Book reviews

Applied Techniques in Behavioral Medicine. Edited by Charles J Golden, Sandra S Alcapanas, Fred D Strider, Benjamin Graber. (Pp 454; \$29.50.) New York: Grune and Stratton, 1981.

This book devoted to behavioural medicine presents a potpourri of theory and practice of this rapidly expanding subject. Although the boundaries of this discipline are not defined it essentially examines the interface between medicine and psychology, in particular attempting to understand the relationship between stress and medical disorders, the complex issues of psychosomatic disorders, and the mainly non-pharmacological treatments used in practice based on principles which have evolved from learning theories. Readers of this journal will perhaps not derive benefit from many of the chapters, although those on assessment and treatment of brain-damaged individuals, back pain, and the temporo-mandibular joint syndrome (renamed the myofascial pain dysfunction syndrome) will provide information of interest. Some 20% of the volume is related to childhood disorders, and this may encourage the purchase of the book by those interested in management of psychosomatic disorders in children, but who are reluctant to embark on conventional medical treatments.

Other subjects covered include coronary heart disease and type A behaviour, the theory and practice of sex therapy, psychological aspects of diabetes, weight disorders and rehabilitation of patients with chronic pulmonary disease. A chapter on psychotherapy provides yet another personal view of the subject and is devoid of references or studies and scattered with the usual case histories to demonstrate principles. The psychotherapies described, with the exception of hypnosis and behavioural therapy, are not of the sort that are likely to be helpful for non-psychiatric conditions.

The final chapter is headed "death and hospice", and while providing an interesting discussion of this important field, also emphasises some of the most difficult aspects of behavioural medicine that traditional physicians find difficult to comprehend. For example, the process of dying is referred to as "the dying trajectory", implying some well-ordered routine to demise, and allowing reflection on the

problems cause by the unthinking patient who "dies too soon".

MICHAEL TRIMBLE

Neuromuscular Diseases. A Practical Approach to Diagnosis and Management. By M Swash and MS Schwartz. (Pp 316; DM 110, \$46.90.) Heidelberg: Springer-Verlag, 1981.

There is a place for a comprehensive but not encyclopaedic book on neuromuscular disease. The concept of this one is excellent and on some aspects it is very good indeed. Disease classification is conventional. There are separate sections on neurogenic disorders, peripheral and central, and on myopathies and disorders of the neuromuscular junction. These provide adequate clinical descriptions but illustrations are surprisingly poor for this field of medicine where so much of diagnosis is made by the observant eye noticing characteristic distribution of muscular atrophy and associated skeletal, joint and skin disorders. Pathology is very fully presented and well illustrated. (Whatever happened to the teased nerve fibre?) Electromyographic investigation is given more prominence than in other recent books on the subject. This should be an ideal formula. Unfortunately the electrodiagnostic sections are very disappointing. Apart from single fibre electromyography (SFEMG), the methods described are the conventional ones of thirty years ago, without the additional precision of the Copenhagen measurements. Nowhere is the EMG beginner warned of the possible sampling errors although the pathological diagnosis is so linked to fibre differences and their grouping. The authors recognise the importance and limitations of polyphasic motor unit potentials, yet for routine EMG and biopsy they advocate the deltoid muscle although the normal deltoid may have up to 25% of its motor unit potentials of that type. Quantitative techniques are hardly mentioned despite a statement that assessment of the rate of progression of a neurogenic disorder can be made from the EMG and pathological findings. Like the reviewer, they consider that few neuropathies are exclusively axonal or demyelinating (their only classification: interstitial neuropathy is not a recognised category presumably as the axon must be involved sooner or later) but they dismiss in a few words the only methods for giving reproducible results. The Ballantyne and Hansen technique is said to have been

criticised on a number of technical grounds. Where are these criticisms published? Certainly not by anyone with practical experience of the method. On the other hand, they stress the value of SFEMG though the most superficial reading indicates the lack of specificity of jitter. Fibre density estimated by SFEMG (up to 6 fibres in the pick-up range of the electrode!) is the basis for statements about collateral sprouting without any comment on the number of units sampled or the significance of the sample. Template methods can do better than that. With this electrophysiological interest there is a surprising lack of discussion of histological assessment of innervation ratios. Ulterterminal sprouting is not discussed.

Nerve conduction data are old fashioned and only H and F wave studies used for assessing radiculopathies. McLean's approach to the brachial plexus and spinal or cerebral evoked potential methods are not described. There is a short section on parathyroid disorders with useless EMG techniques but not even a mention of the accuracy of nerve accommodation measurement. The EMG machine used has some nice tricks for displaying the whole of a motor unit potential but it gives dreadful pictures. Why bother to reduce some artefacts to produce recordings that contain artefact from beginning to end? But this is *not* a book to learn about electrodiagnosis (let the beginner try to reconcile the legend of fig 3.2 with what is actually illustrated; time constants and voltage calibrations are absent), most readers will want to know if it will help their assessment of a rare case. Unfortunately it may not. It is difficult to get from problem at the bedside to probable diagnosis, always a difficulty with a systematic book. The EMG work up proves to be largely non-specific. Then what about information on pathogenesis and aetiology? There is no reference to Ebashi's important work on muscular dystrophy or critical discussion of the role of calcium. Coxsackie virus infection, toxoplasmosis and immune complex disease have no mention in polymyositis. Indeed immunology appears to have no investigative role outside of myasthenia gravis (which is well presented).

This book needs drastic revision but it is worth doing because it has the makings of a splendid handbook.

JA SIMPSON

Left Brain, Right Brain. By Sally P Springer and Georg Deutsch. (Pp 243;

Hard £10.70, Paper £4.95.) Oxford: WH Freeman & Co, 1981.

Left Brain, Right Brain is an elementary survey of the literature on lateral asymmetries of function, covering information published up to 1979. The authors attempt to deal with a wide range of topics including behavioural and electropsychological asymmetries in normal subjects, animal studies, and (of course) split brain research.

This book is directed towards a wide audience, from the interested layman to the graduate student. However, it would probably prove inadequate for any advanced appreciation of this subject. Although many areas of controversy are touched upon in each chapter, they are not given sufficient weight or referencing for any thorough evaluation of the evidence. In fact, in many of the chapters the subject matter is now somewhat out of date. With the notable exception of split brain research, comparatively little space is devoted to evidence from brain damaged populations. A fourteen page appendix attempts to survey neuroanatomy and clinical neuropsychology but does so at a very elementary level. There are no references in this section and no guidelines are offered for further reading on these topics. This seems inadequate in a text on brain function.

The value of *Left Brain, Right Brain* would be limited for any but the most elementary university course. However, it would probably serve as a basic introduction to the methodologies, and areas of contention which have been popular in laterality research. It is pleasingly written, and would be suitable as a "first step" for the student about to take a course dealing with laterality or for the interested general reader.

RA MCCARTHY

Hypoglycaemia (second edition). By V Marks and FC Rose. (Pp 521; £30.) Oxford: Blackwell Scientific Publications, 1981.

This admirable volume is a completely rewritten, updated and somewhat expanded version of the 1964 edition bearing the same name. The additional or much expanded chapters reflect the research and

clinical emphasis in the field during the last 15 years. Drug-induced hypoglycaemia and alcohol-induced hypoglycaemia are now treated in separate chapters and there are new chapters on neonatal hypoglycaemia and on the treatment of hypoglycaemia.

Dr Marks is responsible for the large majority of the chapters, and he has done an outstanding job of incorporating a large body of often conflicting information into a very readable, comprehensive, sound and interesting book. The volume covers different aspects of hypoglycaemia with authority and thoroughness; ranging from mechanisms for regulating blood glucose levels and the effect of hypoglycaemia on basic cellular metabolism, to a careful and critical survey of clinical conditions where hypoglycaemia is a major or contributory component. The major emphasis is on the clinical aspects of hypoglycaemia with equal attention paid to aetiology, symptomatology and treatment. However, the basic molecular mechanisms underlying the phenomena are also discussed when known and relevant, as are results obtained by studying insulin-induced hypoglycaemia in experimental animals.

The logical and clear organisation of the book is very helpful to the reader. To quote the dustjacket of this volume: "The book will prove valuable to clinicians in all disciplines, and particularly to those engaged in neurology, psychiatry, paediatrics and endocrinology, to whom most patients with spontaneous hypoglycaemia are referred".

ASTRID CHAPMAN

Disorders of the Facial Nerve: Anatomy, Diagnosis and Management. Edited by Malcolm D Graham and William F House. (Pp 576; \$85.68.) New York: Raven Press, 1982.

This volume reports the IVth International Symposium on facial nerve surgery in Los Angeles, in September, 1980. Like most reports on symposias the result is rather patchy, particularly so from the neurosurgeons point of view. Neurosurgeons are still probably the commonest cause of facial palsy as a result of their efforts to remove acoustic neuromas. The book is more directed, however, at ENT surgeons and plastic surgeons. One was interested in the chapter by Levine, on

the protection of the exposed eye in facial paralysis, in which he recommends either a palpebral spring implant, or sialastic prosthesis, rather than tarsorrhaphy. The reviewer feels that tarsorrhaphies are often badly done. In general, neurosurgeons should learn to do their own tarsorrhaphies and use an acceptable "plastic surgical" type of tarsorrhaphy overlapping the upper lid upon the lower lid and so preserving the eye lashes of the upper lid. In the United Kingdom the other methods suggested are not widely used, but perhaps they should be considered.

Samii and Draf contribute a chapter on intracranial intratemporal anastomosis of the facial nerve after acoustic neuroma surgery, and suggest that this can be done at the same time as the tumour removal. This, I think, would be difficult for those neurosurgeons that carry out the retromastoid approach, without otological assistance. However, one could see the possibility of using this approach in two stages, the neurosurgeon suturing the sural nerve to the stump of the facial nerve at the brain stem, passing the nerve out subcutaneously, and an otological surgeon at a second stage anastomosing this to the vertical part of the facial nerve. Hypoglossal facial nerve anastomosis is reported by Clemis and Gavron. They favour this technique although they do not directly compare with facial nerve cross-over techniques. The reviewer tends to use facio-accessory anastomosis, finding that the accessory nerve can often be split into two, thus preserving the trapezius muscle, and also avoiding adding a weak tongue to a weak face. Hemifacial spasm was superficially considered. There was a chapter on petrosal neuralgia, which I turned to in the hopes of learning about a type of neuralgia that was new to me. This chapter consisted of nine lines and gave the reader no help.

This is a disappointing book, and I can not recommend it for neurosurgeons. A neurosurgeon's interest may be excited by some ideas, but he will not find sufficient details to allow a proper judgement to be made. Over eighty papers are produced. Fewer papers containing greater detail and more thoughtful comparisons between the very many techniques suggested would have been very much more helpful to the reader.

CBT ADAMS