 (use of "potential" and "response") is ignored three pages later and in subsequent chapters. Nevertheless, volume 2 gives a better impression of planned contributions. The studies on auditory evoked potentials are already accepted as clinically relevant, and the later chapters on psychopharmacology offer great hope for the future.

These books are difficult to read seriatim, and yet are not quite systematic enough to use for occasional reference. Nevertheless, they are welcome as a survey of new thinking in a branch of clinical neurophysiology which had become static. We must look forward eagerly to the seven volumes which are to follow. Perhaps at an early stage we could have a glossary of the many unfamiliar abbreviations.

J. A. SIMPSON

The Peripheral Nerve Edited by D. N. Landon. (Pp. 836; illustrated; £25.00.) Chapman and Hall: London, 1976.

The aim of this volume is to collate and systematise present knowledge of structure and function, development and pathology, recent research and technical innovations in the mammalian peripheral nervous system. More than half the book is devoted to a detailed consideration of the macro, micro, and intracellular structure of the peripheral motor and sensory nerve fibres and

autonomic ganglia, their processes and integuments. Successive chapters deal with myelinated axons, unmyelinated axons, sensory ganglia, the perineurium and connected tissue of peripheral nerve, the functional anatomy of the anterior horn cells, spinal and cranial nerve roots, and autonomic nervous system. The peripheral terminations of sensory and motor factors are discussed in two separate chapters. In view of the interest in the functional anatomy of the motor nerve terminals, two separate chapters are devoted to the structure and function of the endplates. All this is contained in the first 500 pages of the book, and the remaining 300 pages are devoted to presentation of the chemistry of myelin, the histochemistry of peripheral nerve terminals, and a penultimate chapter on the pathophysiology of the peripheral nervous system. The final 70 pages present a critical analysis of the electrophysiological properties of peripheral nerves with particular reference to the mechanisms of generation and propagation of the action potential.

Each chapter in this book is a concise and compact review of present knowledge and can certainly be usefully used as a reference book of peripheral nerve anatomy in particular. It is well illustrated, the illustrations and photographic reproductions being of very high quality. This book will be particularly useful to the postgraduate student researching the peripheral nervous system but no less so to the established worker in the field as a reference volume. It can be thoroughly recommended.

J. P. BALLANTYNE

Immunosuppressive Treatment of Multiple Sclerosis Edited by H. Delmotte, O. R. Hommes, and M. Gonsette. (Pp. 224; illustrated; price not stated.) European Press: Gent, Belgium, 1977.

Multiple sclerosis is a disease of which the aetiology is unknown but there is some circumstantial evidence to suggest that it may have an immunopathological basis. There has now appeared a large number of very poorly carried out clinical trials of immunosuppressive treatment in multiple sclerosis. The duration of such trials, the selection of patients, the absence of adequate and proper controls, and the methods