Book reviews

discussion of indications, pitfalls, etc. The next four chapters thoroughly cover Doppler ultrasound in its various guises with a useful discussion on the correlation between duplex Doppler and arteriography but not on the indications for or use of either of these. They do, however, err on the lengthy side with the section on transcranial Doppler almost amounting to an operator's manual with far more detail than a clinician requires. The longstanding habit of Doppler enthusiasts of confusing velocity with flow is at least partly addressed by use of the term "flow velocity" though I would suggest that "velocity" by itself would be less presumptuous.

To read the chapter on MRI and CT one could be left with the conclusion that CT by comparison is almost useless in stroke. The benefits of MRI in imaging lacunar and posterior fossa infarcts are stressed but is it really necessary in routine practice to use MRI because it may diagnose supratentorial infarction a few hours earlier than CT? Conversely perhaps, the commonest reason for early diagnosis in stroke i.e. haemorrhage or infarct in an anticoagulated or fibrillating patient is not mentioned, though CT is superior to MRI for this. SPECT is covered satisfactorily, though the resolution of the camera used is poor and HMPAO scarcely touched upon. Kushner provides a useful and succinct review of PET in cerebral ischaemia and the book finishes with a short chapter on cerebral function during endarterectomy which may be of use if a role is found for endarterectomy.

Though the subject is adequately reviewed overall, the book is poorly balanced between and within chapters and it is difficult to see at whom the book is aimed; it is too detailed for non-specialists and those who have an interest in vascular neurology will be familiar with the vast majority of the material. It may deserve the making of space on the library bookshelf but not in the wallet.

J V BOWLER

Handbook of Neuropsychology Vol. 1. Series Editors: F Boller and J Grafman. (Pp 441; price not stated.) Amsterdam: Elsevier, 1989.

This production is somewhat reminiscent of the Vinken and Bruyn *Handbook of Clinical Neurology* and aims to provide a "comprehensive and current coverage of both experimental and clinical aspects of neuropsychology". The first volume, which forms the basis for this review, starts with some

introductory chapters on history, methodology, cerebral dominance, neuropsychological assessment etc; goes on to deal with attentional disorders, including confusional states, orientation and hemispatial neglect; and concludes with the first ten chapters of the section on aphasia and related disorders. Apart from completing the section on aphasia, subsequent volumes will contain sections on disorders of visual behaviour, amnesia, emotional behaviour, the split brain and hemispherectomy, and issues surrounding ageing and dementia.

Undoubtedly, the whole series is a major undertaking. As far as can be judged from the contents of the first volume, together with the outline in the preface, the coverage across the series as whole is not quite as comprehensive as is claimed. There is a bias to the theoretical and experimental aspects rather than the practical and clinical. Thus the whole of neuropsychological assessment is reduced to two chapters and it appears that there is no systematic discussion of the management of neuropsychological impairments despite the burgeoning literature on this topic. The anatomical approach to neuropsychology based around the impairments associated with lesions in different parts of the brain (eg the effects of frontal lobe damage) is not specifically covered. The editors might claim that much the same material comes up in the sections on amnesia, aphasia, etc., but this would not be a wholly convincing response. These quibbles apart, the series does look as if it will cover a very extensive chunk of neuropsychology.

The individual contributions to the first volume are mainly of a standard appropriate to a work that obviously sets out to become a definitive reference. The chapter by Bisiach and Vallar on hemineglect stands out particularly as well worth reading. There are some problems however. Aphasia is undoubtedly a major topic that is difficult for any single author or small group of authors to cover authoritatively in all its aspects. Splitting the field into so many different chapters written by a multiplicity of experts may help to enhance the depth of the analysis of each small aspect. The disadvantage is that it makes the overall treatment of the topic appear rather fragmentary. Possibly this will be minimised in practice since many of those consulting the volume will do so to look up particular issues, such as naming or agraphia, and will not attempt to read the whole in sequence. Inevitably there are also some minor problems or omissions within individual chapters. For example, the chapters on methodology do not give single case ex-

perimentation anything like the prominence that might follow from the frequency with which it is encountered in the literature.

Taken as a whole, the first volume suggests that the *Handbook of Neuropsychology* will turn out to be a very useful series which is likely to be a welcome addition to many libraries. Although stronger on the more theoretical and experimental aspects than material of direct practical application, the latter is by no means totally neglected. The series as a whole certainly seems set to bring together a wealth of material from the rapidly expanding field of neuropsychology in a generally competent and authoritative manner. The first instalment will certainly not languish unconsulted on this reviewer's bookshelves.

E MILLER

Child Neurology & Developmental Disabilities. By Joseph H French, *et al.* (Pp 287; £52.00.) Publisher: Paul H Brookes, Quest-Meriden Ltd, 1989.

The preface to the book states that the topics were chosen from papers delivered at the 4th International Child Neurology Congress and the Satellite Symposium of Child Neurology & Developmental Paediatrics that was held in Jerusalem in 1986. Authors of papers selected were given an opportunity to update their contributions. There are 34 chapters and 84 authors.

Chapters 1 to 12 cover recent developments in aetiology, diagnostic categorisation and pathogenesis of some nervous system disorders in childhood. The first paper is an introduction to the biochemical and newer techniques of molecular genetics. The Dutch group give a good review of the spectrum of paroxysmal disorders and suggest a comprehensive list of biochemical tests for the screening and diagnosis of these disorders. The discussion on the pathogenesis of virus-induced nervous system injuries including both acute infections and viral persistence in the CNS, is fairly comprehensive.

The effects of seizures on the developing brain is brief but adequate and concludes with prognostic features to indicate long-term outcome. Opiate peptides and their relationship to seizures is covered in detail with the conclusion that ACTH, a peptide derived from the same precursor molecule as B-endorphin, is the only demonstrably effective anticonvulsant in certain childhood seizure states.

The epidemiology of cerebral palsy from Sweden is comprehensive and covers the period 1959–1981. The conclusion is that there has been a dramatic increase in children treated with respirators, the majority of whom were children appropriate for gestational age and weighing more than 1,500 g. Over the period of study there had been a decreasing perinatal mortality and stillbirth rate but this had been accompanied by an increase of survivors with cerebral palsy although this was offset by a net gain of a substantial number of healthy surviving infants.

The Brussels workers give an excellent account of a multicentre European study of the pathology of prenatal encephalopathies and categorise aetiological factors into disturbances of neuronal-glial production, disturbances of neuronal migration and impairment of cerebral perfusion and hypoxia.

The final chapters cover the early identification of learning disabilities or developmental disorders. Attention deficit disorders and hyperkinesia are discussed in detail, reflecting that over 10% in North America are considered to have this disorder unlike in Britain where it is diagnosed in probably less than 1% of children. Drug therapies and various controversial treatments used in these children are discussed and the plea made that these disorders are complex and rarely have simple solutions, that strict experimental designs to test new therapies are imperative if the results are to be meaningful. The final chapter by Kinsbourne is a detailed overview of the various neurological theories of dyslexia.

As the book covers so many topics, their coverage is usually brief and superficial though some are excellent reviews and will be of interest to many. The book should mainly be of interest to those wishing to gain an insight into progress in varying aspects of paediatric neurology rather than as a reference book.

MJ NORONHA

Neurology and Psychiatry—A Meeting of Minds. Editor: J Meuller. (Pp 290; £101.90.) Basel: S. Karger AG, 1989.

The student of psychiatry today has to steer a careful course between the equally perilous rocks of brainless and mindless psychiatry. In the United Kingdom a more phenomenologically based psychiatry has always kept a foothold in neurology and allied sciences, whilst fashion and historical accident have

determined, until recently, the strong psychoanalytical flavour of transatlantic psychiatry. Thus in the last few years, when a change in direction became necessary as a consequence of the advances in the neurosciences, our American counterparts had to face a greater challenge which they met with their customary enthusiasm. This book needs to be seen in this context, as a correction of brainless psychiatry. Its theme is the integration and recognition of structural and physiological substrates relevant in determining alterations of behaviour, mood and thought. Behavioural neurology, neuroanatomy and neuropsychology are some of the bricks psychiatrists need to build this new and durable edifice.

Except for Trimble's historical account of the changing relationship between neurology and psychiatry, this is an American book. Its size precludes a comprehensive coverage of the subject and it is best seen as a mixture of reviews of current topics (for example AIDS, PET scanning) and chapters where research strategies are discussed for their potential value to psychiatry rather than for their past contributions (for example the anatomic evolution of neural networks subserving language). The list of contributors is impressive, but includes few psychiatrists and this results in the brain/mind interactions getting occasionally out of focus. Their approach to the task in hand is varied. Some, like Nauta (the role of the corpus striatum), Mazzotta (PET), Alexander (head injuries), Starkstein *et al* (stroke), Levy *et al* (AIDS), provide comprehensive scholarly reviews, while others take the opportunity to recount their own research or to expound their theories. In the latter category are the contributions of Sacks on Gilles de la Tourette syndrome, Stevens on schizophrenia, Kiernan on neuropsychology and Benson and Stuss on frontal lobe function.

I found the book useful and easy to read and I was interested in its transcultural aspects. Those looking for a glimpse of current thinking in American behavioural neurology/biological psychiatry will share this view. Those looking for a more extensive coverage of the subject will need to fill in the gaps.

MARIA A RON

Diagnostic Neuropathology. By MM Esiri and DR Oppenheimer. (Pp 403; £59.50.) Oxford: Blackwell Scientific, 1989.

This is an excellent book. Its success lies in clear definition and perfect execution of its

aim. The authors, both experienced neuropathologists, have set out to provide a practical manual (the subtitle of the book) for trainee neuropathologists and general pathologists with an interest in the subject. In doing so they have produced a book which will appeal to a much wider readership and no doubt will also find its way to the bookshelves of neuropathologists who have long completed their training and of clinical and basic neuroscientists who treat and investigate diseases of the nervous system.

Whilst the book's approach is practical and the text predominantly descriptive, the authors also discuss theoretical considerations and basic pathological mechanisms. This approach results in an immensely readable text which conveys both the complexity and attraction of neuropathology.

The text is not comprehensive, but covers most disease entities in a concise, illuminating and systematic fashion. The first four chapters on necropsy, cut-up, histology and biopsies are entirely practical and give many useful hints to the examination of the nervous system. One of the best examples of such practical notes is to be found at the conclusion of the chapter on histology. The authors not only list non-specific changes and artefacts, but also give practical advice on the use of the microscope and warn of the pitfalls of the much abused term "slight cell loss". The first two chapters could also serve as an atlas to neuro-anatomy and a very good one at that. Whilst the emphasis is on more common conditions, rare neurodegenerative, metabolic, nutritional and immunative disorders are also reviewed.

The style is most appealing: clear, instructive, but not patronising. The authors often ask questions which they do not always answer themselves. As indeed so many of the afflictions of the nervous system are of unknown aetiology or pathogenesis, they induce the readers to think about these problems. The text is complemented by abundant illustrations of consistently high standard.

I can recommend this book most warmly and without hesitation. The authors have clearly fulfilled their original aim of producing an excellent practical manual. But more importantly, they have also succeeded in presenting neuropathology which has become a fast developing, fascinating and challenging area of neuroscience.

PL LANTIS