

Book reviews

Recent Advances in Clinical Neurology Vol. 3. Edited by WB Matthews and GH Glaser. Pp 254; £11.00. Edinburgh; Churchill Livingstone, 1982.

Under the expert editorship of Matthews and Glaser, the third edition of *Recent Advances in Clinical Neurology* contains a stimulating pot-pourri of twelve essays. Matthews up-dates his review of spongiform virus encephalopathy, and critically discusses the treatment of Bell's palsy. Glaser writes about epilepsy, concentrating upon valproic acid, the role of the menstrual cycle, and the prognosis and surgical treatment of temporal lobe epilepsy. The thorny perennial problem of the management of transient ischaemic attacks is tackled by Warlow, who is critical of most of the evidence on which current therapy is based. Collins and Chehrizi contrast the striking difference in approach to the surgical management of spinal cord trauma in the United Kingdom as against the United States, but provide no solid evidence to choose between Stoke-Mandeville conservatism and North American aggression. Bowen and Davidson review their extensive studies on the neurochemistry of ageing and senile dementia, but whether the changes in neurotransmitters found in the Alzheimer brain are the cause or the consequence of the disease remains unanswered. Wisniewski and his colleagues contribute a long dissertation on immunological and experimental aspects of multiple sclerosis. Their theme is the similarity of the human disease to immunologically-induced relapsing experimental allergic encephalomyelitis in guinea pigs which, they conclude, is a valid model of multiple sclerosis. Barbeau, fresh from Parkinson's disease and levodopa, turns his attention, and that of a formidable body of colleagues as well as the Canadian Journal of Neurological Sciences, to the problem of Friedreich's ataxia. Much complex biochemistry, which has led to great dispute, is discussed but no definite conclusion as to the basic chemical abnormality in the disease is reached. Therapy with choline or lecithin remains unproven, while treatment with precursors of glutamate or aspartate is speculative. Downie discusses the clinical features of peripheral nerve compression syndromes, concentrating upon the less common entrapment neuropathies. Nathan, in a chapter on pain, focuses upon

the contemporary problems of the function of the substantia gelatinosa, endorphins, acupuncture, the sympathetic nervous system, and surgical or electrical methods of treatment of pain. Tonsgard and Huttenlocher discuss two topics of particular importance to paediatric neurology, namely Reye's syndrome and Sturge-Weber disease. Finally, Morgan-Hughes contributes an exceptional review of the currently exciting field of defects in the energy pathways of skeletal muscle, which increasingly also are being found to involve the central nervous system. In summary, a delightful volume to pick at in the coming year.

CD MARSDEN

Mitochondria and Muscular Diseases. Edited by HFM Busch, FGI Jennekens, and HR Scholte. (Pp 223; Dfl 75.40, \$37.50, £15.00.) Netherlands; Mefar bv, 1981.

This book reports the proceedings of the 25th meeting of the Belgian-Dutch Study Group on Neuromuscular Diseases held in Rotterdam, December 1980. It is divided into four sections. The first deals with the functional role of muscle mitochondria and contains sufficient basic biochemistry to accommodate those new to the field. Section two expands on the first section, providing experimental data on muscle mitochondria and in particular AJ Meijer gives an excellent account of the various mitochondrial transport processes. The role of calcium uptake and release by mitochondria in the pathogenesis of muscle disease is also well discussed (AM Stadhouders). The third section delineates the known sites of mitochondrial dysfunction and the numerous ultrastructural changes seen in muscle disease. The last section highlights the clinical manifestations of various deficient or defective mitochondrial processes and is sadly the least well presented section, since this is surely the most exciting aspect of the book. Only one paper studies the biochemical characteristics of isolated muscle mitochondria, the remainder present either structural or muscle homogenate data and draw rather tenuous conclusions from such limited data. In spite of this however, the book is well worth purchasing and represents a useful contribution to this interesting area of muscle disease.

DJ HAYES, JB CLARK

Animal Models of Neurological Disease. Edited by F Clifford Rose and PO Behan. (Pp 465; £30.00.) Tunbridge Wells; Pitman Medical Ltd, 1981.

The understanding of neurological disease in man has greatly benefited from the use of a wide range of behavioural and biochemical animal models of these disorders. The volume edited by Drs Clifford Rose and Behan is a compendium of such animal models utilised to study a whole variety of neurological disorders. The book is the proceedings of a meeting held in Cambridge in 1979. It contains some 36 chapters dealing with neurological disease from muscle disease to peripheral nerve lesions to demyelination and regeneration through paroxysmal disorders, neuro-ophthalmology to movement disorders, lesions of the central nervous system, slow encephalopathy, brain tumours, metabolic disorders and cerebellar vascular disorders. The quality of the chapters varies enormously as does their length. Some are so brief as to be hardly worthy of inclusion whereas others such as those by Outram and by Bradley and Wells are comprehensive contributions to the understanding of their topics. Perhaps the greatest deficit of the volume lies in an attempt to be all embracing. Thus, it is impossible within a single volume to deal comprehensively with animal models of all neurological disorders. For example, in the section on movement disorders the two chapters dealing with extrapyramidal disease are hardly able to scratch the surface of the underlying currents of research. However, overall the volume is a comprehensive reference volume which will be of use to those working in the neurological research area. It is unlikely to be a book bought by individual readers since it spans so many different areas of interest that there are unlikely to be many individuals with such a wide interest. However, a worthy addition to any departmental or institute library.

PG JENNER

The Biochemistry of Psychiatric Disturbances. Edited by G Curzon. (Pp 132; £13.00.) Chichester, John Wiley & Sons, 1980.

The difficulty in producing books concerned with research topics of high current interest is that these fields are often so rapidly expanding that when published the volume does not reflect current thinking.