Book reviews

Psychiatric Disorders: Neurotransmitter and Neuropeptides. (*Progress in Brain Research Volume 65.*) Edited by JM Van Ree and S Matthysse. (Pp 288; \$83.25.) Amsterdam: Elsevier Science Publishers, 1986.

To those of us who believe that there is a biological basis to psychiatric illness, the search for biochemical abnormalities in brain would seem a logical approach. The study of the monoamines, particularly dopamine, noradrenaline and 5HT, has received considerable attention. The apparent involvement of these transmitter substances in psychoses and depression has greatly assisted the development of drug treatment. More latterly, the involvement of GABA in anxiety has had a similar effect and there are hopes that involvement of acetylcholine in Alzheimer's disease may lead to a treatment for this disorder.

The present volume attempts to assess the role of neurotransmitters and neuropeptides in psychiatric disorders. Unfortunately, it takes a very broad approach to the topic which does not allow a detailed focus on specific issues. A variety of factors underlying psychoses and affective disorders are discussed in a series of chapters ranging from genetic influences, viral factors and nutrition. Others deal with specific monoamine transmitter involvement. However, there is no obvious thread to the story that unfolds.

Subsequently, the volume turns to the question of neuropeptides. With over forty peptide substances known to exist in brain it is likely that some alterations in these substances will occur in psychiatric disease. The book contains a variety of chapters which deal with a range of peptide substances in terms of their localisation, regulation and relevance to behaviour in animals. Other sections deal with clinical post-mortem studies. But again, there is an enormous gap between the sections and no apparent logical sequencing of contributions. My overall feeling was that a lot more basic research needs to be carried out to show whether or not neuropeptides are of any relevance to mental illness. Altered levels in brain and CSF may merely reflect the disease processes rather than being its cause. A biological basis to psychiatric disorders seems a long way off.

This is not a volume I would recommend. It contains a number of interesting articles

but these are lost in the general approach taken. It is also an expensive volume and reflects the state of the art in 1984 when the meeting from which it results was held.

P JENNER

What is Epilepsy? The Clinical and Scientific Basis of Epilepsy. Edited by MR Trimble and EH Reynolds. (Pp 350; £40.00.) Edinburgh: Churchill Livingstone, 1986.

This is another report of conference proceedings: Windsor Great Park, July 1985. Twenty-four chapters and 345 pages of contributions by acknowledged epileptologists (horrid name!) cover a great deal of this perplexing field of knowledge heavily patched by large bare areas of ignorance. The chapters explore deeply such fundamentals as what is epilepsy? What is an EEG epileptic discharge? Is dyscontrol epilepsy? Basic science has so far done little to improve our understanding of the disorders and precious little more to improve the lot of the epileptic patient. It is thus meet that the text is dominated by clinical contributions.

Recent legal issues have clearly influenced the contents. Fenton gives a balanced view of the EEG, epilepsy and psychiatry; Fenwick follows with a consideration of dyscontrol-paroxysmal behaviour disorder, not frankly epileptic, but associated with abnormal cerebral discharges; this fertile field of polemic is fairly presented and will be of some assistance to those required to testify on the putative relationship between epilepsy and aggressive, violent behaviour. Wieser and Binnie write similar chapters on monitoring and the ever topical "kindling" gets its fair share. The transcripts of two sections of discussion are the final chapters and make for interesting reading.

There are already several good texts about epilepsy in adults and in children. This book will not replace them. It is a specialist work of no great intellectual weight, but it does clearly ventilate many of the imponderables which face clinicians each day. Many areas are not covered: there is little about diagnosis or treatment, and the Lennox-Gastaut syndrome is not even mentioned in the index; myoclonic disorders are likewise neglected. I think the editors have rightly avoided trying to produce an all embracing text, but they have succeeded in providing a well written and nicely produced book which will stimulate and educate a wide audience of neurologists and psychiatrists.

JMS PEARCE

Cerebrovascular Disease: Research and Clinical Management Vol 1. Edited by H Lechner, JS Meyer, E Ott. (Pp 350; \$104.00.) Amsterdam: Elsevier Science Publishers, 1986.

When a distinguished array of the stroke hierarchy contributes to a book with this title the clinician can be forgiven for expecting theoretical and practical guidance in the management of patients with stroke and/or precursors. Unfortunately, he/she will be disappointed for there is very little of a practical nature here. The majority of contributions deal with aetiology and evaluation: those sections devoted to therapy tend to be didactic with claims for efficacy based more on conjecture than fact. And many crucial clinical problems (such as the management of TIA, the status of carotid endarterectomy, stroke in evaluation and the role of rehabilitative services) are completely ignored.

The first two chapters on MRI and PET offer eloquent resumes of the new technology. There seems no doubt that MRI will find lesions where the CT does not. Quite what contributions this will make to patient management is difficult to predict but the pictures are beautiful. The PET chapter is a tour de force from Philadelphia and may itself justify purchase of this volume. PET can give tomographic images of blood flow and blood volume and may delineate those small number of patients in whom recurrent symptoms occur on a haemodynamic basis. I suspect this can be done clinically by a combination of history and retinal artery pressure readings but unfortunately most PET papers are rather sparse on clinical details. Images of oxygen extraction suggest that some infarcts, when studied early enough, are surrounded by a zone of tissue which may be functionally damaged but structurally intact. Whether or not this can be manipulated remains to be seen. It seems improbable in that no successful manipulation has yet been undertaken and the logistics alone insure a fairly minor role for PET scanning in the management of patients with cerebro-vascular disease.

There follow two chapters on haemorrhage, the second of which seems to confuse an increase in cerebral blood flow with an improvement in cerebral blood flow. A detailed and well referenced chapter on the lacunar syndrome serves to illustrate just how difficult this concept has become now that we include those small deep lesions seen on CT within what was once a definition based on pathological changes. Presumably much of this will have to be re-written

more patients are scanned by MRI and even smaller lesions are visualised. The section on vascular dementia is conducted without a definition of dementia which rather undermines the discussion on infarct location and neuropsychological deficit. For instance, if memory impairment is taken as a *sine qua non* of dementia, then most patients will have bilateral damage. Nor are problems of clinical definition resolved in the section on chronic cerebrovascular disorders where, if I understand it correctly, the Hachinski scale is applied to patients who are not demented. This seems extraordinary and the results serve to illustrate the danger of applying rating scales to clinical problems for which they were never intended.

The second and more compact section of the book includes proceedings from the Winston-Salem conference on "the Clinical Value of Diagnostic Testing for the Evaluation of Patients with Stroke", which took place in May 1985. Little is new and much is contentious. We are told that the diagnosis of TIA cannot be made solely on clinical grounds and that every patient needs a CT scan, ultra sound vascular examination, angiography and a cardiological and haematological work-up: investigations which are considered mandatory in deciding appropriate management. This confident stand is maintained despite the absence of any discussion on the relative merits of various types of intervention. There follows a chapter of the management of acute brain infarction which is equally didactic (we are told to give heparin—unless contraindicated—to all patients with early brain infarction) and poorly referenced. The indications for EC/IC bypass surgery are clearly identified but, regrettably, wrong. The chapter on the management of cerebral haemorrhage is dictatorial, rather than didactic, and at times sounds like a recipe for turning mortality into severe morbidity.

The book ends with recommendations for the clinical management of cerebrovascular disease and here we return to the central crisis of research in stroke. We are pretty certain the treatment of hypertension has been of paramount importance in the observed decline in the incidence of stroke. It is also clear that aspirin seems to reduce the incidence of subsequent stroke in men presenting with TIAs. We do not know if carotid endarterectomy is a useful operation and until we do, further investment in carotid imigary remains of debatable value.

Finally, EC/IC bypass surgery does not prevent subsequent infarction in patients with symptomatic, severe, inaccessible carotid disease. The new technology may lead

to breakthroughs in our understanding of stroke and may even suggest alternative therapies. But those therapies need to be evaluated within the setting of prospective controlled clinical trials. There is little insistence in this book about the need for clinical trials and as a consequence much dogma masquerades as fact. This is unfortunate in a book published under the auspices of the World Federation of Neurology.

JOHN WADE

The Facial Nerve. Edited by Mark May. (Pp 819; DM 248.00). Stuttgart: Georg Thieme Verlag, 1986.

It is through our faces that we communicate many of our thoughts and feelings and any disturbance of the facial nerve can cause disabilities out of all proportion to simple lack of movement in the small muscle mass. The word "personality" is derived from the Greek word *persona* — the mask worn by actors in ancient drama, and it can be argued that the facial nerve is the most important motor nerve in the body. This book deals mainly with the surgical management of facial nerve disorders and draws on the experience of Dr May, the main author, in managing over 1,500 patients with facial palsy over the course of 20 years. Forty-one other authors, mainly from the United States, provide chapters individually or in association with Dr May. The book is divided into sections. The first 180 pages on applied basic science deal with embryology, anatomy and physiology, including the neurobiology of nerve and muscle degeneration and regeneration. The next section covers assessment of facial nerve function by clinical, neurophysiological and radiological methods. The main part of the book comprises sections totalling over 350 pages dealing with the management of facial palsy, the management of abnormal facial movements, surgery on and around the facial nerve and lastly procedures to correct effects of facial palsies. Different surgical approaches to the same problems are considered and it is in these central sections that the book excels. Finally there is a section dealing with the emotional effects of facial palsy, and the medico-legal aspects. The book is lavishly illustrated in all sections and has a remarkable uniformity of style and presentation probably due to Dr May having contributed to 24 of the 41 chapters. This reviewer's adverse comments are that although there is a chapter on the neurological causes of

facial palsy this is very brief, and that disorders of facial movement not responsive to surgical treatment are poorly covered. The neurosurgical chapter on surgery of the facial nerve is also a bit light. The book appears to be directed more towards otologists than neurosurgeons but can be strongly recommended for all those involved in investigation and treatment of facial nerve palsies. The hard back volume is very well presented and can be strongly recommended as a handsome addition to any medical library.

RD ILLINGWORTH

Neuro-psychological Rehabilitation. Edited by Manfred J Meier, Arthur L Benton, Leonard Diller. (Pp 475; £45.00.) Edinburgh: Churchill Livingstone, 1986.

This multiauthor book is edited by three of the most influential workers in clinical neuropsychology, and in the words of the editor it was designed to "...help clarify the current state of knowledge and application...and encourage researchers and clinicians to focus their energies towards pursuing a major new direction for both neuropsychology and rehabilitation...". It has achieved its goals in part. The 26 chapters are organised into three main parts. The first deals with assessment and methodological issues; the second with representative research and application; and the third with a description of neuropsychological rehabilitation programmes in the United States, Europe, Scandinavia, and Japan. The first part is rather mixed. Some of the individual chapters are very good indeed (for example, that by Meier on *Individual Differences*..., as are Lezak's chapter on *Assessment for Rehabilitation Planning*, and Diller's on *Neuropsychological Rehabilitation*). Nevertheless, as a group they do not appear to gell, and read as an interesting collection of individual papers, rather than contributions towards a coherent theme. The second part is by and large much more impressive, with authors dealing with the identification, understanding, and remediation of fundamental cognitive and related behavioural deficits. It is very difficult to single out any individual chapter for praise in this section, as they are all of high quality. The last part is very difficult for any one person to review, containing as it does an account of rehabilitation in various parts of the world. This reviewer has detailed knowledge of the reha-