

Akathisia and Restless Legs. Edited by PERMINDER SACHDEV. (Pp 425; £45.00). Published by Cambridge University Press, Cambridge 1995. ISBN 0-521-44426-8.

Restlessness, both mental and physical, is a symptom of a number of neurological and psychiatric illnesses. This book focuses on two of the commonest causes: akathisia (to which more than two thirds of the book is devoted) and restless legs (a brief coda). Since it is written from the authors' perspective of psychiatric practice it is largely devoted to neuroleptic-induced akathisia, and details the authors' own studies of acute akathisia and the entity known as tardive/chronic akathisia, as well as thoroughly reviewing the pre-existing literature. It is claimed to be the first extended work on akathisia, and certainly this area has been neglected in comparison with drug induced extrapyramidal side effects and tardive dyskinesia.

The reasons for this neglect become apparent throughout the text: the lack of pathognomonic features, the absence of widely accepted diagnostic criteria or rating scales, the difficulty of assessment and measurement in patients who are often suffering from concurrent psychotic illness, the lack of definitive understanding of pathophysiology. All these issues are addressed lucidly, and solutions suggested (diagnostic criteria, rating scales) to guide future research in this difficult subject. The heuristic value of considering akathisia and restless legs together is apparent in the sections on pathophysiology and treatment; the latter will be of particular value to those encountering only occasional patients with these disorders.

Price may preclude the purchase of this beautifully produced book by those not directly involved in the field, but it should be in hospital and departmental libraries and is certainly worthy of selective reading by anyone regularly prescribing antipsychotic drugs, and by neurologists with an interest in movement disorders.

ANDREW LARNER

Carotid Endarterectomy. Principles and Technique. By CHRISTOPHER M LOFTUS. (Pp 242; £129.00). Published by Waverly Europe Ltd, London 1995. ISBN 0-942219-69-4.

This well illustrated book is a practical guide to carotid endarterectomy. It encompasses the personal view of the author, who has extensive experience with the technique. The three sections are divided into fundamentals, radiographic study and surgical technique. The first section provides a synopsis of the literature which is concise and well referenced. The key studies are cited, and the author provides his personal interpretation of them. Guidelines for specific situations are also given but these are again a personal view and bias strongly towards surgery. This is particularly so for the asymptomatic carotid stenosis.

The remainder of the book provides beautifully illustrated cases and an approach for most surgical eventualities. The surgical section provides colour intraoperative photographs which are accompanied by labelled drawings illustrating the relevant anatomy. The operative pictures are particularly well reproduced.

Although this is a well illustrated

approach to carotid endarterectomy, my main criticism is that the operative alternatives have not been well addressed and that the recommendations for surgery are rather dogmatic. Nevertheless, I found this a useful contribution and would recommend it to carotid surgeons.

PETER KIRKPATRICK

Comprehensive Textbook of Psychiatry/VI. Edited by HAROLD I KAPLAN and BENJAMIN J SADOCK. (Pp 2804; £225.00). Published by Waverly Europe, London 1995. ISBN 0-683-04532-6.

This text, now in its 6th edition, has expanded to two volumes, with over 2800 pages, and encompasses the new Diagnostic and Statistical Manual, DSM IV. Comparison with the previous volume shows that many chapters have been extensively rewritten and much new material has been added.

On looking through the index of the book to locate a number of topics I wished to read for the purpose of this review, I found myself constantly distracted by interesting subjects and words, which I felt obliged to consult before reaching the item I intended to look up. Dipping into the text in this way was extremely enjoyable and informative, and all the sections I read were clearly written. Case vignettes illustrating clinical syndromes and scenarios, tables and diagrams all add to make the text accessible.

The majority of the text is of course unaffected by a transatlantic perspective. Some clinical information is, however, very American in its outlook and does not address other perspectives—for instance, the controversy that exists over dissociative identity disorder (multiple personality disorder). Some sections of the book—for example, methods of billing and payment, USA training issues and examinations have little relevance to the British psychiatrist. In contrast, there is no information on the Mental Health Act and our particular models of community care. Large sections on geriatric psychiatry and child psychiatry are present, but the book is unlikely to be the prime text for people training in these specialities.

Without doubt this is a text that should be in every library and if not for its expense, on the trainee psychiatrist's shelf. It would, however, require supplementation from a British text.

CAROL GREGORY

Merritt's Textbook of Neurology. (Ninth Edition). Edited by LEWIS P ROWLAND. (Pp 1058; £72.00). Published Williams and Wilkins, London 1995. ISBN 0-683-07400-8.

In this latest edition of this well known textbook of neurology first published in 1955, Lewis P Rowlands has set out in the customary approachable and logical manner to provide the reader with a comprehensive understanding of basic clinical practice in neurology, and succeeds. From chapter 1 covering the presenting symptoms of neurological disorders through the application and description of widely used investigations and the major pathological entities neurologists are likely to encounter in their practice, there perfuses a user friendly style which is

to the authors' credit. This is exemplified by the references which follow subsections and provide a manageable list of reviews and more specific papers which we found useful in a trial period using this book as a day to day reference book for ward work. It is also refreshing to see that the importance of neurorehabilitation is acknowledged by the sizeable section given up to this subject and outlines in a manageable fashion the principles which many of us still find difficult to grasp. If there are criticisms to be levelled it is that in a rapidly changing speciality it has been a little slower than others in incorporating some of the more recent advances in molecular genetics, basic immunology and changing prognoses for newer treatments of neurological disease. This is clearly important in a keenly contested slot in the literary market where it must compete with old favourites some of which have a less painful price tag. In summary this is a useful and easily digestible book for those learning the basic concepts of clinical neurology and has a light refreshing style which encourages return to its pages.

NEIL ROBERTSON

Neurotransmitter Release and its Modulation. Edited by DAVID A POWIS and STEPHEN J BUNN. (Pp 356; £27.95 pb, £65.00 hb). Published by Cambridge University Press, Cambridge 1995. ISBN 0-521-44616-3 pb, 0-521-44068-8 hb.

This book presents a series of incisive and interesting accounts on the organisational control of neurotransmitter release at chemical synapses both within the CNS and in the periphery, especially the sympathetic nervous system (SNS) and adrenal medulla. It evolved out of the 13th International Congress of Neurochemistry in Sydney in 1991, and is written by a number of experts in a clear informative and up to date way. The book is divided into five sections, the first discusses neurotransmitter release whilst the following chapters discuss the modulation of this release process and the clinical relevance of this modulation is dealt with in the final part of this book. Each chapter summarises a given aspect of the neurotransmitter release process and skillfully combines both an overview of the subject with data from the key experiments. This is no mean achievement as so often books such as this lose sight of their general readership and assume a detail of knowledge that can lose even the most conscientious of readers. Furthermore these various aspects of synaptic behaviour are not viewed in isolation but as the book progresses their clinical relevance becomes more apparent and is accordingly discussed. There are therefore chapters at the conclusion of this book that discuss the role of neurotransmitter receptors in hypertension, depression and recreational drug use.

However, of particular interest to most clinicians is the number of issues that this book raises which fly in the face of conventional preclinical teaching. Examples of this include the following.

It is well known that the calcium concentration inside the cell is critical for neurotransmitter release, but as important is the spatial distribution of calcium within that cell, an area discussed in the opening chapter by Burgoyne and Cheek. This topic of the role of calcium in the release process is

taken up in later chapters by Majewski and Barrington and Bleakman and Miller when discussing the regulation of calcium influx and its relationship to receptor mediated secondary messenger systems.

There is increasing evidence that many neurons release more than one neurotransmitter—so-called cotransmission. The notion of neuromodulation in the context of cotransmission is well discussed by Sneddon in this book—namely, that some factors released at the synapse may function more to modify the function of another neurotransmitter rather than have a direct action itself.

The existence of inhibitory presynaptic autoreceptors at the synapse is well established but this simplistic view of synaptic modulation is in need of revision as the number and distribution of both auto- and heteroreceptors on the presynaptic nerve terminal expands. Furthermore the interplay between the two synaptic elements is becoming increasingly important, but sadly no discussion on LTP is to be found in this book; an area that currently is producing many new concepts with diffusible messengers such as nitric oxide and possibly carbon monoxide.

The classic division of the autonomic nervous system into sympathetic and parasympathetic components is now no longer tenable in the light of work demonstrating an interaction in the periphery between noradrenaline and acetylcholine. Furthermore the cholinergic system is now complicated by the fact that there is heterogeneity of nicotinic acetylcholine receptors (at least in the brain), to complement the known diversity of muscarinic receptors.

Finally many factors conventionally thought of as being hormones are increasingly being found to have a neurotransmitter function or at least an ability to modulate neuronal synaptic transmission. Such factors include the corticosteroids and adrenaline, ACTH and angiotensin. The book therefore presents much information that the clinician would find new, and which most preclinical textbooks miss out or gloss over. However, the major difficulty that this book encounters is knowing who it is primarily written for. To the scientist working in this area, most of these data are well established and not especially challenging in content. To the clinician most of it will seem irrelevant, and the clinical slant emphasised in the later chapters does not detract from the fact that this is essentially a book on the modulation of synaptic function in animal systems. To the preclinical medical student there is too much detail without enough breadth and so other books on biophysics and pharmacology will seem more attractive. However, the final year student interested in synaptic pharmacology and physiology will find this book invaluable, as will those students embarking on research in this area. But for the majority of people this book, despite its excellent clear presentation, will remain too scientific and specialist to be of interest.

ROGER BARKER

Attentional Processing. The Brain's Art of Mindfulness. By DAVID LABERGE. (Pp 262; £27.95). Published by Harvard University Press, London 1995. ISBN 0-674-05268-4.

Attention is the most pervasive but the most elusive of all our cognitive abilities. We must

select from the flood of information potentially available to awareness or, in George Eliot's memorable exaggeration, we would "hear the grass grow and the squirrel's heart beat and die of that roar that lies on the other side of silence". Were you aware of the shoe enclosing your left foot until you read this? If the focus of our attention determines our experience, the processes which direct it must be of key importance to the economy of mind and brain.

LaBerge's lucid study helpfully distinguishes the goals, expression, mechanism and control of attention. Its goals range from enhancement of the speed and accuracy of responses to maintaining a state of rapt contemplation (LaBerge remarks glumly that we "find it difficult to frame a justification for this use of attention in computational terms"). It is expressed by amplified signals in one or several brain areas, which can facilitate thoughts and actions as well as perception. Its mechanisms revolve around the superior colliculus and thalamocortical interactions. Its control resides in prefrontal areas, in particular the dorsolateral and ventrolateral prefrontal and anterior cingulate cortices.

The first half of the book is devoted to the experimental psychology of attention, the second to its neurobiology. The early chapters might have benefited from a more systematic account of the relevant experiments, and illustration of the mainly visual tasks might have spoken more clearly than text. But overall the monograph is highly informative and very readable. LaBerge does full justice to the neurobiological, behavioural and subjective complexities of attention.

ADAM ZEMAN

Colour Atlas of Paediatric Neurology. Edited by RICHARD W NEWTON. (Pp 256). Published by Times Mirror International Publishers Ltd, London 1995. ISBN 0-7234-18799.

It seemed odd at first to be asked to review a slender picture book for a neurological journal. Surely such a volume could not admit sufficient detail to appeal to serious paediatric neurologists used to large tomes filled with detail about endless genetic and metabolic abnormalities. But I was pleasantly surprised by the usefulness of this colour atlas. It is compiled by a team of paediatric neurologists, neurosurgeons, geneticists and neuroradiologists all from the Manchester area who have joined forces to produce an excellent book.

It starts with a thoughtful section on talking with families. Paediatric neurology, even more than other paediatric specialties, requires the ability to walk an emotional tightrope by providing factual and honest information whilst being sensitive to the needs of highly anxious parents. The book wisely takes its time before launching into specific disease categories. There is a good early chapter on the child with special needs which focuses on some of the early indicators that a child might be handicapped. We are all too often faced with a profoundly disabled patient for whom no formal diagnosis is ever reached. Early awareness of this situation can help to soften the blow. The "subject" chapters are well written and contain sufficient detail to act as a useful aide mémoire even to the specialist paediatric neurologist. Non-specialists will find the clear systematic approach easy to

negotiate and understand. The book will be invaluable to medical students both for the magnificent collection of illustrations and for the lack of complicating detail.

I only have one or two minor criticisms. The number of typographical errors in the text is unacceptable and in some areas whole paragraphs are either left out or duplicated. There are a few accounts of neuroradiology in which a picture would have been worth a thousand words. But these are small quibbles. Overall this is a welcome book which should appeal to a wide readership. The Manchester team deserve applause.

REBECCA AYLWARD

Trigeminal Neuralgia (MPN 28). By JOANNA M ZAKRZEWSKA. (Pp 229; £37.50). Published by WB Saunders Company Ltd, London 1995. ISBN 0-7020-1696-9.

There are a number of problems with trigeminal neuralgia. Despite evidence from surgical findings that vascular cross compression may be relevant, the full cause remains obscure. While the symptoms are usually characteristic there are many patients in whom the diagnosis may be difficult. The multiplicity of medications and surgical operations are ample evidence that there is no fully satisfactory treatment. While a fairly frequent condition in neurological practice, trigeminal neuralgia is sufficiently rare for general practitioners to see only a very few cases in a normal career.

This book clearly and succinctly expresses what is known about the condition through the personal experience of the author, whose main interest it is, and through the extensive publications cited, amounting to over seven hundred references. Either of these sources would recommend the book to those who see and treat patients with trigeminal neuralgia, or who have an interest in answering the various questions which remain. For the former there is much sound advice based on personal experience in such matters as the need to inform patients on the choices of treatment through counselling and information leaflets. For the latter there are some intriguing questions to be answered, such as why the condition is much more common on the right side than the left, which seems strange for a condition which some still regard as idiopathic. I highly recommend this book.

ROBIN ILLINGWORTH

Nerve Injuries. Edited by KLINE and HUDSON. (Pp 611; £100). Published by Harcourt Brace, London 1995. ISBN 0-7216-3264-5.

Workers in the field of surgical disorders of the peripheral nerves have been waiting for some time for a comprehensive account of the work of Dr David Kline of New Orleans and Dr Alan Hudson of Toronto. Now at last we have this considerable work from them both, concerned principally with the results of operation, and in particular with the results of operations done at Louisiana State University Medical Center and related hospitals. The authors start with a graceful dedication to the memory of Sir Sydney Sunderland. The text begins with six chapters relevant to the whole field. Then follow 11 chapters arranged topographically, six of them devoted to the brachial plexus and conditions affecting it, including thoracic



Neurotransmitter Release and its Modulation

Roger Barker

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