

changes may increase disability. The standard of chapters is high except for a somewhat weak contribution on scoliosis (Dickson) which refers, for example, to "the optic organ" and "the equilibrium centre of the midbrain".

There are two useful clinically orientated chapters on orthopaedic and orthotic correction of deformity (Swash) and management of Duchenne dystrophy (Miller). Jones and Edwards discuss the mechanisms of muscle fatigue. Quantitative assessment of muscle strength (Henriksson) is clearly important if treatment strategies are to be properly assessed. Kakulas's myopathy in the Rottneest Island quokka is appealing (for at least two reasons) but begs the question as to what prevents normal regeneration in dystrophic myopathies.

There are contributions on gene mapping in muscular dystrophy (Harper) and on trophic factors and motor neuron and synaptic development (Appel, Vrbova). Several chapters are concerned with plasticity of motor neurons and the muscle fibres which they supply (Stalberg, Vrbova, Pette, Gordon).

This volume contains a great deal of interesting and original material and will appeal to those with an interest in neurophysiology, neurobiology and neurological rehabilitation although perhaps less so to the general clinical neurologist. It is well produced but expensive.

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Recent Advances in Neuropathology—3. Edited by JB Cavanagh. (Pp 167; £30.00.) Edinburgh: Churchill Livingstone, 1986.

As is usual in this type of publication, the topics are heterogeneous, their selection depending very much on the editor as well as on the fashion of the time. However, it has to be said that whatever the quality of the various chapters, not all of them are in the forefront of today's neuropathology.

Chapter 1 (by Mirsky and Jessen) deals with glial cell lineage in brain and peripheral nerves and reviews the progress made in recent years in the knowledge and significance of these components of the nervous system. The second chapter (by Coakham and Brownell) gives a clear account of the use of monoclonal antibodies in histological and cytological diagnosis of brain tumours. The authors give the reader useful information about the value of this type of test when applied to "solid" tumours or in the examination of tumour cells in the CSF; they also warn us against over opti-

mism when tackling difficult problems and indicate, with the help of case reports, the pitfalls which make immunohistochemical methods not infallible.

In Chapter 3 Bullard and Bigner lead us to the difficult subject of the relationship between glioma and host resistance by steps in which they describe briefly, but clearly, the principles of immune mechanisms and the interactions between host and tumours. Various biochemical and pathological findings in glioma patients are presented and discussed. One feels disappointed that such a wealth of data has not produced the therapeutic results hoped for.

A detailed classification of pituitary tumours is obtainable by combined light and electron microscopic and cytochemical studies and this is the subject of the fourth chapter by Horvath and Kovacs. One need only compare this with previous classifications to realise the progress made in this field in recent years.

The highly controversial subject, the pathogenesis of diabetic neuropathy, is dealt with in chapter 5 by Dyck, Karnes and Lais. The authors do not seem to have any doubt that ischaemia is the cause. However, fig 5.8 is not the ideal one to show abnormal capillaries: the number of endothelial cell nuclei is indeed increased in the diabetic vessel, but the basal lamina, which is said to be thickened around it, does not differ from that seen around the control capillary. The less well informed readers might believe that ischaemia is the only factor operating in diabetic neuropathy and that there need be no further discussion on the subject, which is not the case.

In Chapter 6 (by Griffiths and Duncan) the illustrations are excellent, but the style is odd in places. The chapter describes how much domestic animals (dogs, horses etc) have contributed to a better understanding of peripheral neuropathies, in spite of the relatively large size and small number of affected animals available for study factors which prevent a more detailed examination of these cases.

The final chapter (by Palmer) brings us back to traditional neuropathology. The subject of decompression sickness is well presented, the classical findings are reviewed and compared with more recent results of experimental work and conclusions are put forward about its pathogenesis.

I found all the chapters clear and enjoyable to read, and the illustrations excellent, all of which make the book useful and well worth buying. Minor points: the errors are few; the references are numerous and up to date; a few of them however are to submit-

ted papers or PhD theses. Since review chapters are intended to be a source of reference, papers not yet accepted or theses of limited accessibility are not good references.

F SCARAVILLI

Principles and Methods for the Assessment of Neurotoxicity Associated with Exposure to Chemicals. (*Environmental Health Criteria No 60.*) (Pp 180; (English & French) \$8.00.) Geneva: World Health Organisation, 1986.

This document, published by WHO, is the result of discussions by an international group of neurotoxicologists with interests across the spectrum of relevant disciplines. Its function purports to be to provide guidelines for the study of the effects of chemicals on the nervous system and to attempt some international unification of methods. There is more discussion of principles than methods, with many pages devoted to the complexities of neurobehavioural testing. The balance of the book is surprising, 27 and 30 pages devoted to behaviour and morphology; 11 and 16 to neurophysiology and biochemistry. Only 3 pages are devoted to neurophysiology of the peripheral nervous system and no modern methods of assessment are mentioned, nor is there any mention of currently used techniques for assessing the autonomic system. Although dialysis encephalopathy is known to be due to the aluminium content of the dialysis fluid, in this book it is attributed to phosphate binding gels, an idea suggested and discarded nearly 10 years ago. There are some useful practical suggestions in the morphology section, although again there are attempts to cover too many broad principles for a volume this size. The concise section on statistics, with its timely warnings to many workers in this field, is good.

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Notice

The VIIth Symposium on Intracranial Pressure and Brain Injury

19–23 June 1988 in Ann Arbor, Michigan, USA. Information may be obtained from JT Hoff MD, Section of Neurosurgery, University of Michigan Hospitals, 1500 E. Medical Center Drive, Ann Arbor, Michigan 48109-0338, USA.