Book reviews

Modern Perspectives in Clinical Psychiatry. (*Modern Perspectives in Psychiatry Vol 10.*) Edited by John G Howells. (Pp 400; £54.50.) New York: Brunner Mazel, 1988.

Modern Perspectives in Psychiatry is a series which aims to provide clinicians with an up to date overview of theory and practice of the entire breadth of psychiatry. The tenth in the series, *Modern Perspectives in Clinical Psychiatry*, as the title suggests, focuses on clinical issues largely in adult psychiatry. The range of topics covered is wide and broad enough to include chapters such as *Systems Theory in Psychiatry*, *The Place of Computers in Psychiatry* and a chapter on psychodynamics *The Borderline Domain: the "inner script" and other common psychodynamics*. Unfortunately in its attempt to be wide ranging this current series loses its coherence and many of the chapters, including the above-mentioned, are unlikely to have much general appeal. The more "meaty" chapters such as those on the dementias, epidemiology and brain imaging do not contribute anything in the way of a fresh perspective and these topics have been better covered in recent Journal review articles. Furthermore the overall style of presentation is unlikely to appeal to clinicians this side of the Atlantic and coupled with the uninspired content makes it difficult to recommend.

RJ DOLAN

Biochemical and Pharmacological Aspects of Depression (*Topics in Neurochemistry and Neuropharmacology 3*). Edited by Keith E Tipton, Moussa B H Youdim. (Pp 146; £30.00.) Basingstoke: Taylor & Francis 1988.

Most new books on the biology of depression are little more than conference proceedings. *Biochemical and Pharmacological Aspects of Depression* is quite different and provides a clear and brief account of the field in a form that makes it a useful addition to any psychiatric library.

It contains excellent reviews of the neuroendocrinology of depression and the actions of lithium on second messenger systems. Most areas relating to the biochemistry of depression are covered including GABA and histamine.

The book covers the basic sciences of

relevance to depression but is relatively weak on the more difficult clinical studies.

The review of the monoamine hypothesis gives the brain and the platelet equal prominence and the discussions of the clinical pharmacology of anti-depressants is not up to date. For a book published in 1989 there are in fact very few references after 1986.

Despite these criticisms the book as a whole should give a fair impression to the outsider of what is happening in the field of the biology of depression.

STUART CHECKLEY

Neurotransmitters, Drugs and Disease. Edited by RA Webster, CC Jordan. (Pp 474; £19.50.) Oxford: Blackwell Scientific Publications. 1989.

The book clearly has several aims and to facilitate and make them more apparent, it is sensibly divided into three parts. The first deals with the basic physiology of neurotransmitter systems, their function, location, inter-relations and the current experimental and clinical methods available for studying their release, binding and re-uptake. The second part permits a more detailed examination of the structure, location in the central nervous system and function of individual neurotransmitters. Finally, the third section integrates this important and basic neuropharmacology into the context of CNS disorders such as Parkinson's disease, Huntington's chorea, epilepsy, the psychoses and neuroses, Alzheimer's disease and pain manifestation and control.

This is an area of neuroscience which, because of its complexity, can be tedious and intimidating. This is not the case here. The well qualified contributors have provided a detailed and accurate but at the same time, highly readable account. The medical student and clinician will find new light shed on the darker areas of neuropharmacology and the clear breakdown of individual chapters will make it possible to adjust the depth of reading or to pick out specific points of interest and enquiry. The clinical application is equally excellent and successfully links basic science to clinical medicine in a way that will be attractive to both the pharmacologist and the clinician.

For those wishing to embark on a detailed study of neurotransmitters and disease and their manipulation by drug therapy or others simply wanting to clarify and bring themselves up to date with this type of CNS disorder, this is a book which will prove to be very satisfactory at an affordable price.

M SAMBROOK

Yearbook of Neurology and Neurosurgery 1989. Edited by DeJong Currier Crowell. (Pp 439; £32.00.) Chicago: Wolfe Medical Publications Ltd. 1989.

Every neurologist must have his or her favourite amongst the many annual reviews of modern progress or recent advances. Over the years I have to confess that this one has been mine. As devotees know, it differs from the other contenders by critically reviewing and summarising a large number of papers in neurology and neurosurgery, illustrating them where necessary and ending the summary with a brief personal comment by the editor. It is this last feature which so attractively brings the text to life. The comments are always apt, often provocative, and not infrequently critical and highly amusing. Crowell's comments in the neurosurgical sections are embellished by a number of other notes and references to papers on the topic in question: a most useful addition. The headache of selecting from such a vast literature must be considerable as the 28 section headings indicate; yet the menu is judicious, appetising and provides a balanced digest of most of the recent new work.

In short, there is something here for everyone employed in the disciplines of neurology, and so good are the summaries, that the reader can fairly quickly and enjoyably bring himself up to date over the areas in which he is lacking special experience or expertise.

The format is pleasing, the illustrations and diagrams are of high quality and the book rests pleasingly and easily in the briefcase, by the bedside or in other small rooms. Strongly recommended.

JMS PEARCE

Neurology for Non-Neurologists. 2nd edition. By Wigbert C. Wiederholt (Pp 356; £25.00). Harcourt Brace Jovanovich Ltd.

The first edition of this book became available in 1982. The title "Neurology for Non-Neurologists" suggested a short-cut to the complexities of neurological diagnosis and management but the implied brevity and potential superficial treatment of the subject was not borne out in the text which was reasonably comprehensive and must have endeared the book to General Physicians with little or no neurological experience and certainly to physicians in training. The publication of a second edition six years later perhaps speaks well of the book's reception.

In the foreword, Professor Wiederholt advises us that the first edition was indeed well received but there was constructive criticism and this has been taken into account.

The chapter on "Infections of the Nervous System" had been critically reviewed and has been rewritten. Some alarm was expressed in 1983 that in the chapter on headache, lumbar puncture was said "to be used to assess . . . tumour and increased pressure." Surely this sentence must come out of the book, for with the advent of CT scanning, lumbar puncture in tumour suspects must be culpable, and certainly this recommendation to non-neurologists is totally unacceptable. In an earlier chapter, the same author, i.e. Frank R. Sharp states ". . . Meningitis and encephalitis are major indications for lumbar puncture. The presence of focal signs or symptoms require CT or MR imaging and neurological consultation prior to lumbar puncture" and in the same chapter under the heading "Mass Lesion" the author states "... This is a contraindication since L.P. may precipitate or hasten herniation (sic)." I would certainly recommend that the editor deletes the initial recommendation from any future edition. The advice in these three sections is confusing and could well lead to spinal fluid examination in the face of raised intracranial pressure.

The possible increased morbidity of lumbar puncture is recognised in the section on spinal cord compression but the advice to the clinician is again somewhat uncertain. It is suggested that lumbar puncture may worsen pre-existing spinal cord compression and no doubt this is true but the clinician is advised that "in this event emergency myelography should be performed and surgery considered . . ." Surely it is more acceptable in suspected spinal cord compression to undertake the myelogram initially, to define the extent and location of the lesion.

Thus I feel this book is found wanting in two major areas of acute neurological-neurosurgical practice. It is unfortunate that the short chapter on Craniospinal Trauma has not been expanded. This is an area of major concern and as the author states, "Accidents constitute the leading cause of death in the United States in those between the ages of one and 40".

The remainder of the book, however, is attractive. It is short and could readily be assimilated by a person taking up his initial residency in neurology. As in the first edition, the essays are largely written from the Department of Neurology in San Diego. I feel Professor Wiederholt should be congratulated on his book which, with the above

provisos will, I am sure, again prove useful and of great value to those without specific neurological training.

J B FOSTER

Functional Brain Imaging. By G Pfurtscheller and F H Lopes da Silva. (Pp 264; Price not stated.) Publishers: Hans Huber, Toronto. 1988.

The range of techniques for studying the topography of cerebral function has recently been expanded by the development of PET, SPECT, MRI spectroscopy and magnetoencephalography (MEG). At the same time a fresh impetus has been given to the mapping of electrical activity by the development of the low cost coloured computer graphics available commercially as devices for brain electrical activity mapping (BEAM). This book records a symposium held in 1987 which brought together expertise in topographic EEG and evoked response (ER) analysis, MEG, PET and SPECT. Several reports concern correlative studies of magnetic and electrical measurements for EEG and regional blood flow or metabolism.

The first section devoted to localisation of electrical and magnetic ER sources is introduced by technical and theoretical reviews of interest both to the specialist (Nunez, Meijs *et al*) and the more general reader (Kaufman and Williamson, Romani). Several studies indicate the possibilities for resolving basic ERs into the activities of topographically distinct generators (Huttunen *et al*, Bertrand *et al*). Some interesting results emerge, for instance that the fields produced by simultaneous stimuli in different sensory modalities are not simply the sum of sources for the ERs to each individual modality (Weinberg *et al*).

Section II considers what Gevins and Bressler term "functional topography", not simply mapping electrical fields nor deriving equivalent dipoles, but using statistical techniques to analyse functional relationships between activities at different sites. Pfurtscheller and colleagues approach this by considering event-related desynchronisation in relation to sensory processing and memory, and a single contribution on motor mapping by direct electrical stimulation through the scalp is provided by Cohen and Hallett.

Conventional BEAM is introduced by a critical review of methodology and current problems by Duffy. Petsche *et al*, employ significance probability mapping to display differences during various tasks, and Etevenon *et al* adopt a similar approach to

pharmacological studies. Reports on psychiatric material include a study by Gruzelier *et al* showing that memory tests which discriminate between schizophrenics and controls are also accompanied by anomalies of EEG topography in the former.

The final section on PET and SPECT (disappointingly MRI spectroscopy is omitted) covers a good deal of familiar ground but includes a very full review by Engel of the relationship between PET and EEG findings in partial epilepsies.

It is the view of many clinical neurophysiologists that the introduction of BEAM in clinical EEG practice has thus far been counter-productive. In centres of excellence it has proved a useful research tool, offering improved insights into the topography of ERs in particular, but, as indeed Duffy points out, more generally its clinical use has been either naive, as a supposedly simple substitute for proper EEG recording and interpretation, or frankly exploitative: a coloured brain map looks as impressive as a PET scan and is cheaper to produce. The present volume provides a much needed corrective to the many recent publications which have misrepresented and trivialised brain mapping. It describes exciting and innovative approaches to the topographical study of cerebral function, some of which must surely become standard neurodiagnostic techniques in the future. This book is not easily read, partly because of the wide range of technologies covered, but certainly merits the attention of experimental and clinical neurophysiologists, cognitive psychologists and other neuroscientists.

COLIN B BINGHAM

Noninvasive Imaging of cerebrovascular disease. Edited by Jesse Weinberger. (Pp 190; \$62.50.) New York: Alan R Liss 1988.

This volume is the fifth in the series *Frontiers of Clinical Science* and attempts to provide the clinician caring for stroke patients with a working knowledge of non-invasive techniques for investigating cerebral ischaemia.

Divided into nine chapters, it includes sections on echocardiography, Doppler, CT and MRI, SPECT, PET and, rather incongruously, cerebral monitoring during endarterectomy.

The section on echocardiography, written by a cardiologist, is little more than a very basic text on echocardiography and its only concession to the investigation of cerebral ischaemia amounts to 16 lines with no use of