

based on a meeting at Pavia in May 1987, published in 1990. The choice of subjects was aimed at items of topical interest, emphasising biochemical and neuropharmacological studies and experimental data. The 21 chapters are grouped under: Advances in pathophysiology; Parkinsonism, Dementia and Depression; Focal dystonia and myoclonus; Autonomic disorders; and Therapy.

Why a book on Parkinson's disease contains work on dystonias and myoclonus may well make readers scratch their heads, although Tolosa's account of Meige's syndrome is excellent. Other features are also of interest: mood disturbance relates not surprisingly to depression but responds quickly to levodopa (Jouvent and Baruch). The role of GM1 as a protection against MPTP and neurotoxic agents is discussed. Pathological studies (Tomlinson and Blessed team) show that only a minority of the Parkinsonian patients who are demented show the hallmarks of Alzheimer's disease, and vice versa. Fiorvanti's studies on the cognitive deficits in ageing, Alzheimer's and Parkinson's diseases is disappointingly inconclusive.

The expertise of contributors is considerable, the references generously selected, and the publication in leatherette soft covers is satisfactory with clear text, line diagrams and figures. Though by now somewhat dated, the manual provides a fairly comprehensive coverage of the perplexing problems of extrapyramidal diseases which will I think be enjoyable and illuminating to experts. The selection of subjects may be apposite for a conference, but for a monograph is quirky. There are many alternatives.

JMS PEARCE

Comprehensive Epileptology. Edited by M DAM, AND L GRAM. (Pp 844; Price \$180.00). New York, Raven Press, 1990. ISBN 0 88167 646 2.

This multi-author book, edited by two Danish neurologists, is intended for the clinician in daily contact with the innumerable problems of epilepsy. The editors and publishers are to be congratulated on the speed of production as most chapters are referenced up to 1989, a remarkable achievement with such a large international team of authors. The emphasis is strongly clinical, with only two short introductory chapters on more fundamental aspects. The range of topics is, indeed, comprehensive, ranging from detailed descriptions of forms of seizure and epileptic syndromes, through methods of investigation and assessment of individual anticonvulsant drugs. Social aspects are not neglected and there are chapters on the special problems of tropical countries.

The advice given is eminently sensible. Simon Shorvon describes the abnormalities that may be seen on the routine EEG, but further emphasises that the majority of such records in adults suspected of epilepsy are non-contributory and also that "epileptiform" abnormalities may occur in about 1% of people who have never had a fit. His statement that only 15 of 7400 Air Force employees "had no overt neuropsychiatric features" can only arouse unnecessary alarm. Some authors still have difficulty in distinguishing "idiopathic" epileptic syndromes from "cryptogenic" seizures, although this is clearly stated by Fritz Dreifuss. The chapters

on febrile convulsions and on the management of status epilepticus both give eminently practical advice and I was particularly pleased to see that in the latter the drug so favoured in intensive care units, chlormethiazole, received no mention. It is extraordinary that rectal diazepam is not officially approved in the USA. Among other excellent chapters those on differential diagnosis are particularly informative.

Not unexpectedly, the definition of epilepsy remains elusive, even "ongoing" fits following an acute cerebral event, requiring anticonvulsant treatment, being regarded as non-epileptic. The title of "comprehensive" presents a challenge and a few gaps can be detected. The role of alcohol in causation of seizures in adult life is barely discussed and impossible to find in the index. Fits on withdrawal from benzodiazepines are not mentioned and multiple sclerosis does not appear except as a cause of non-epileptic paroxysmal symptoms. Perhaps a more important lapse is the absence of a clear account of a systematic approach to the common problem of adult onset epilepsy.

This book fills a genuine need and can be highly recommended.

WB MATTHEWS

The Neuropsychology of Everyday Life: Assessment and Basic Competencies. Foundations of Neuropsychology Series. Edited by DE TUPPER AND KD CICERONE. (Pp 348; Price: Dfl 215.00, US\$ 92.50, UK £65.25.) Dordrecht, Kluwer Academic Publishers Group, 1990. ISBN 0-7923-0671-6

This book addresses an important issue for neuropsychology—how useful are clinical and laboratory tests for practical assessment in predicting patients' performance in everyday life and their likely residual difficulties or scope for rehabilitation?

In the past clinical neuropsychology has concerned itself with trying to isolate particular effects of damage to particular areas of the central nervous system, but it has proved inadequate as a basis for judging present or future patient disability in real-life situations.

There are two main reasons for this. Firstly, most injuries are diffuse, so that their effects cannot be simply listed as a combination of separate localised deficits. There are systematic changes associated with unlocalised brain injury but these are quantitative rather than qualitative and/or involve changes in the operation of the whole system rather than in separate individual components of behaviour. Secondly, their effect on everyday tasks is often indirect, so that the practical impact of any loss may be much more or less than one might think from laboratory measures of ability.

Thus, whether a slowed reaction time is likely to make patients dangerous when driving depends to what extent they need to make fast reactions—good driving usually involves anticipation to the extent that fast reactions are not required. Operating a control system with many parallel continuous inputs, however, would be drastically affected by slow reactions. Thus Gestalt concepts (e.g. that wholes have properties different from and independent of those of their parts) re-emerge as a major principle.

Other examples of such unpredictable knock-on effects of particular symptoms are

given in this book, which attempts to develop neuropsychology as a practical science of functional assessment that can measure real-life disability and provide a rationale for rehabilitation. The first section comprises chapters concerned with the ecological validity of existing tests and methods of assessment, most contributors concluding that few of the present measures can accurately predict patient performance in real-life situations.

There are useful reviews of the correlation with practical everyday performance of test battery scores (Mary Acker), aphasia and communication deficits (Leila Hartley), memory tests (Alan Sunderland) and demographic data (Laetitia Thompson and Robert Heaton). In all these cases the problems of using measures of impairment of component psychological processes such as aphasia scores, memory loss, or IQ deficit to predict the efficacy of general behaviour are emphasised, and more general functional assessments proposed to give better predictions. Two other chapters discuss the wider issues of quality of life assessment (John McSweeney) and legal cognitive competency (Paul Wang) from a neurological standpoint.

The second section deals with assessing overall competencies in neurological patients, the presence of an organic lesion taken as simply one factor causing difficulty. Chapters by Schachter *et al* on the impact of amnesic difficulties on capacity to work, by Mayer *et al* and by Warzak and Kilburn on analysing decision and action errors in everyday activities, and by Hopewell and Van Zomeren on measuring car driving competence open up new areas of assessment that are plainly of great practical importance.

In these chapters the nature of the lesion has become irrelevant and the patients' performance is approached holistically by task or systems analysis. In this sense brain damage is just another form of stress to which the system has to adapt, and efficiency is measured in terms of activities of daily living such as the ability to return to work or cook a meal adequately.

Analysis of exactly what is wrong, based on objective tests, is still the aim, and experimental psychology the best method of achieving it. Among many interesting ideas included in this book are an emphasis on the need for behavioural measures rather than questionnaires, that computerised tests are going to be increasingly useful for testing, that we need multi-task batteries rather than isolated single tests of memory, language etc., and that perceptual-motor or performance tasks are often the most sensitive for detecting deficits and predicting practical impairment.

Generally, there seems to be a consensus, expressed in several chapters that neuropsychology has come into its own as a supporting science for neurology and neurosurgery. Any neuropsychologist interested in such possibilities will find this book a good introduction to what the future holds.

KA FLOWERS

Brain Fluids and Metabolism. By G A ROSENBERG. (Pp 207; Price £30.00.) Oxford University Press, 1990. ISBN 0 19 505324 9.

This short volume is based on a series of lectures that the author gives to the medical

students and interns at the University of New Mexico School of Medicine. It provides a succinct guide to the key features of brain metabolism for clinicians in the neurosciences. As might be expected from a book based on a well honed lecture course, it is clearly laid out and presented.

After an initial chapter outlining the essentials of the subject, the anatomy of the brain interfaces, and the physiology of the cerebrospinal and interstitial fluids of the brain are clearly described. The section on the mathematics of intracranial substance transport will be somewhat beyond most clinicians, but is relevant to an understanding of the succeeding chapters on MRI spectroscopy and the use of radio-isotopes. A final section discusses the metabolic aspects of cerebral hypoxia and brain oedema.

This book is clearly written and well produced. It will be useful to those clinicians who wish to understand the metabolic basis of neurological disease and investigation. Fortunately the price is reasonable and should not place it beyond the reach of neurologists and neurosurgeons working in the United Kingdom.

RS MAURICE-WILLIAMS

Neurobehavioral Aspects of Multiple Sclerosis. Edited by STEPHEN M RAO. (Pp 271; Price: £35.00). Oxford, Oxford University Press, 1990. ISBN 0-19-505400-8

Dr Rao, the Associate Professor of Neurology and Psychiatry in Wisconsin, has edited a review of recent advances in understanding cognitive and affective disorders in patients with multiple sclerosis. This multi-author book is not the product of a scientific meeting but an edited and thoughtful overview of a subject which for decades was dismissed as "euphoria" and largely ignored; its aim is to bridge the gap between the Clinical Neurologist and the Neuropsychologist or Psychiatrist. With the exception of a single New Zealander, currently working in Canada, all the authors are North American.

There are four sections: Clinical pathological features; cognitive effects; affective problems; and a plan of management. In the first the author comments "Too often physicians have overlooked the frequency and extent of cognitive change in multiple sclerosis" and Professor Sibley, who provides an excellent summary of clinical features in MS, duly obliges by omitting all reference to cognition and affect. The chapters on Neuropathology and Imaging by Raine and Paty respectively are well written and excellently illustrated.

The sections on Cognition and Affect reveal the bias of individual authors who suggest that multiple sclerosis causes a "subcortical" dementia with "secondary" memory defects, and that the tissue volume on MRI scan relates to the cognitive disability suggesting that the Clinical Neurologists' concept of "silent" plaques is incorrect. The frequency of euphoria is shown to be low, less than 10% of patients with multiple sclerosis, and it is evident that the Neuropsychologists involved in research in MS are beginning to recognise that change in patients with multiple sclerosis is often remarkably slow, one of the examples quoted reporting only four of 46 patients showing measurable deterioration over an 18 month period.

The final section explores the use of psychological measurement in the planning of future trials, though the slow evolution of change will surely be limiting. It recommends the development of psychological treatment regimes and investigates their role in rehabilitation. The book will be of more use to introduce multiple sclerosis to Psychologists than to demonstrate the uses of psychological measurement to neurological clinicians involved in MS research, but is a useful and well produced synopsis of current knowledge.

D BATES

The Metabolic and Molecular Basis of Acquired Disease Vols 1 and 2. Edited by RD COHEN, B LEWIS, KGMM ALBERTI AND AM DENMAN. (Pp Vol 1-1219, Vol 2-2135; Price: £175.00). Sidcup, Bailliere Tindall, 1990. Vol 1 ISBN 0-7020-1282-3, Vol 2 ISBN 0-7020 1369-2, Set ISBN 0-7020-1493-1

This is a major work of well over two thousand pages with some 160 contributors. It is expensively produced on good quality paper with colour in the text and with a small number of colour plates. From the Preface it seems that it can be seen as a companion volume to the esteemed "Metabolic Basis of Inherited Disease" by Stanbury, Wyngaarden & Fredrickson. If it were to measure up to that standard it would, indeed, be a most valuable addition to the medical literature.

Despite the generous time allowed for reviewing I confess I have not read the entire two volumes! I have worked on the principle of looking up things I think I know about, things I need to know about and things which have occurred in the course of my daily work. In most cases I have not been disappointed. The book aims at a wide readership stated to include clinicians, pathologists, biomedical scientists, epidemiologists, experts in preventive medicine and students. There is certainly something here for all of these. Perhaps this work is of greatest use to the clinician looking up a subject which arises and in which he has a smattering of knowledge. I suggest all clinicians have many topics in this category and reference to this book will usually supply the necessary information and set it in context clearly and succinctly. Even better than this, the work is excellent for a systematic introduction to certain topics, for example the chapter on immunological mechanisms. There are also admirable chapters on alcohol and hepatic encephalopathy. Looking up some subjects, however, proved disappointing, for example opioid peptides and hypogammaglobulinaemia are dealt with only *en passant*.

In a work of this magnitude errors are bound to creep in, and some may be disconcerting, for example table 41.2 should be headed hyponatraemia not hypernatraemia. It would be helpful if the index clearly indicated which is the main entry when there are multiple pages referred to.

These comments are not intended to be carping. This is an excellent work of reference covering a very wide field. It seems to me that when I remember to consult it I will rarely be disappointed. It does measure up.

MS LOSOWSKY

SHORT NOTICES

Cognitive Neuropsychology: A Clinical Introduction. By RA MCCARTHY AND EK WARRINGTON. (Pp 428; Price \$34.95.) 1990. San Diego: Academic Press. ISBN 0 12 481846 3.

This well produced paperback is an authoritative introduction to clinical neuropsychology suitable for clinical and academic disciplines.

Each chapter covers a specific cognitive function and its breakdown in the face of cerebral disease. The text is well written, avoids jargon, and clearly assembles theoretical and anatomical considerations in a wide variety of contexts. It is well illustrated by photographs and by line drawings of commonly applied clinical tests, supplemented by tables of experimental data.

In a psychology literature replete with the abstruse, the irrelevant and the unintelligible, this excellent volume will be a boon to a wide variety of neuroscientists.

Motor Control: Concepts and Issues Dahlem Workshop Reports. Edited by D R HUMPHREY AND H-J FREUND (Pp 500; Price: £70.00) 1991. Chichester: John Wiley & Sons Ltd. ISBN 0 471 92919 0.

Handbook of Multiple Sclerosis. (Neurological Disease and Therapy Series/8). Edited by S D COOK. (Pp 513; Illustrated; Price \$115.00 (U.S. & Canada) \$138.00 (All Other Countries)). New York, Marcel Dekker, Inc., 1990. ISBN 0 8247 8367 0.

This is a substantial multi-authored text covering all the important aspects of current knowledge on Multiple Sclerosis. Most of the authors are from the United States but there are English contributors. The text ranges widely over basic science immunology, clinical features, pathology, evoked potentials and imaging, and there are detailed accounts of various therapeutic options.

The text is well produced, illustrated, and abounds with well chosen references.