In addition, it attempts to supply more general information about head injury and its sequelae, and as such, it is rather less satisfactory; the chapter on "Long Term Recovery" is particularly unsatisfactory, with an apparently rather arbitrary selection of topics. However, having said this, the rest of the book which deals with the specifics of educational rehabilitation is very interesting indeed, and contains a wealth of valuable information for those concerned with paediatric rehabilitation. The authors are clearly extremely experienced, and in the sections which draw heavily upon their experience (preparing for return to school, behaviour management in the classroom, assessment of needs and deficits, etc.), they are particularly impressive. A number of their prejudices are shared by the reviewer; for example, the fact that variability is the rule after head injury, and this necessitates creative and individual solutions for individual patients. Furthermore, they respect the importance of pre morbid factors in the head injury population, acknowledging that many of their patients had suffered academic or behavioural problems even before the injury, and they rightly point out that to expect a patient to be made better than he was before the injury is a recipe for rehabilitation disaster.

In summary, this book is somewhat of a curate's egg, but it does contain a wealth of valuable practical information based on the experience of two skilled practitioners of Paediatric Rehabilitation. The price is a little steep at £14 for 152 pages, but anyone concerned with the rehabilitation of the younger patient should buy a copy of this book.

NEIL BROOKS

Pain, The Journal of the International Association for the Study of Pain, Supplement 3, 1986. Edited by Harold Merskey. (Pp 222; Dfl 645 p.a. exc. postage.) Amsterdam: Elsevier Biomedical, 1986.

This third *Supplement* to the journal *Pain* comprises a classification and description of pain syndromes and a glossary of definitions of pain terms. Whether the exercise, which involved numerous collaborators from various disciplines, is valuable or not will depend on whether doctors actually consult the *Supplement* to classify and thereby clarify their patient's illnesses and whether it furthers research by delineation of pain states and presumably therefore the underlying mechanism.

The volume bears some resemblance to a

cook-book, which might be consulted for a particular recipe: more or less every page is devoted to a particular condition which in telegraphic style is then defined and its site stated; the body system (musculoskeletal, nervous, etc.) is then specified, and the main features, associated symptoms, signs, laboratory findings, usual course, complications, social and physical disability, pathology, summary of essential features and diagnostic criteria, and differential diagnosis usually follow. The final item apart from some references in certain instances is a code number, derived from a coding system that is set out at the beginning of the *Supplement*.

The trouble with classification is that it is necessarily an exercise in achieving precision in an imprecise world. An imprecise or faulty classification is worse than no classification, and this is where I think the book fails. For example, *causalgia* is defined on page S218 as "a syndrome of sustained burning pain, allodynia, and hyperpathia after a traumatic nerve lesion ...", and on page S28 as occurring after "partial injury of a nerve or one of its major branches". Can *causalgia* occur after complete nerve lesions? On the same page, the essential features of the condition include "cutaneous hypersensitivity with signs of sympathetic hyperactivity ...". In the section on frostbite, when traumatic nerve injury is absent, it is stated "persistent pain and hyperhydrosis following frostbite may simulate *causalgia*". What does all this mean, and in particular, does it matter? Again on page S117, *acrocyanosis* is specifically stated to be painless; on page S118, it is a state "sometimes with aching pain" (and if not, why is it in this book?). These issues might be considered nit-picking, but surely a book devoted to classification is meant to clarify such issues?

It is unsatisfactory to see so much inconsistency. For instance, whilst various drug and dental procedures are included in the sections on different dental conditions, methods of relief are not even discussed in the section on trigeminal neuralgia. Neurologists will also be surprised to see no mention of multiple sclerosis as a cause of secondary trigeminal neuralgia, whereas some less common structural causes are referred to. Another irritation is the arbitrary use of one or two references for some conditions, and the choice of references is itself idiosyncratic: sometimes references (without even pagination) to major textbooks are given which seems pointless, and it is inappropriate to cite conflicting references, for example concerning the frequency of lateralisation of limb pain of psychological origin.

Much of medicine is paraded here, ranging from hereditary coproporphyria to oesophagitis, from chronic venous insufficiency to chemical irritation of the brachial plexus. Omissions however are also evident: better to omit the excessively rare painful arms and moving toes described in 1985 than to omit osteoid osteoma which is commoner and curable; better to omit tuberculosis of the larynx than glaucoma; better to include a section on multiple sclerosis than that on syringomyelia and reserve a passing mention for the latter rather than the former.

Classification can easily become an end-less exercise of doubtful value; this volume despite its five pages of introduction and justification has not convinced me otherwise.

GD SCHOTT

Progressive Neuromuscular Diseases. (Recent Achievements in Restorative Neurology Vol 2). Edited by MR Dimitrijevic, BA Kakulas, Gerta Vrbova. (Pp 360; \$155.00.) Basel: S Karger, 1986.

The first volume in this series was devoted to restorative neurology of upper motor neuron dysfunctions. The present volume of 27 chapters is the outcome of a symposium held in Houston in 1984. The distinguished authors come from a wide range of disciplines, mainly clinical neurology, neurophysiology and neurobiology. The dominant theme is that, through a greater understanding of normal and pathological physiology, it should be possible to reduce the disability and retard the progression of many progressive neuromuscular diseases. As with most symposium proceedings, the contents of this volume are unevenly balanced, reflecting the contributors interests rather than any unified approach to this problem.

Parents who play football with children will suspect that children's muscles are more fatigue-resistant than those of adults. Dubowitz and colleagues show this, although the very wide range of response in their normal controls leads me to worry slightly about their methods. There are several studies on the analysis of gait, posture and motor unit activity (Dimitrijevic, Dietz, Gregoric, Larsson, Grimley), mainly in normal subjects and in Duchenne dystrophy. The emphasis is on consideration of the integrative function of the nervous system and the concept that secondary, compensatory,

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 Rottne 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.

BRF LECKY

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, 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.

PM LE QUESNE

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.