symptom orientated and the second is devoted to major disease groupings. This method of approach I found most interesting and the sections entirely complementary without too much repetition. The symptomatic approach will be particularly useful for the new student. As the authors state in the introduction, patients complain of symptoms and not of diseases; this section goes through the major groups of symptoms: dizziness, blackouts, headaches, etc. I liked the way the authors dealt with this section and in particular with their own practical lists of common causes of certain symptoms. These I feel are important in getting any particular complaint into perspective. For example, multiple sclerosis will be the culprit relatively rarely when the complaint is "dizziness".

The last section details major disease categories in a more standard way. Inevitably this leads to some repetition of ground already covered in the previous chapter. This was not excessive and for the new student has some positive reinforcing value.

The bibliography at the end of each chapter was sensibly short but sufficient to direct the interested reader to more detailed tomes.

I enjoyed the book, I liked the style and presentation and would certainly recommend it to an elective student or one who had a particular interest in neurology and those junior medical staff studying for higher degrees. However, I think the length is too great to recommend it to the average student. I well remember how much neurology I knew before finals!

RP MURPHY

The Heart and Stroke: Exploring Mutual Cerebrovascular and Cardiovascular Issues.

(*Clinical Medicine and the Nervous System series.*) Edited by Anthony J Furlan. (Pp 382; £42.00.) London: Springer-Verlag, 1987.

There is a lot of good stuff in this rather random collection of reviews which set out to "explore mutual cerebrovascular and cardiovascular issues". CM Fisher provides us with a wonderful historical account of the evolution of basic ideas in cerebrovascular disease. There follows an article, co-written with RD Adams 35 years ago, which displays his unique talent as an investigative neurologist. The subject is brain embolism and from the correlation of good clinical data with meticulous neuropathological

observation, emerges a pathophysiological scenario which still seems credible today. The next four chapters consider the heart as a source of embolism and three are reasonable if a little repetitive, whilst the fourth (by Lauzier and Barnett) focuses on mitral valve prolapse and mitral annulus calcification and is exemplary. Something like 200 references are cited, each is critically reviewed and the discussion covers all the pertinent controversies. Diagnosis and treatment are eloquently dealt with by Mohr and Hart in two successive chapters which correctly emphasise management uncertainties. Both contributions are well referenced up to early 1986.

Section B, entitled *Cardiovascular Neurobiology*, comprises three chapters which examine: (a) the role of the central nervous system in cardiovascular regulation (Barness & Farrario), (b) the type of cardiac dysfunction which may follow stroke (Norris & Hachinski) and (c) the neuropsychological disturbance which might provoke cardiac rather than brain "attacks" (Levine *et al*). Much of the latter is unashamedly provocative. Again all are copiously referenced. Section C considers post-resuscitation anoxic brain damage, orthostatic hypotension and syncope, within the general heading of global brain ischaemia. The chapter by Abi-Samara *et al* on the diagnostic approach to syncope is particularly good.

Furlan and Jones begin Section D (*Stroke and Open Heart Surgery*) with the CNS complications of open heart surgery, a review which maintains the high standard of other contributions though it is a shame recent results from the Newcastle group are not included. Hertzner and his surgical colleagues then set out the case for pre-treatment of co-existent carotid artery disease but their enthusiasm is tempered by the evidence amassed in the subsequent critical review by Easton and Hart.

The fifth and final Section (*Epidemiology and Risk Factors*) contains two chapters the first of which is from the Framingham Study Group. It evaluates the status of risk factors for ischaemic stroke circa 1986. Elevated serum fibrinogen has now joined the long list of "independent" risk factors identified by multivariate analysis. Almost every manifestation of ischaemic heart disease identifies individuals at risk from stroke but it is by no means clear whether the link is causal or merely guilt by association. The gratifying reduction in stroke incidence is attributed to risk factor manipulation (particularly the identification and treatment of hypertension); once you have had a stroke, the chances of functional recovery have not

really improved.

The book ends with a chapter which has staggering resource implications. Every study on the natural history of patients with cerebrovascular disease has identified cardiac disease as a major cause of death. This is true for patients with asymptomatic carotid disease, TIA, stroke, vertebro basilar atherosclerosis, internal carotid artery occlusion, etc. Ergo, argue Hobbs and Furlan, all patients should be screened for coronary artery disease and exercise ECG stress testing represents a minimal requirement. If the test is abnormal, then some form of coronary angiography should be undertaken even in asymptomatic patients. The purpose, of course, is to identify patients whose angiogram needs surgical attention but it hardly seems reasonable to predict their prognosis on data culled from symptomatic patients with comparable angiographic lesions. And if you do a CABG, shouldn't you also advise "protective" carotid endarterectomy (see chapter 16)? District managers better watch this space!

Two problems facing the editor of a book by multiple authors are repetition and lack of consensus and both are apparent here. But Dr Furlan made some excellent choices when he selected his authors and he seems to have got the best out of them. He has edited an important and provocative book which should interest everyone concerned in managing neurovascular patients.

J WADE

Neuromuscular Problems in Orthopaedics. Edited by CSB Galasko. (Pp 279; £49.50.) Oxford: Blackwell Scientific Publications, 1987.

There is much orthopaedics in neurology and much neurology in orthopaedics, and any textbook which tries to bridge the two disciplines is welcome. This book is aimed primarily at orthopaedic surgeons, but certainly there is a wealth of important information for neurologists, few of whom have much training in orthopaedic aspects of neurological problems. Medical and surgical aspects of various topics are considered, including cerebral palsy, congenital spinal cord lesions such as the dysraphic states,

dystrophies, myopathies, spinal muscular atrophies, neuropathies and the ataxias; and there then follow chapters on the orthopaedic management of spinal deformity, the hip, the knee, the foot, the upper limb; and on the stroke victim. The book's title is therefore slightly misleading or ambiguous, since a number of effects of disorders of the central nervous system are discussed, and neurologists might be led to think only in terms of peripheral neuromuscular diseases.

The individual contributions are very varied in approach and style, even to the extent of one chapter concluding with 136 references and another with three. There is considerable duplication, for instance discussion of the hereditary neuropathies in both the chapters on foot deformity and on peripheral neuromuscular problems, and consideration of the different types of cerebral palsy in the two chapters (medical and surgical) devoted to that topic as well as that again on foot deformity. Tighter editing (and perhaps physician and surgeon joining forces to write a single chapter) would reduce this duplication and allow space for topics such as lumbar spondylosis, neurofibromatosis, and less common conditions of mutual concern to physician and surgeon such as ankylosing spondylitis and achondroplasia. The role of orthopaedic surgery in contractures and other disabilities in patients with multiple sclerosis would be useful.

This is a generally successful book from which neurologists can learn what the orthopaedic surgeon has to offer. Whilst many of the difficulties which face the surgeon are considered, of particular concern is the occasional lapse in the surgeon's appreciation of iatrogenic problems. Thus there is no mention of the pain from partial peripheral nerve damage and even causalgia that can follow operations for ulnar nerve entrapment (and similar procedures on other nerves); again, paraplegia is virtually ignored as an infrequent but devastating complication of corrective spinal surgery, and spinal cord monitoring deserves a mention in this context. Apart from the patient's suffering, these sorts of problems are of increasing medico-legal importance and should be discussed.

The medicine and surgery common to neurology and orthopaedics have been much neglected in this country, and this book is probably the first in Britain to tackle the subject since Sandifer's *Neurology in Orthopaedics* published 20 years ago. The present volume is well produced, reasonably priced, and very much recommended to doctors in both these and related disciplines.

GD SCHOTT

A Textbook of Clinical Neurophysiology. Edited by AM Halliday, SR Butler, R Paul. (Pp 730; £32.00.) London: John Wiley & Sons Ltd, 1987.

The review tutorials from the International Congress of Electroencephalography and Clinical Neurophysiology held in London in 1985 form the chapters of this book. Most aspects of contemporary clinical and applied neurophysiology are addressed, with sections on electroencephalography, evoked potentials, and electromyography. A final section entitled *Neural Mechanisms* covers topics ranging from the cellular mechanisms of epilepsy to evoked potential correlates of cognitive processing. Included in this section also are chapters on retinal and motor physiology.

The authors, all authorities in their respective areas, present a practical summary of currently accepted methods of performing various neurophysiological techniques and their interpretation. The editors state that the book has not been designed as a basic introduction to applied clinical neurophysiology. Some chapters are refreshingly provocative in challenging the accepted methods of practice (for example, EEG recording). Other authors have transposed previously published work. With the routine recording of evoked potentials coming under increasing scrutiny, this might have been an ideal opportunity for a more critical appraisal. Nevertheless, here is collected a large body of information for convenient reference. A welcome feature is the relatively modest price of this book which will enhance its appeal among the increasing number of clinical neurophysiology texts.

PD THOMPSON

Neurochemistry: A Practical Approach. Edited by AJ Turner and HS Bachelard. (Pp 293; £17.00 Soft; £26.00 Hard.) Oxford: IRL Press Ltd, 1987.

As the title of the book suggests, this volume is one of application of techniques to the study of neurochemistry. The Practical Approach Series so far contains some 28 titles designed to provide step-by-step guides to the methods utilised for investigations in a variety of fields.

The authors, who are distinguished neurochemists, have selected a variety of topics for the volume to emphasise the diversity of techniques used in modern neurochemistry. This makes the book rather specialised since only nine subjects are covered. However, this is offset by the enormous amount of details contained within each chapter which makes the book

an excellent laboratory handbook for those interested in the areas covered. Details such as the exact composition of buffers, the precise manner in which to use specific equipment and the names and addresses of suppliers are included. These are precisely what is needed to make techniques work and which are so often omitted from research publications, as many of us know to our cost.

The first chapter covers the all important area of subcellular fractionation and specifically synaptosomes, growth cones and their subcellular components. This forms an ideal introduction to a book of this kind by establishing many principles employed in subsequent chapters. The important areas of cell culture, immunocytochemistry, receptor purification and second messenger systems are all covered in detail. In the final chapter the secrets of molecular biology are explained in an excellent discourse on the functional expression of mRNAs for cell surface receptors and ion channels.

This is a specialists volume, but if you are interested in the areas covered it is one you should not hesitate to buy. At £17 a bargain for any laboratory.

P JENNER

Notice

The Upjohn Prize for neurosurgical research of the European Association of Neurosurgical Societies

This prize is offered by the Upjohn Company and awarded annually by the E.A.N.S. Those eligible for the prize should be neurosurgeons under the age of 40 at the time of submission, who are either fully trained or still in the course of their training. Applicants should be either a member of one of the National Societies of the E.A.N.S. or should be supported by such a member. The basis of the manuscript submitted should be previously unpublished research work of either clinical or experimental or both, of relevance in the field of neurosciences. There are no specific regulations for the format or type of manuscript. Twelve copies of the submitted manuscript should be sent to the Chairman of the E.A.N.S. Research Committee before the 1st April 1988. The prize will be presented normally during the E.A.N.S. training course of that year, and the winner will be invited to attend that meeting and to present his work. The Chairman of the E.A.N.S. Research Committee is Professor J. Pickard, Wessex Neurological Centre, Southampton General Hospital, Southampton, SO9 4XY, UK.