an excess incidence among doctors and nurses.

The sharply conflicting data from the two studies suggests that one may be biased. The lack of any excess of MS among spouses of MS patients³ indicates that MS is not (or is very rarely) a transmissible disease among adults. This observation, as well as our study, and the potential biases outlined above suggest that the incidence and mortality of MS among doctors and nurses is likely to be close to that in the general population.

RICHARD GRAY

Clinical Trial Service Unit and ICRF Cancer Studies Unit,
Radcliffe Infirmary,
Oxford, UK

- 1 Dean G, Gray R. Do nurses or doctors have an increased risk of developing multiple sclerosis? *J Neurol Neurosurg Psychiatry* 1990;53:899-902.
- 2 Shepherd DJ, Downie AW. Prevalence of multiple sclerosis in north-east Scotland. *BMJ* 1978;2:314-16.
- 3 Editorial. Risk factors for multiple sclerosis: race or place? *J Neurol Neurosurg Psychiatry* 1990;53:821-3.

Evaluation of vigabatrin in refractory epilepsy

We were interested to read the report by Sander *et al* of their experience of vigabatrin in 128 patients with severe medically refractory epilepsy, and in particular their comments on neurotropic side effects.¹ We began using vigabatrin at the beginning of 1990 and were struck by the high incidence of such side effects. We therefore recorded the effects of vigabatrin therapy in 30 sequential patients.

All the patients had localisation related seizures intractable to conventional medical therapy. The seizures were complex partial in 24, focal motor in five, and secondary generalised in one patient. Eleven patients had secondary generalised seizures in addition to focal seizures. The average age was 33.9 years with an average duration of seizure disorder of 17.8 years. The first 10 patients were started on a dose of 2000 mg/day, the rest on 1000 mg/day (see below). The maximum dose used was 4000 mg/day. The patients were started on vigabatrin between January and August 1990, and all are still being followed up. Side effects permitting, all had a minimum three month trial of therapy.

Of the 30 patients started on vigabatrin only seven remain on it. The drug was withdrawn in 10 patients because of lack of effect, in four patients who relapsed following an initially good response (all the relapses have occurred within three months of starting therapy), in two patients whose seizures appeared to become worse on vigabatrin, and in seven patients because of neurotropic side effects. This type of side effect was most common in the group as a whole, and included drowsiness (five), irritability (three), anxiety (one), depression (two), emotional lability (two), confusion (one) and psychosis (one). Other side effects included weight gain (two patients) and headache (one patient).

The seven (23%) patients remaining on vigabatrin therapy have all had either a useful reduction (> 30%) in seizure frequency, and/

or significant amelioration of seizure manifestations, but none is seizure free.

The starting dose of vigabatrin was reduced after the first 10 patients because seven of these patients suffered neurotropic side effects, in two cases severe. There were no severe neurotropic side effects in patients started on the lower dose of 1000 mg/day. All of our patients who showed a therapeutic response did so at a dose of 2000 mg/day or less, and there were no patients in whom increasing the dose beyond this produced any further response.

Our group of patients was different from that of Sander *et al*, in the type of epilepsy, and in being composed entirely of outpatients who may have less severe disease. We have found its therapeutic effect less good, but our experience of the neurotropic adverse effects associated with vigabatrin is similar, and we too have seen tolerance develop in a significant number of patients. A response rate of 23% in patients refractory to first line anticonvulsant agents is certainly worthwhile, but careful supervision is required in the early stages of therapy, and we agree with Sander *et al* that vigabatrin should be used with particular caution in those with a previous history of psychological problems.

ILONKA KRUTSCHMANN

RODERICK DUNCAN

Institute of Neurological Sciences,
Southern General Hospital,
Glasgow, UK

- 1 Sander JWAS, Trevisol-Bittencourt PC, Hart YM, Shorvon SD. Evaluation of vigabatrin as an add-on drug in the management of severe epilepsy. *J Neurol Neurosurg Psychiatry* 1990;53:1008-10.

BOOK REVIEWS

Handbook of Sleep Disorders. (Neurological Disease and Therapy Series/6). Edited by M THORPY. (Pp 817 Illustrated; Price US & Canada \$165.00; All Others \$198.00.) New York, Marcel Dekker Inc, 1990. ISBN 0 8247 8295 X.

This is a new and attractive book about sleep disorders. The stated aim is to be a comprehensive summary of knowledge in nearly all aspects of human sleep. Under the able editorship of Michael Thorpy the book substantially but not completely fulfils this claim. About a third of the book covers the physiology and anatomy of sleep mechanisms and the pharmacology of sleeping and waking. The remainder is concerned with clinical sleep medicine. The code of practice of American sleep disorders centres is amply covered, and reflects the very high ratio of North American authors. There are two starting points for this approach. The first is the chapter by Lemmi on sleep disorders centres and polysomnographic evaluation, and the second is the recent American-inspired, international classification of sleep disorders. This system may result in a primary focus on the sleep laboratory rather than on the patient.

The coverage of primary and secondary sleep disorders as well as circadian rhythm problems is wide. Some might argue at the

use of the term "dyssomnia" to cover narcolepsy, obstructive sleep apnoea and other hypersomnias, but this classification is clinically relevant. Many of the sections on insomnia are particularly good, notably those by the Italian school, led by Lugaresi in his description of fatal familial insomnia. The discussion of parasomnias and secondary sleep disorders is thorough but I wonder if a disproportionate amount of the book is devoted to these topics. For example, the detailed focus on sleep disorders in many degenerative neurological disorders seems excessive. However the book is essential reading for European as well as American polysomnographers and contains outstanding sections on narcolepsy from Broughton and Honda, despite some apparent contradictions. Thus Broughton reports that monozygotic twins may be concordant for narcolepsy and cites three references in favour of this; in the next chapter the same references are cited by Honda to support the statement that no examples of complete concordance are known. The book is well produced, with good illustrations and figures and adequate references. It is however far too expensive.

MERYL DAHLITZ

Positron Emission Tomography in Dementia. Frontiers of Clinical Neuroscience Vol 10. Edited by RANJAN DUARA. (Pp 186; Price: US\$ 89.95). New York: Wiley-Liss, 1990. ISBN 0 471 56804 X.

This is an elegantly bound volume in the Wiley-Liss series of Frontiers of Clinical Neuroscience. It reviews our current understanding of dementia using Positron Emission Tomography. At \$89, I picked up this book excited as if I had been invited to eat at an exclusive restaurant by a selection of famous transatlantic chefs.

The first course, which explained the methodology behind PET was excellent. Despite the risk of being a rather indigestible topic, it combined sufficient spices to make a most agreeable *hors d'oeuvre*. To the non expert this section was refreshingly easy to read and understand.

The main course in contrast, which tackled the metabolic deficit found in Alzheimer's disease, was rather disappointing. One of the reasons for this was the tone set by a prefacing chapter on cerebral atrophy. This was the wrong accompaniment for a review of the PET findings and the savoury topic of atrophy should have been reserved for after dinner. An opportunity was missed to provide an elegant meta-analysis of PET results. The presentation was not as good as I expected and the chef must have been disappointed with the quality of the plates. However the chapter on Huntington's chorea was excellent.

For dessert there was a wide range of topics, including, ligands and PET, activation paradigms, and SPECT. It was a little over-ambitious, since it failed to mention a number of important findings. For example the studies of 18F Dopa in Alzheimer's Disease, and some of the case reports of PET in the rarer dementing syndromes, were absent. Work from Mesulam and others from this side of the Atlantic on focal degeneration were omitted. The foreword expressed a

desire to suggest direction for future investigation and a chapter should have been reserved for this purpose.

To the connoisseur the meal was perhaps disappointing. However several of the dishes are to be recommended, especially the first course. The book aimed to provide a clear direction for future study which I feel it unfortunately failed to achieve.

ANGUS KENNEDY

Surgery for Epilepsy. Contemporary Issues in Neurological Surgery. Edited by SUSAN S SPENCER AND DENNIS D SPENCER. (Pp 201 Illustrated; Price £39.50.) Oxford, Blackwell Scientific Publications, 1990. ISBN 0 86542 089 0.

This brief book, less than 200 pages, has been written by a distinguished group of North American contributors in response to the renewed interest in the surgical treatment of epilepsy. The first section covers preoperative selection, the use of intracranial electrodes and special considerations in children. The second section covers specific operative treatments and the third section is a single chapter describing the outcome of treatment including aspects other than seizure control.

This attempt to provide a simple and comprehensive guide to the surgical treatment of epilepsy deserves considerable sympathy. The standard of the contributions is high. Often topics are discussed in detail, for example intracranial recording, but with the omission of techniques which are not used locally. The section on temporal lobe surgery describes two or three methods in detail, omitting others of importance and giving no guidance as to how they should be used. Only one method of hemispherectomy is described in detail, and the only application of functional surgery described is callosotomy. The contributions of modern brain imaging and the place of neuropathology are hardly mentioned.

However, within this narrow parochial view, topics are discussed in detail and one has the impression of attending a series of honest, interested but restricted local seminars. This book would fail to impress those with some knowledge of epilepsy surgery and may mislead the uninformed.

CE POLKEY

Pediatric Neurology: Behavior and Cognition of the Child with Brain Dysfunction. Series: Pediatric and Adolescent Medicine. Edited by N AMIR, I RAPIN AND D BRANSKI. (Pp 186; Price: Sfr 174; DM 208; UK £75.70; US\$ 139.25). Basel: Karger, 1991. ISBN 3 8055 5223 8.

A distinguished group of child neurologists, psychiatrists, psychologists and educationalists contribute to the aims of creating a meeting ground and of facilitating communication between specialists whose primary interests in disturbances of higher brain functions are diverse. Some of the authors cross the artificial boundaries between the various disciplines more successfully than others.

A multidisciplinary approach is attained well in the chapters on innate specialisation

for emotion, assessment of psychiatric status in the child with cerebral palsy, preschool children with inadequate language acquisition, developmental dyslexia and developmental dyscalculia. The contributions on attention deficit hyperactivity disorder, tics and the Tourette syndrome, the role of augmentative communication in impaired language acquisition and neuro-psychological assessment of children with developmental disabilities are informative and well-written; so that, even though fewer references to related subspecialties are cited, they contain much interesting and useful material.

Since epileptic seizures, particularly brief and non-convulsive attacks, are recognised as potentially important features in deviant higher brain functions, it is disappointing that a chapter on this subject was not included. Otherwise, the diversity of the material covered and the high standard of virtually all of the text commend it to those, whatever their special interests, who work with children with cerebral dysfunction.

SHEILA J WALLACE

Patient Care in Neurosurgery. Third edition. By NM OYESIKU AND AL AMACHER. (Pp 317; Price: US\$ 37.50). Boston, Mass: Little, Brown & Co. 1990. ISBN 0 316 03640 0.

In this book of just over 300 pages one third covers clinical and neurosurgical physiology and two thirds clinical neurosurgery. It is one of a series entitled Patient Care, written for the American resident in training for neurosurgery. The physiology section contains a limited amount of anatomy, and sections on cerebral blood-flow, intracranial pressure and what is nicely termed "brain water" which are concisely and well presented, are based upon the classical papers in these subjects, with good appended references, and fine simple line diagrams. Furthermore there are good details of the practical procedures in patient monitoring and lists of the necessary equipment.

The clinical neurosurgery section is a synopsis of the main conditions accompanied by practical plans for pre-operative assessment and intra-operative and post-operative management, with good references. One can easily find here basic information such as the Glasgow Coma Scale, the WFNS classification for patients with subarachnoid haemorrhage, clearly listed and referenced. The section concerned with neuroradiology does not include adequate information about MRI and CT scanning in the neurosurgery of today and would benefit from the addition of more detail on techniques, and the basic interpretation of the scans, with a few simple line diagrams as in other parts of the book. A similar criticism could be made of the information on neuropathology but it would be difficult to widen the scope of this book without either increasing the number of pages, or changing from a mildly quaint but readable style to a note form with many more tabulations. Were such changes to be accompanied by a reduction of an inch or so in size this would be the ideal *vade mecum* for the resident in neurosurgery. In its present form it is strongly recommended as a good starting text for the first year registrar in neurosurgery which should be easily available on the ward, although a little large for the coat pocket.

GORDON BROCKLEHURST

Epilepsy: Current Approaches to Diagnosis and Treatment. Edited by DB SMITH. (Pp 276; Price: US\$ 106.50). New York: Raven Press, 1990. ISBN 0 88167 615 2.

The preface to this book begins "Another book on epilepsy?" One certainly has to agree that there have been a profusion of books on epilepsy produced over the last ten or fifteen years and another one probably needs a very clear vision of something new to justify its production.

The book has no aim to be comprehensive. Individual chapters focus on growing points in the field of epilepsy and more controversial management issues. Most chapters are short, to the point and concisely written. Some of the better chapters include discussion of the classification of seizures and epilepsies and their implications, the use of EEG and EEG monitoring, drug selection and the relationship between epilepsy and aggression. The final part of the book is taken up by two appendices which in turn discuss the requirements for clear guidelines for standards of care in epilepsy and some subsequent recommended guidelines for diagnosis and treatment that have been drawn up by the National Association of Epilepsy Centres in the United States. These are of interest and value in view of the developing debate about quality of care and quality of life in epilepsy.

The style of writing is gratifyingly to the point but the book is sparsely illustrated, and those illustrations that are produced are of very poor quality and appear to have been produced by a dot matrix printer. The book should be of interest to those who have a preliminary understanding of epilepsy and its practical management but who wish to explore the more controversial areas in a little more detail. Whether the approach justifies another book on epilepsy can still be questioned.

DAVID CHADWICK

Magnetic Resonance Imaging of the Brain and Spine. Edited by SCOTT W ATLAS. (Pp 1137, illustrated; Price: \$198.00). New York: Raven Press, 1990. ISBN 0 88167 694 2.

This is a refreshingly good book. There are many authors but the editor has achieved a uniform style of presentation and ensured that each chapter is interesting, informative and relevant to current publications. As well as the obligatory account of MR physics there are chapters describing blood flow techniques and MR angiography and also spectroscopy. Although these chapters are brief they point to an expanding role for MR.

There are useful chapters on the biological effects and on safety. Artefacts in imaging of the central nervous system are well illustrated. The chapters follow the usual sequence from developmental lesions through tumours, infections, degenerative conditions, head injury etc., and also consider specific sites eg. pituitary, orbits and spine. The text in general avoids the trap of a repetitive comparison of CT and MR appearances. Each chapter describes details of the MR sequences which provide optimum images and describes the interpretation of these. Other techniques such as angiography