BOOK REVIEWS

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Age-Related Dopamine-Dependent Disorders. Edited by N SEGAWA and Y NOMURA. (Pp 225 \$192.00). Published by Karger, Basel 1995. ISBN 3-8055-5960-7.

This book summarises in 27 short chapters the proceedings of a symposium held in November 1993 to commemorate the 20th anniversary of the Segawa Neurological Clinic for Children. It therefore is not surprising that a large section of this book is devoted to the condition of dopa responsive dystonia (DRD). This rare condition is now thought to be identical to the hereditary progressive dystonia with marked diurnal fluctuation. Both of these conditions have been linked to the long arm of chromosome 14 and have as their pathology a disorder of dopamine turnover in the terminal boutons of the nigrostriatal pathway. The elucidation of this abnormality helps explain the sensitivity of the condition to low doses of levodopa, and the fact that the condition remains stable over time so that patients do not require increasing doses of medication with all its inherent complications.

This book, apart from providing chapters with information such as that discussed above, also presents many interesting speculations on the role of the dopaminergic system in disease and health. Admittedly at times this is rather limited but it nevertheless raises many interesting questions. For example the concept is advanced that rigidity and dystonia are a feature of early onset basal ganglia dopamine disturbances whilst parkinsonism and tremor are more characteristic of disorders in the aged system. Another example of this emphasis on interesting speculation is the notion of overlap between early onset Parkinson's disease, juvenile parkinsonism and DRD. This approach clearly has the potential to offer new insights into the pathogenesis of the much commoner late onset sporadic idiopathic Parkinson's disease (iPD). In this respect Leenders *et al* comment on the fact that dopamine supersensitivity in the striatum seems to be a consequence more of axonal loss of the dopaminergic projection from the nigra, rather than dopamine deficiency itself. Of course the lack of dopamine receptor supersensitivity in DRD may simply reflect the fact that there is still a basal release of adequate dopamine in the striatum and this in itself is capable of preventing receptor supersensitivity.

However, although the book offers many interesting insights into the dopaminergic nigrostriatal system, there is a degree of repetition and some difficulty in seeing the rel-

evance of certain chapters. For example the chapters on the pharmacology of the ventral striatum and the anatomy of locomotion seem a little misplaced in a book of this type. Furthermore although the chapters on basal ganglia neurosurgery give much food for thought, they seem to sit uneasily in this book where the basic disease for which they are used, namely iPD, is not really discussed. Conversely other chapters would have been welcome, whilst others would have benefited from relocation. For example a chapter on the anatomy and development of the nigrostriatal network would have made a useful opening chapter. Instead the anatomy of the basal ganglia was not explicitly discussed until section 2 of the book, and a clear developmental account was never forthcoming.

Overall the book does provide much useful information, both clinically and scientifically. Unfortunately though it fails to accurately define its subject matter and as such falls between two stools with not enough detail for the neuroscientist and too little clinical detail for the neurologist. Indeed more work on the commoner diseases of the basal ganglia (such as iPD) would have been welcome, and its omission will therefore greatly limit the appeal of this book.

ROGER BARKER

Immunology of Neuromuscular Disease. Edited by R. HOHLFELD. (Pp 299 £70.00.) Published by Kluwer Academic Publishers Group, Dordrecht 1994. ISBN 0-7923-8844-5.

Despite the self-evident areas of subject matter shared between this book and McLeod's *Inflammatory Neuropathies*, reviewed recently in these pages, the differences are in fact far greater than the sum, or rather the subtraction, of the parts. For although Professor Hohlfeld's book includes coverage of neuromuscular junction disorders and inflammatory diseases of muscle, it is in style and emphasis that the true differences lie. As the book and series titles suggest, *Immunology of neuromuscular disease* is aimed not only at clinical neurologists, but also at immunologists interested in the area (as well as those clinging by the finger tips to both stools).

For clinicians, there are outstanding accounts, brief but none the less comprehensive, of the neurological features, diagnosis and current therapy of Guillain-Barre syndrome, chronic inflammatory demyelinating neuropathy, and variants thereof, vasculitic neuropathy, Lambert Eaton myasthenic syndrome and neuromyotonia, myasthenia gravis, and idiopathic inflammatory myopathies. A chapter on retrovirus related neuromuscular disease is equally authoritative and informative but sits a little uneasily in a monograph which includes no other infective disorders, for example leprosy springs to mind as being of no less immunological relevance. An account of neuropathies associated with anti-myelin antibodies is perhaps a little ungainly, with a very great emphasis placed clinically on benign monoclonal IgM gammopathy, to the detriment of the electrophysiologically and clinically rather different neuropathies

associated with other classes of benign paraproteinaemia, or indeed with malignant gammopathies. There is also much immunological attention devoted to the fine epitope tuning of the IgM antibody response, and an unfortunate howler also mars this chapter, namely the identification of C1q, C3d and C5 as "terminal complement complex".

This is a slight shame, as the forementioned chapters include detailed and very good descriptions of the immunological aspects of their subject diseases, mostly married with great success to the clinical accounts. Readers of an immunological persuasion receive additional sustenance from Wekerle's (too brief!) introductory chapter on immunological self tolerance and auto-immunity, Linington's excellent account of animal models of peripheral nerve disease, and a slightly patchier chapter on "Immunological factors that influence disease severity in experimental allergic myasthenia gravis".

On the whole this is an excellent book, Professor Hohlfeld having assembled and marshalled a formidable rank of coauthors. It is clear and well-structured, well-indexed and well-bibliographed, and works both as a source of casual reference, as a series of up to date reviews, and a detailed but manageable monograph. But how to advise the neurologist interested in purchasing this book and the also excellent *Inflammatory neuropathies*? Easy, so great are the differences—buy both.

NEIL SCOLDING

Approaches in Neurosurgery. By I MOHSENIPOUR, W-E GOLDBAHN, J FISCHER, W PLATZER and A POMAROLI. (Pp 229 298DM). Published by Georg Thieme Verlag Stuttgart, 1994. ISBN 3-13-100241-7.

This book provides a systematic approach to a large variety of surgical approaches to intra and extracranial regions, spine, and peripheral nerve. Each chapter is stereotyped, and they have presented the typical indications for surgery, principal anatomical structures involved, positioning of skin incisions etc. They then go on to provide technical details on these specific approaches. They finally offer advice regarding potential errors and dangers for each surgical procedure. Each chapter is illustrated by means of partially coloured drawings which are sparsely labelled.

The book has been written with the surgical trainee clearly in mind, but overall I feel the book would be of use to the more experienced surgeon with respect to some of the more unusual pathologies requiring approaches which are rarely undertaken. My main criticism relates to the illustrations which will be difficult to compare with the clinical setting. It would have been useful to have intraoperative pictures adjacent to the drawings for direct interpretation. The only other main criticism is that the stereotyped layout has resulted in considerable repetition. As such the book is best used as a reference manuscript for looking up specific approaches as and when they are required.

Despite the above reservations, I would still recommend this work to the training

surgeon, and in addition to the more mature neurosurgeon who will have less difficulty in interpreting the illustrations.

P KIRKPATRICK

The Human Brain: in photographs and diagrams. By J NOLTE and J B ANGEVINE. (Pp 192; Price: £31.00.) 1995. Mosby, St Louis, MO. ISBN 0-8016-8125-1.

I was once asked, whilst a research registrar, to teach some MRCPsych candidates neuroanatomy. This task I would liken to trying to enthuse a band of Mongolian trainee cattle herdsman to learn the A to Z of London by heart. Having to learn maps of places one might never visit is a task that challenges anyone's enthusiasm for topography. However, trainee London taxi-drivers, by constantly visiting places aided by their "A to Z", quickly become familiar with the anatomy of London in order to pass their viva. In the same way many trainee neurologists realise how much nervous system anatomy they need to know some time after they have failed to learn it for the first time as students. So for anyone (MRCPsych candidates included) needing a useful Michelin map guide to the brain for their travels in the neurosciences . . . this is it, right down to a Michelin-style ring binding (as useful here as in the road maps in the car on holiday).

Here is a striking example of how to ease what the preface calls the "daunting task" of learning about the functional anatomy of the brain. The illustrations are a superb mixture of photographs (digitally retouched) of stained whole brain sections in many planes and quite beautiful diagrams and annotated photographs illustrating neuronal circuitry including the main neurotransmitter systems (the latter diagrams are not very widely available elsewhere). Therefore, although aimed at medical students, this book should be bought by neurological trainees (and/or their librarians) since it will prove invaluable. Anatomy teachers should hope that in the future for their students they can get access (on the Internet or on CD-ROM) to the Washington School of Medicine's computerised brain reconstruction images used in this book.

The main features of the brains' topography are demonstrated by successive computerised reconstructions starting with the brainstem-mesencephalon-diencephalon stalk upon which successive structures (ventricles, hippocampus, basal ganglia, etc), in different colours are superimposed. Later chapters then use the same reconstruction images to demonstrate the different planes from which sections are taken. Below each clean stained brain section labelling is provided on "ghosted" images of that section. At the end are well produced CT, MRI and angiogram photographs all clearly illustrating relevant anatomical watering holes. The venous anatomy is shown on venous-phase angiograms labelled even with the direction of blood flow!

If you need to know the anatomy of the brain, either to pass an exam, diagnose a patient's problem, or teach neuroanatomy, you will not regret the hole in your budget this book will make.

CHRIS ALLEN

Advances in Radiosurgery. Edited by C LINDQUIST, D KONDZIOŁKA, and J S LOEFFLER. (Pp 124; Price: DM 150). Published by Springer Verlag, New York 1994.

This book is composed of a selection of papers from the proceedings of the 1st Congress of the International Stereotactic Radiosurgery Society, held in Stockholm in June 1993. A wide range of topics is covered but most papers give only the results of small series and an appraisal of current indications rather than any recent advances in radiosurgery as the cover title of the book might lead one to expect. However, of the less established indications, sufficient benefit has been shown for radiosurgery in the management of low grade glioma, the squamous cell type of craniopharyngioma, low flow corticocavernous fistulae, and some cases of focal epilepsy to justify its continued exploration in larger series.

In the long run this newly formed Society plans to meet every two years, so the published proceedings should continue to provide a useful update on the range and efficacy of stereotactic radiosurgery, which is still a relatively new technique.

DAVID FORSTER

Clinician's Guide to Neuropsychological Assessment. Edited by RODNEY D VANDERPOEG. (Pp 307; Price £53.95). Published by Lawrence Erlbaum Associates, Hove 1994. ISBN 0-8058-1253-9.

Any neurologist, psychiatrist or even neurosurgeon buying this book will, I'm afraid, be sadly disappointed: the term "clinician" in the title applies to practising neuropsychologists, but even among the latter group, it is hard to think who would enjoy this rather turgid book. Instead of making accessible a fascinating and vibrant subject, it lives up to the warning issued in the first sentence of the introduction "neuropsychological assessment is a difficult and complicated process". This need not, I think, be the case.

Most of the book revolves around methodological issues of patient assessment. For instance, whether to use a set and standard test battery on their flexible approach; the problem of assessing pre morbid intelligence; the difficulty of assessing cognition in individuals of highly variable backgrounds.

The dominant trend in European neuropsychology, that is to say the application of cognitive models, derived from normal experimental psychology, to patterns of deficit in brain-injured subjects, is almost entirely neglected. Any naive reader of this book would be forgiven for total ignorance of the area which has undoubtedly revolutionised our understanding of human cognition and of brain structure-functional relationships.

JOHN R HODGES

Principles of Neurosurgery. Edited by SETTI S RENGACHARY and ROBERT H WILKINS. (£150.00). Published by Wolfe, London 1994. ISBN 1-56375-022-8.

This book, edited by the authors of the best known and most definitive neurosurgical textbook, sets out to provide a comprehensive but not encyclopaedic overview of clinical neurosurgery. The book achieves its aim in 51 chapters and inevitably, in a multi-author text, some are better than others. In the preface the authors offer the reader "extraordinary visual appeal" and I was indeed impressed by the illustrations. There are many excellent radiological images, photographs, drawings, tables and algorithms. The layout is attractive and invites the reader to dip in. The introductory chapter, which covers the historical development of neurological surgery, sets the tone and is beautifully illustrated.

There is a good mix of basic science and clinical material, so necessary for the successful practice of this discipline. Important allied areas are also covered with good chapters on the assessment of pituitary function, radiotherapy and chemotherapy of the CNS. The text is easy to follow, well structured and subdivided logically. Referencing is full but inevitably, in a textbook of this size, somewhat dated.

The authors have set out to provide an introduction to neurosurgery for medical students and junior house officers. I do not think the book will find much of a market on this side of the Atlantic in these groups. However, as an introductory text for those entering higher surgical training in neurosurgery this book is likely to be popular. I would certainly recommend all departmental libraries to buy a copy for their trainees but individuals may find £150 too high a price to pay. Those studying for the inter-collegiate fellowship will find that the text falls short on detail and also in the appreciation of some of the more controversial aspects of practice.

RODNEY LAING

Handbook of Tremor Disorders. Edited by LESLIE J FINDLEY and WILLIAM C KOLLER. (Pp 608; Price: \$195.00). Published by Marcel Dekker, New York. ISBN 0-8247-8859-1.

Within the ethereal circle of movement disorders there exists a group of specialists who devote much of their time to research into tremor. These individuals, with the help of The International Tremor Foundation in Chicago, have organised a series of excellent symposia and workshops over the years and have significantly advanced both knowledge and awareness of the variety and complexity of neurological conditions in which tremor is a major clinical feature. Both the editors of this book have a major interest in the investigation and treatment of tremor, and as a result of their international contacts have been able to marshal a formidable team of contributors.

David Brooks reviews the recent findings from functional imaging, which have shown global overactivity of the cerebellum in the tremor of Parkinson's syndrome, essential tremor and neuropathic tremor, and in addition the fascinating finding that patients with an isolated rest tremor invariably have nigral dysfunction. It will be crucial to see if these cases remain as a discrete benign tremulous form of Parkinson's disease or go