field are thin on the ground, and there is little useful practical advice. For example, we are told that simple visual hallucinations are not uncommon in partial epilepsy, but we are not told that they may be distinguished from the hallucinations of migraine as the latter are usually black and white and linear, whereas the former are usually coloured and rounded. The chapter on differentiating non-convulsive status from delirium is particularly unilluminating. Too often we are given a fairly standard review of a subject with little thought to how its phenomenology might overlap with that of seizure disorders. I cannot see the point in the chapter on movement disorders which includes sections on torticollis, facial dystonia and Tourette's syndrome yet dismisses juvenile myoclonic epilepsy in one sentence.

The author tends to reinforce the view, still current amongst some physicians, that the main aim of epilepsy diagnosis is to distinguish "epilepsy" from "non-epileptic attack". However, "epilepsy" is no longer an adequate diagnosis, as different epileptic syndromes have distinct appropriate treatment and prognosis. The important question in the neurology clinic is much more likely to be "what kind of epilepsy is this"? Patients are entitled to a precise diagnosis of their seizure disorder, and this can only be achieved by a thorough knowledge of the phenomenology of epilepsy syndromes and their syndromic classification. Only then can the diagnosis and classification of non-epileptic attacks be attempted.

RICHARD GRÜNEWALD

Advances in Behavioural Biology: Volume 43. Neurotransmitters in the human brain. Edited by D J TRACEY, G PAXINOS and J STONE. (Pp 224). Published by Plenum Press, New York and London, 1995. ISBN 0-306-44915-3.

This book is a commemoration of the work and influence of Istvan Tork and thus sets out to define the CNS in terms of neuropharmacological networks rather than anatomical entities. This approach has much to commend it, not least because of its heuristic value from a pharmacotherapeutic point of view. However, although neurotransmitters may seem a logical defining point for such an approach, it may prove ultimately more successful to define networks by their effector receptor subtypes rather than the afferent neurotransmitter. This said, the book presents much interesting data that support the editors' approach although on occasions it can be used to highlight the limitations of this neuropharmacological approach. Chapters 1 and 2, for example, illustrate well the strengths of the chemo-architectonic model as homogenous areas or cells in the CNS can be redefined using neurotransmitter labels. Thus areas of the brainstem become more clearly delineated using a range of different neurotransmitter markers (for example, chapter 1) and similarly amacrine cells in the retina can be subdivided into pharmacological groups which may have functional consequences (for example, chapter 2).

However, there are a number of shortcomings that then become apparent as the book unfolds, some of which are a consequence of this type of book: one that

summarises conference proceedings. Firstly there is a tendency to repetition and the cataloguing of neurotransmitter types and location with little attention to the functional significance of this distribution. Whilst this may reflect a lack of relevant work (for example, chapter 6 on excitatory amino acids and neurotoxicity in the human neocortex), it may also be a consequence of too limited a discussion (for example, chapter 3 on the developing visual cortex). A second difficulty that this book encounters is the unnecessary use of tiny figures with even smaller inserts. This is a great shame as the book relies heavily on detailed immunohistochemical studies which are difficult to appreciate at this scale of illustration. Finally the book is rather eclectic in the topics it discusses, so that some chapters seem misplaced in a book on human neuropharmacology (for example, chapter 11 on striatal pathology, grafts and GABA binding), whilst other chapters present small limited studies of only limited significance (for example, the neurotransmitter changes in Alzheimer's and Parkinson's disease discussed in chapters 12 and 13). This therefore leaves the reader with a sense of disorientation and only limited insight.

Overall this book sets out an interesting approach and presents some useful insights into the distribution of neurotransmitters in the normal and diseased human brain. However, it ultimately fails to capture the reader's imagination, and reads more as a list of pharmacological pathways than a view on the pharmacological organisation of the human brain.

ROGER BARKER

Occupational and Environmental Neurology. By NEIL L ROSENBERG. (Pp 374 £55.00). Published by Butterworth Heinemann, Oxford 1995. ISBN 0-7506-9515-3.

We are increasingly aware of neurological disorders caused or exacerbated by various chemicals and traumata encountered during work—an area known as "Occupational Neurology". Indeed, given the current epidemic of personal injury claims and the increasingly restrictive regulations governing the safety of the working environment, sooner or later most neurologists will be pressed by lawyers for a view as to whether their patient has an occupational disease. In Chapter 3 of this book the coordinating author, Rosenberg, outlines a format for rigorous and defensible analysis of causation when an occupational cause is suspected. The analytical method derives from the time-honoured Koch-Henle postulates about bacterial pathogenesis which were modified by Evans and Hill to the occupational setting. Although this approach seems to be the only valid analytical tool, it is cumbersome. In the field of occupational exposure it will always be difficult to strike a balance between either proffering too many diagnoses of a speculative and potentially inaccurate nature, or withholding such diagnoses because clear-cut proof of an occupational cause is so difficult to assemble.

It is valuable to have this area of neurology summarised in such a clear and comprehensive volume; Dr Rosenberg deserves particular credit. The subject matter ranges through organic solvents, toxic movement

disorders and neuropathies, brain and spinal cord injury, low-back pain, and problems particular to performing artists. Each neurotoxic chemical is discussed in sufficient detail for one to judge what constitutes a significant exposure, without submersion by the abbreviations and dry jargon that so often characterise such information. The chapter on movement disorders contains an excellent up-to-date review of the association between Parkinson's disease and environmental chemical exposure which most neurologists will enjoy. Ethanol toxicity is presumably an occupational rather than recreational hazard for some. It is a pity that the uncertain question of how much alcohol is needed to cause peripheral neuropathy is not addressed. Many presume this question to be answered by edicts from the health police that men can drink up to 21 units per week with safety. But the limited evidence which is available suggests that neuropathy is unlikely until at least 45 units of alcohol are drunk weekly for some years.

The rapidly growing area of "cumulative trauma disorders" is reviewed. Many will know these as "repetitive strain injuries", "over-use syndromes", "occupational cervico-brachial disorders", and most frequently encounter them as carpal tunnel syndrome due to repetitive hand use. It is surprising that the section on brain and spine trauma excluded motor vehicle injuries given the rather higher rate of accidents which occurs in those who drive company cars. This trauma chapter should have discussed the post-traumatic syndrome, and reviewed the controversial evidence for underlying brain damage, given that this disorder so commonly interferes with work following head injury. Writer's cramp is not dealt with in depth; perhaps the personal computer is driving that disorder out of the American workplace. The discussion of work-related low-back pain is refreshingly realistic about the rarity of scientifically sound diagnoses despite the frequency of successful compensation claims. This chapter contains a valuable discussion of how to rehabilitate low-back pain patients and how to advise them on whether they might return to work, and if so to which type.

From time to time most of us will need access to this succinct, well-indexed and comprehensively referenced book on occupational neurology. Lawyers specialising in this area of personal injury litigation will find it especially useful. It is a pity the title also refers to "environmental" neurology since the book does not discuss topics such as heatstroke, altitude and decompression sicknesses, trench foot, or lightning strikes and electric shock.

MICHAEL DONAGHY

Electrodiagnostic Medicine. By DANIAL DUMITRU. (Pp 1233). Published by Hanley & Belfus, Philadelphia 1995. ISBN 1-56053-071-5.

This is an impressive volume of more than 1200 pages on the topic of peripheral clinical neurophysiology covering nerve conduction studies, electromyography and somatosensory evoked potentials. The introductory chapters on physiology, volume conduction and instrumentation are well

presented and there is a clinically orientated section dedicated to motor unit disorders which covers a broad area, including CNS disorders. The end of the book contains a section on specialised examinations including paediatric and intraoperative topics. The book is very well referenced, with a comprehensive selection of original and reproduced figures. This is a serious reference text, therefore, which is accessible, readable and potentially useful to clinical neurophysiologists when faced with new or unusual cases.

SIMON BONIFACE

Infantile Spasms and West Syndrome.

Edited by OLIVER DULAC, HARRY T CHUGANI and BERNARDO DALLA BERNARDINA. (Pp 310 £40.00.) Published by W B Saunders Co, London 1994. ISBN 0-7020-1777-9.

West syndrome is the combination of infantile spasms with hypsarrhythmia on EEG. The onset in the first year of life is all too often associated with profound cognitive regression and a poor long-term prognosis. Fortunately Dr West did not know this when he first described the syndrome in his own baby son in 1841. His boy, unusually, did well. Initially spasms were thought to be rare, an impression not helped by the wide spectrum of names given to them. With better classification of the epilepsies, we now know that the incidence of spasms is 1:1400–1800. The pathophysiology is not known. It seems likely that a wide range of factors affecting the cerebral cortex can produce spasms if they occur at the correct stage of brain development. The revolution in neuroimaging, both structural and functional, has improved our understanding of the range of pathologies causing infantile spasms and of the differences (sometimes subtle) in their clinical presentation.

This book, although detailed, does carry a clear message: infantile spasms are usually symptomatic. If a structural lesion is found but not treatable, the prognosis is poor. If found and treatable, it is better. But if no cause can be found and particularly if pre-morbid development was normal, the outcome may be good, and it would be useful to identify these patients early. Prompt recognition of children with an operable lesion may also be important. The book reviews evidence that early surgery prevents the appalling long-term consequences of spasms, and discusses the role of functional imaging (SPECT, PET) in defining this group. Drug treatment is unsatisfactory. The book reviews the patchy evidence favoring ACTH over prednisolone. The authors are perhaps too low key about vigabatrin which seems promising, particularly in the treatment of the refractory symptomatic group. The question of the relationship between vaccinations and infantile spasms also deserves more prominence. Recent evidence suggests that this association is coincidental, but it has such important implications that it warrants a chapter of its own.

Overall this is a welcome book. Occasionally a clear picture is obscured by detail but one can find a lot of good new information and useful consolidation of the old.

REBECCA AYLWARD

Craniopharyngioma. Edited by GIOVANNI BROGGI. (Pp 158). Published by Springer Verlag, Berlin 1995. ISBN 3-540-75001-0.

This monograph on the surgical treatment of craniopharyngioma comprises papers given at a meeting organised by the Paolo Association for Neuroscience which was held in Milan in May 1993. The result is an up to date summary of the surgical management of craniopharyngioma by some of the recognised authorities in paediatric and adult neurosurgery. Each of the authors report the results of their personal series in the treatment of this demanding condition which was described by Northfield as being "fraught with difficulty to a degree not offered by any other benign intracranial tumour". Publishing the proceedings of a meeting as a book results in much repetition and there has been little editing of the text resulting in loss of clarity and frequent textual errors which I found distracting. Many of the chapters are illustrated with radiographic images which are adequately reproduced and clear.

The title of the monograph reflects a distinct surgical bias which emanates from a large body of current opinion which holds that the ideal treatment for these tumours is radical microsurgical excision. Although this view is widespread it is by no means unanimous and I do not think sufficient space has been devoted to the difficulties facing clinicians who have to balance the theoretical benefits of total excision against the very sizeable neuropsychological, visual and endocrine morbidity associated with this approach even in the most experienced hands. However, other treatment methods are covered including intracystic bleomycin, colloidal isotope administration and stereotactic radiosurgery. There are further chapters on neuropathology, neuroradiology, endocrine tests and hormonal replacement therapy but these topics are not covered in sufficient depth to make this text alone a sufficient source of information for doctors managing these patients.

I found the final chapter rather disappointing. This is a transcription of a round table discussion chaired by the editor addressing five important controversies in the management of craniopharyngioma. However, the exchanges left me unclear whether, for example, preservation of the pituitary stalk should be attempted and, if achieved, whether it would confer any benefit without increasing recurrence risk. The topic of who should be operating on these patients was raised but then not discussed in any depth. Overall, a useful contribution to the literature, but unlikely to find a place on many bookshelves.

RODNEY LAING

Muscle Disorders in Childhood. By v DUBOWITZ. (Pp 540; £70.00.) Published by WB Saunders Company Ltd, London 1995. ISBN 0-7020-1437-0.

There can be few clinicians who have such widespread experience of paediatric neuromuscular disease as Professor Dubowitz. This is perhaps emphasised by the fact that all but a handful of the illustrations in this beautifully presented book are derived from

his personal cases and clinical records. The book has been completely up-dated since the first edition to include much recent work on the molecular biology of the muscular dystrophies.

There is also an excellent review of our current state of knowledge regarding various ion channel disorders where there have been major advances in our understanding of this complex group of conditions within the last few years.

A further chapter encapsulates the author's extensive clinical experience of dermatomyositis in childhood but I was a little surprised not to find some discussion here about the recent pathological studies suggesting the involvement of muscle fibre capillaries at any early stage in dermatomyositis which would appear to differentiate this disorder more clearly from polymyositis than was previously thought. There is an excellent review of the author's personal experience of drug therapy in juvenile dermatomyositis, including the use of cyclosporin.

I enjoyed reading this book in which Professor Dubowitz has achieved a very successful blend of his extensive clinical experience with recent advances in molecular biology and immunocytochemistry. It should be available in any centre with a paediatric neurological clinic and would be an excellent reference text book for trainees in paediatrics or neurology seeking up to date background information on muscle disease in childhood. For anyone running a neuromuscular clinic I would suggest it to be required reading.

TIM WALLS

Magnetic Resonance Imaging of CNS Disease. A Teaching File. By DOUGLAS M YOCK. (Pp 724; £99.50.) Published by Mosby, St Louis 1995. ISBN 0-8016-8098-0.

This is a hard-covered book of 724 pages compiled from the Departments of Neurosciences and Radiology of Abbott Northwestern Hospital, Minneapolis, USA. The author explains in the preface that the book is designed to "offer a survey of CNS disease but does not constitute an all-inclusive atlas" of brain and spine MR. However the following chapters constitute a very significant proportion of what a radiologist working with MR can expect to uncover during his or her career. There are 18 chapters (13 brain, five spine) and a selected pictorial index. The main chapters are divided into pathology sections—for example, metastases, white matter disorders, hydrocephalus and cysts etc. The second contents list presents anatomical location so once the scheme is mastered it is possible to locate a particular pathology entity at a particular anatomical site fairly easily. Each page consists of two cases with a single MRI or MRA (MRI in a great majority) with several lines of text describing the interpretation of the MR with limited clinical correlation and pathology. Only one image is offered with each case (although a few cases are duplicated with different images) which is not ideal for interpretation. However, the images used are first class, both in content and quality; this is definitely the strong point of