developed augmentation, and were then treated successfully with levetiracetam. Both patients showed no response to traditional anticonvulsants and agreed to test levetiracetam before opioid treatment. RLS was familial in one case and associated with iron deficiency in the other. Levetiracetam was well tolerated in both patients and induced a subjective improvement in the restless symptoms and daytime sleepiness. Objectively, it reduced the PLM index in polygraphic recordings.

Levetiracetam is employed as an adjunctive therapy for refractory partial epilepsy in adults. Its mechanism of action is not fully understood. None of the well established mechanisms of action of classic antiepileptic drugs can be hypothesised for levetiracetam. Recently, it has been demonstrated that the synaptic vesicle protein SV2A is the brain binding site of levetiracetam.³ Some neuropharmacological observations suggest levetiracetam may be useful in the treatment of RLS-PLMS, in the treatment of neuropathic pain,⁴ and in reducing L-dopa induced dyskinesias in Parkinson's disease.⁵ The choice of levetiracetam was justified by the need to test, in drug resistant patients, a non-dopaminergic agent, and in particular an anticonvulsant, as suggested by the management algorithms for RLS.¹

Our observations suggest that levetiracetam can be useful in the treatment of RLS unresponsive to traditional dopaminergic agents. The 2 year follow up suggests that the therapeutic effect may be long lasting; this is particularly interesting, since it is well known that the therapeutic efficacy of many drugs employed in RLS can be transient. More systematic evaluations of levetiracetam in controlled trials are needed to confirm these findings.

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BOOK REVIEWS

Palliative neurology

Edited by Ian Maddocks, Bruce Brew, Heather Waddy, Ian Williams. Published by Cambridge University Press, Cambridge, 2005, £29.99 (softcover), pp 252. ISBN 0-521-67249-x

This book is a well-written introduction to the ideas, philosophy and interventions of palliative care as applied to neurology. It joins a small but growing list of similar works, such as *Palliative Care in Neurology* (Volz et al, 2004). The focus of the book is around the meaning and application of supportive and palliative care. The first section gives an introduction to the basic tenants of palliative care such as the focus on the patient, communication, and effective team working. The historical background allows a discussion of supportive, palliative and terminal care for different disease trajectories and a recognition that these "phases" overlap. It does not specifically define specialist palliative care, apart from referral to a hospice, and perhaps misses an opportunity to discuss the often excellent multi-disciplinary work currently carried out in neurology and the role of specialists in palliative care (eg complex symptom management, terminal care, etc). It covers the trigger points for generalist palliative care, such as at diagnosis, change in physical or psychological condition or terminal phase, the common problems (poor team working, lack of clear documented communication, boundary working) and some common themes for good palliative practice (documentation of symptom control, carer support, etc).

The second section focuses on specific symptom control, such as fatigue, pain and others. All common symptoms are dealt with, the breadth allowing only the briefest of pathophysiology, complications and other interactions to be discussed. However, suggested treatments are clearly, sometimes simplistically, presented with dosing regimes, which would make for easy reference. The third section reviews the specific palliative care and terminal care needs of 11 different neurological conditions, such as Parkinson's disease, amyotrophic lateral sclerosis (ALS), and dementia. Each condition is briefly introduced, assuming a wider knowledge of the neurology, and concentrates on specific areas of palliative care. For example, in the ALS chapter it is divided into the Palliative phase: breaking the bad news, end of life discussion, the supportive phase: fasciculation, hypoxia, communication, dysphagia, constipation and psychological issues and the terminal phase: pain, immobility, choking fears, requests for euthanasia.

No book would be complete without a more concentrated discussion on the ethical dilemmas and issues surrounding proxy-decision making, euthanasia, advanced directives, decisions in non-competent adults and terminal sedation. These areas are handled clearly, with some useful examples of advanced directives, definitions and some points that inform the arguments on both sides. The final part of the book are the appendices giving more details of the practical aspects of palliative home care, team organisation, education, drugs with common doses and further reading.

The book is a useful addition to the few already available. It is aimed at neurologists who wish to know and understand more about general palliative care. It carefully suggests that the principles of good palliative care can and should be part of all neurology care, although it perhaps falls short of discussing where and when specialist palliative medicine/care may be of help. However, as an introduction to the principles and practical integration of palliative care into neurology it succeeds.

C E Urch

Neurologic disease in women, second edition

Edited by Peter W Kaplan. Published by Demos Medical Publishing, New York, 2005, \$165.00 (hardcover), pp 454. ISBN 1-888799-85-4

That women have particular health issues, often in relation to childbearing, and that some conditions have a female preponderance is not new. However, it is good to see a work that recognises the gender difference and deals with it in some detail. This is the second edition of the book, which is multi-authored, all USA based, with some interesting choices of topics—for example, women, law and neurological disease, frailty in women.

The editor divides the book into three main sections – General issues in women's health, Life stages and neurological disease expression in women and, finally, Neurologic disorders in women. The first section on general issues highlights differences between male and female regional brain structure and metabolic activity largely based on imaging techniques. These differences may contribute to the gender differences in disease processes and alter risk. There are also sociological and epidemiological topics and, more usefully for the physician, a chapter on drug treatments, especially antiepileptic drugs with emphasis given to teratogenicity and changes in metabolism in pregnancy and lactation. There is much useful information in this section.

The chapter on Women, law and neurologic disease is interesting but may not be as helpful as it might have been as the case law quoted is American. However, the chapter does raise issues found in many cultures where no doubt equivalent case law exists.

The section on Life stages takes the reader through from childhood to frailty in elderly women, the latter being an aspect that might appear to be no different in women from men. However, there does seem to be some evidence suggesting that oestrogens are important in maintaining muscle strength with age, an area for more work. Pregnancy, menopause and their association with neurological conditions are explored in some detail within this section.

The last section covers predictable specific groups of disorders—migraine, epilepsy, autoimmune disease—for example, in relation to women. There is a useful section on pelvic floor disorders.

Overall this book has taken a broad and interesting approach to the topic of women and neurology, a field that is likely to expand as we begin to understand more about hormonal influences on disease processes. The information is well referenced and clearly set out with good easily readable tables. With about 50% of the population and hence our

patients likely to be female, this is a reference work that would be a useful addition to your bookshelf.

L M Parsons

Neuroethics: defining the issues in theory, practice, and policy

Edited by Judy Illes. Published by Oxford University Press, Oxford, 2006, £29.95 (soft cover), pp 320. ISBN 0-19-856721-9

No-one interested in the neurosciences could fail to be stimulated by this book. It has a tremendous reach, but perhaps it oversteps the mark. For instance, there is the suggestion that neuroscience, via neuroethics, might help to solve the problem of socioeconomic disadvantage and sort out values diversity in education. But who really believes that brain scans will contribute significantly to solving major political and moral issues?

Well, some authors in this book do. Gazzaniga quotes himself as saying that neuroethics aims at "a brain-based philosophy of life". Writers of this ilk clearly think of the brain (like the genome) as being the key to all human problems. This must be true if (like Patricia Churchland) you believe that brains "incessantly make decisions" as well as think, remember and plan. But people (not brains) make decisions, think, feel, and so on. Language to do with people (or persons) is only used at the sub-personal level by analogy. Luckily there are some in this volume who suggest that neuroscience is largely irrelevant in the realm of meaning and recognise that reductionist science just cannot accommodate our more humanistic tendencies.

Apparently neuroethics encompasses both the ethics of neuroscience and the neuroscience of ethics. The ethics of neuroscience is simply a branch of bioethics. It is worried, for example, by confidentiality and neuroenhancement. There are also futuristic concerns about the possibility of "mind-reading". Meanwhile, whilst neuroscience can tell us a lot about the causes of mental phenomena, arguably it cannot tell us about content: meanings and memories are outside the head. Hence, the neuroscience of ethics (or religion) is simply as exciting as the neuroscience of feeling pain or making music.

So, all in all, this book is worth reading; but the standing of neuroethics as a discipline remains contentious.

J C Hughes

Psychiatry for neurologists

Edited by Dilip V Jeste, Joseph H Friedman. Published by Humana Press, New Jersey, 2005, £79.50 (hardcover), pp 436. ISBN 1-59259-960-5

Psychiatry for Neurologists is part of the Current Clinical Neurology Series. It is aimed primarily at neurologists and deals with the evaluation and management of psychiatric disorders in the neurological patient. It is an edited volume with a mainly American authorship.

The editors acknowledge at the outset the uneasy relationship between neurology and psychiatry and the different historical evolution of the two disciplines in different countries. There are two nice historical chapters exploring this further. While it is to be hoped that training in neurology will include significant attention to psychiatry and vice versa, the reality in many countries including the UK is that this is the exception rather than the rule. This volume is a welcome addition to the bridging of that divide.

The differing perspectives of neurologists and psychiatrists are reflected in the eccentric organisation of the book. After Parts 1 and 2: Introduction and Evaluation, there is a series of chapters on "Major Psychiatric Disorders": depression, anxiety, schizophrenia, hysteria, catatonia, addictions and personality disorders. Dementia and other organic disorders are dealt with in part 4 under "Psychiatric complications of major neurological disorders". Part 5, the longest section of the book comprises "Other topics". The chapter on delirium appears under "Others" in part 5. There is no dedicated chapter to head injury, or encephalitis.

The editorial and series style is to have experienced clinicians in their field write concisely and authoritatively about their area. The result is a series of accessible, relatively brief and not overly speculative articles that are likely to be useful as quick points of reference for the clinician. The quality of illustration is poor and the book generally lacks pictorial or graphic aids.

The ambition of this volume is bold and admirable, and it largely achieves its aim of being of more practical than theoretical focus. Overall, despite its omissions and necessarily limited by space, it manages to provide a reliable series of reviews of the behavioural problems of the main neurological disorders and a good account of basic

psychopathological and psychopharmacological principles. It would be a useful addition to the library of neurologists and psychiatrists.

J Moriarty

Antiepileptic drug interactions: a clinical guide

P N Patsalos. Published by Clarius Press, Guildford, £18.00 (soft cover), pp 175. ISBN 09542279-5-6

Over the past 15 years, 10 new antiepileptic drugs (AEDs) have been licensed worldwide. This brings the overall number of available agents to treat the many types of seizures and syndromes to nearly a score. Although these modern AEDs tend to be less troublesome because they are responsible for fewer drug-drug interactions, there are still enough problems with many of them to require a detailed knowledge of their interaction profiles. This is particularly the case for general neurologists who are likely to field a trickle (or flood) of epilepsy cases in their everyday practice. The increasing incidence of epilepsy in the elderly, whose care is often complicated by polypharmacy, makes the launch of this manageable little book also particularly timely for general practitioners. Even the "cognoscenti" require access to a rapid resumé from time to time.

Philip Patsalos has focused on the production of a succinct "no nonsense" approach to AED interactions. The format is concise and easily accessible. The general introduction deals with the basic mechanisms of common interactions and provides guidance on how to predict their likely occurrence and, thereby, anticipate and avoid problems. The next three sections cover interactions among the different AEDs, interactions affecting AEDs and interactions caused by AEDs. Individual drugs are grouped usefully into therapeutic classes.

This publication provides an invaluable tool for the practising clinician. This is undoubtedly the first of many editions. If I had to cavil, I would like Professor Patsalos to provide me with an index in the next update. In these days of evidence-based medicine, it might be nice too to have access to the important source references in addition to the "selected reading" list. These modifications will increase further the value of this convenient text.

M J Brodie