

most effective cure for the patient. Routine antiemetics had minimal or no effect on his symptoms. This clinical syndrome, to the best of our knowledge is the first of its kind in the neurological literature.

Vomiting has been associated with a chemoreceptor trigger zone in the area postrema and a vomiting centre, both located in the medulla oblongata.⁴ The location and existence of the vomiting centre is, however, controversial. A possible anatomical pathway from the retina to the vomiting centre and the chemoreceptor trigger zone in the area postrema may explain the symptomatology in our patient. Retinal ganglion cells project to the primary visual cortex (Brodmann area 17) for visual perception. Efferents from the visual cortex project to the superior colliculus, which is known to send efferents to the pontine and medullary reticular formation,⁵ reticular formation being the site of the vomiting centre. As visualised in brain MRI (figure) a large lesion occupied the posterior portion of the brainstem including the medulla. Ephaptic spread, arguably the most accepted explanation of paroxysmal symptoms in multiple sclerosis,⁶ from this lesion could certainly involve the vomiting centre and the chemoreceptor trigger zone in the area postrema. Furthermore, involvement of the nucleus of the tractus solitarius could also lead to nausea and vomiting as it is reciprocally connected to the area postrema. Despite the plausibility of this explanation, one needs to bear in mind that clinical symptoms and lesions seen on MRI in multiple sclerosis do not always correlate.

Curiously, despite the protean manifestations of paroxysmal symptoms in multiple sclerosis, paroxysmal nausea and vomiting have never been reported as manifestations of multiple sclerosis. The differential diagnosis of paroxysmal vomiting is complex and among the many causes, a psychogenic basis has also been emphasised. In one report, intractable hiccups were reported as manifestations of multiple sclerosis.⁷ In the same paper, the authors quoted several surveys emphasising a psychogenic basis of intractable hiccups, thereby raising the possibility of misdiagnosing multiple sclerosis as a conversion reaction. We agree with their point of view as paroxysmal nausea and vomiting without neurological symptoms may easily mislead the clinician towards a psychogenic aetiology, if other tests are negative. The possibility of multiple sclerosis should be considered when evaluating patients with paroxysmal symptoms such as nausea and vomiting.

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MATTERS ARISING

Progressive supranuclear palsy: neuropathologically based diagnostic clinical criteria

Collins *et al*¹ provide a valuable set of criteria to aid in the clinical diagnosis of progressive supranuclear palsy. They include as a prerequisite the absence of family history: this is based on their own series of 12 patients who did not have a positive family history and the fact that progressive supranuclear palsy is considered to be sporadic. We have reported a family with autosomal dominant progressive supranuclear palsy, one member of whom would have fulfilled the criteria of Collins *et al*¹ were it not for the family history.² Details on the other family members were insufficient to apply the criteria but members of the family showed classic neuropathological changes at necropsy. Thus, progressive supranuclear palsy shares with many other neurodegenerative diseases, such as Alzheimer's and Pick's disease, a phenotype common to both sporadic and autosomal dominant cases. Whereas the classification of such cases as separate diseases or subtypes is arguable, the current usage in the field of Alzheimer's disease is to consider autosomal dominant familial cases as a subtype. The prerequisite of an absent family history may unnecessarily exclude cases of familial progressive supranuclear palsy.

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NOTICES

First European Forum of quality improvement in health care. QEII Conference Centre, London. 7-9 March 1996.

This first European Forum will allow the exchange of ideas on quality improvement in health care and provide education. The forum will consist of plenary lectures, parallel seminars and workshops and discussions and short educational courses.

The themes of the first forum are:

- The fundamentals of continuous quality improvement
- Achieving patient orientation
- Leadership and managing organisational change
- Improved quality and reducing costs
- The importance of measurements
- Involving everybody in quality improvements
- Professional education for quality
- The politics of quality.

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World Federation of Neurosurgical Societies: awards to young neurosurgeons

The World Federation of Neurosurgical Societies will give five awards to young neurosurgeons for the best papers submitted for presentation at the XI International Congress of Neurological Surgery to be held in Amsterdam, Netherlands on 6-11 July 1997. This will be open to all neurosurgeons born after 31 December 1961. Each award will consist of an honorarium of US \$1500, a certificate, and complete waiver of registration fees along with accommodations for the Congress. The papers will be judged by a committee and must contain original, unpublished work on basic research or clinical studies related to neurosurgery.

Young neurosurgeons should submit eight copies of the manuscript (not more than 10 double spaced typewritten pages exclusive of figures and tables) to:

Albert L Rhoton Jr MD, Chairman
WFNS Young Neurosurgeons Committee,
Department of Neurological Surgery,
University of Florida Medical Center,
PO box 100265; 1600 SW Archer Road,
Gainesville, Florida 32610-0265, USA

The submission should be accompanied by a supporting letter from the Head of the candidate's neurosurgical department. The last date for submission is 1 October 1996.

BOOK REVIEWS

All titles reviewed here are available from the BMJ Bookshop, PO Box 295, London WC1H 9TE. Prices include postage in the United Kingdom and for members of the British Forces Overseas, but overseas customers should add £2 per item for postage and packing. Payments can be made by cheque in sterling drawn on a United Kingdom bank, or by credit card (Mastercard, Visa or American Express) stating card number, expiry date, and your full name.

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