PostScript

BOOK REVIEWS

Neurological emergencies, 4th edn

R A C Hughes, ed. London: BMJ Books, 2003, pp 496, £45.00 (paperback). ISBN 0-7279-1774-9

Medical SHOs' training only infrequently includes a dedicated attachment to neurology. Routine neurology then seems daunting enough, but neurological emergencies may appear a worst nightmare. This updated compilation of 13 reviews covers common neurological emergencies in surprising detail. Most practically useful are those focused on presenting symptoms, such as medical coma and acute visual loss. Stroke and status epilepticus are treated authoritatively, but first seizure, a common emergency referral, is not included. Subarachnoid haemorrhage is well presented but may have been even more useful if considered as one cause of acute headache. Brain stem death criteria are described clearly but, if emergency means cannot wait until morning, their inclusion is unexpected. The summaries concluding each chapter are disappointingly printed black on dark grey, in smaller type than the text, hard to read even in daylight. Perhaps the publishers intended it, but these summaries will not readily copy for handy laminated reference in the emergency unit.

Neurological emergencies is too large for the white coat pocket (nearly 500 pages), and too longhand for last minute reference behind the patient's curtain. Its style is detailed prose rather than notes and bullets. Nevertheless, this book will usefully inform clinicians of all grades and increase the likelihood that neurological patients are managed safely. At £45 there may be only one departmental copy, but that must be on the registrar's bookshelf. At risk of stating the obvious, the book should be digested, calmly, away from the coalface, before the emergency presents. Then those faced with serious neurological situations need not echo Arthur Dent in *Hitchhiker's Guide to the Galaxy*, ''''It's at times like this […] that I really wish I'd listened to what my mother told me when I was young.'' ''Why, what did she tell you?'' ''I don't know, I didn't listen.''''

P E M Smith

Psychoneuroendocrinology; the scientific basis of clinical practice

Edited by Owen M Wolkowitz and Anthony J Rothschild. Published by American Psychiatric Publishing Inc, Washington DC, 2003, £69.00, pp 546. ISBN 0-88048-857-3

In the last two decades a wealth of information has been gathered regarding the potent influences of our endocrine hormones on the brain and behaviour, giving rise to the discipline of psychoneuroendocrinology. By calling upon leading authorities in their subjects, Wolkowitz and Rothschild have produced this timely volume that explores, with great clarity and success, what might be the clinical significance of the empirical scientific findings in this emerging field and how this may underpin breakthroughs in the treatment of behavioural and affective disorders. Essentially, each contributor considers the hormonal changes observed in primary psychiatric illness, the psychiatric sequelae of hormonal dysregulation in primary endocrinological illness, and the potential for exogenously administered hormones or hormone antagonists to influence behaviour and affect.

The main text begins with a delightful account of the historical roots of psychoneuroendocrinology, dating back to the ancient philosophers, and the recent rapid development of this discipline. There is then an exhaustive coverage of central nervous system neuropeptides and hypothalamic releasing factors, which addresses the controversial question of whether alterations in their secretion contribute secondarily to or are causative of aspects of psychiatric illness. There is also a balanced view of the potential use of melatonin and its analogues as chronobiotic drugs, and a review of the psychiatric manifestations of endocrinopathies—including diabetes mellitus and those affecting secretion of prolactin, growth hormone, and parathyroid hormone. There follows next a section each on glucocorticoid hormones, gonadal hormones, and thyroid hormones, considering conditions of over- and/or undersecretion, which can produce behavioural symptoms closely resembling signs of primary psychiatric illness. The penultimate section is devoted to the use and interpretation laboratory testing in clinical psychoneuroendocrinology to improve accuracy of diagnosis and treatment. The volume ends with an updating of Hans Selye's original exposition of the general adaptation syndrome that occurs in response to stressors—both exogenous and endogenous. Although mounted to protect the host, the stress response itself may become harmful—both emotionally and physically—if allowed to proceed unchecked.

This comprehensive work clearly demonstrates the importance of crossing the traditional boundaries of endocinology, neuroscience, and psychiatry, and represents an approachable and informative text that should be of value not only to clinicians from many disciplines, but also to basic scientists, teachers, and the educated public.

G Gillies

Clinical neurology, 3rd edn

T J Fowler, J W Scadding. London: Arnold, 2003, pp 562, £39.99. ISBN 0-340-80798-9

Clinical neurology is now into it's third edition since first appearing in 1989 under the original editors Tim Fowler and the late David Marsden, an indication of its popularity in a congested market of similar titles. It provides excellent value as a comprehensive introduction to neurology for medical students, MRCP candidates, other junior doctors, and physicians of all specialties, but does not pretend to have the depth of detail required by more senior neurologists in training or in practice. On looking up a few topics with which medical SHO's (and their bosses) always seem to have difficulty, I found dysphasia clearly covered, eye movement disorders well described and illustrated, and lateral medullary syndrome mentioned in the text but not in the index. Cord compression, coma, and confusion are each presented well, and there are good overviews of common (and rare) neurological conditions pitched at just the right level for the readership. Chapters on raised intracranial pressure, cerebrovascular disease, epilepsy, infection, spinal disease, and many other topics guide the neurological novice confidently through diagnosis and management. The book is substantially updated from the second (1998) edition, and although there are some hangovers in terminology and illustration, these are only minor caveats in a textbook whose uniformly British contributors have done such a good job. *Clinical neurology* will continue in this edition as a firm favourite for MRCP trainees, in the GP surgery library, and to inform and stimulate the undergraduate neurology curriculum.

P K Newman

Behavioral medicine in primary care—a practical guide

M D Feldman, J F Christensen. McGraw Hill: New York, 2003, pp 366, $39.95. ISBN 0-07-138336-0

It is well known that a large proportion of consultations in primary care have their origins in the psychological wellbeing of the patient. There is clearly a need for a reference book in this area that strikes the right balance in presentation, engagement, and usefulness, without being overbearing. With this in mind, is this book of use to a primary care physician with limited training in behavioural medicine?

The early chapters go back to basics and focus on the doctor–patient relationship. The reader not so keen on this approach may be lost by the wayside in these chapters. However, for those prepared to re-valuate the patient interview, these chapters could be very insightful. Because this is a quick reference book, if the reader is so inclined, the early chapters can be skipped, but the reader may miss out on the central message of the book, which is the understanding of the doctor–patient relationship. Further thumbing through the book will reveal comprehensive backgrounds and practical approaches to psychiatric, medical, and behavioural disorders in primary care, including pharmacological treatments for psychiatric illnesses. The book is written for the US healthcare system but most treatment options suggested are available in the UK.

The presentation of information is stylish and cohesive, with the 35 chapters following a similar format including case illustrations. These illustrations are interesting but occasionally a little too simplistic. The book's major achievement is its diversity, which is also its weakness, as some detail is lost. However, this is a minor criticism.

Overall, this is a well edited and presented book, which fulfils its aims as a practical reference book adequately. It offers a different approach to behavioural and medical problems in the primary care setting. Although the book would be of limited use to trainees in psychiatry, due to its primary care focus, it would serve as a useful text to those in primary care, other healthcare professionals, and students.

G Price

Quantitative MRI of the brain—measuring changes caused by disease

P Tofts. Chichester: John Wiley & Sons, 2003, pp 617, £175.00. ISBN 0-470-84721-2

We have waited for a long time for a comprehensive book on magnetic resonance (MR) techniques that will appeal to the neurologist/neuroradiologist as well as the physicist and researcher. A book that is right up to date and is relevant across the board for all who are interested in the technique and that deals with quantification.

Paul Tofts has produced a book that is in the coffee table style, in the best sense of the concept, and in price; in the fact that the book invites you to pick a section at random and find that the information is immediately accessible and self-contained. The level of detail is impressive, as is the design of the presentation where information of different types is presented in boxes comprising summaries, opinions, and practical suggestions. The layout works well; chapters take you through theory to practical applications and mention problems and solutions along the way. It is clear that it has been written by people who have hands on experience of MR and who have had to deal with the issues associated with quantification in all forms of MR use (diffusion, magnetisation transfer, spectroscopy, contrast enhanced MRI, functional MRI, blood perfusion and volume estimation, and the various practicalities associated with analysing images, to mention just some of the topics covered).

The usual pitfalls of multiauthor books have been avoided as Paul Tofts is involved in the writing of many of the chapters and the book has the coherence of a single author book. The style of writing is occasionally poetic, for example: ''the paradigm shift from qualitative picture-taking to objective measurement-making is taking place'', which elegantly summarises the theme of the book. I have to mention the introduction, which might have been written by Melvyn Bragg and at first seems a little out of place in a science textbook and more fitting to a book on the arts. It references Stravinsky, John Cleese, Bronowski, and Rachmaninov, among others, and speculates about the nature of creativity: ''Sometimes I seemed to be witnessing the creation of perfection'', writes Paul Tofts. I smiled to myself when I first read this but having looked at this book in greater detail, I think he might have a point.

If you are involved with MR imaging in any way I urge you to look at this book, and once you have, you will know that you need to have it and you will want it for its sheer comprehensiveness, and the knowledge that quantification in MR imaging is truly at the cutting edge.

M Maier

Neuroscience in medicine, 2nd edn

P M Conn, ed. New Jersey: The Humana Press, 2003, pp 701, $135.00, (hardback). ISBN 1-58829-016-6

Neuroscience in medicine, second edition, is aimed primarily at medical students and seeks to explain the basic structure and function of the nervous system underlying medicine. It is arranged as a collection of essays by individual contributors, interspersed with short clinical chapters. Most of the chapters are written at a level appropriate for medical students but others (for example those on hypothalamus, muscle, and ion channels) carry detail more suited to a neuroscience undergraduate or even postgraduate student. While it is no bad thing to offer students more information than they strictly need, it does need careful management in order to avoid a fascinating subject becoming a daunting one.

In terms of coverage, it is refreshing that subjects such as sleep, cerebrospinal fluid, and neuroimmunology are dealt with individually, as these tend to be minimised or overlooked in some textbooks. However, there are also some serious omissions. There is no chapter explaining the structure and function of the autonomic nervous system, surely one of the topics most often misunderstood by medical students. Also, parts of the motor system are described in several chapters but no attempt is made to show how it all fits together. The order in which subjects are dealt with is unusual. For example, chapters on synaptic transmission and receptors come early in the book while neurotransmitters come much later. A chapter on spinal mechanisms for control of muscle is divorced from the other chapters dealing with either spinal cord or other motor functions, being placed between chapters on the thalamus and chemical messenger systems.

Perhaps the greatest disappointment is the illustrative material, which varies considerably from chapter to chapter. While some contain effective explanatory diagrams, others have figures of poor quality (apparently due to scanning at low resolution, as in the chapters on spinal cord and higher brain function). The chapter dealing with neuroanatomy relies on a few black and white photographs of dissected brains and histological sections—no diagrams or MRIs.

In summary, when compared to its many competitors, this book is unlikely to appeal to its intended audience. Sadly the generally high quality of the individual contributions is not sufficient to compensate for the poor organisation and variable illustration of this book.

M Lowrie

Local therapies for glioma: present status and future developments

Edited by M Westphal, C Tonn, Z Ram. Published by Springer Wien, New York, 2003, pp176, €108 (hardback). ISBN 3-211-40355-8

This small book, which is a supplement of *Acta Neurochirurgica*, represents the proceedings of a meeting held in Milan in 2003. It is organised by the EANS Neuro-oncology Executive, which is chaired by Professor Westphal. The point of the meeting was to describe the concepts and status of local therapies for glioma. Owing to the inevitable failure of surgery, chemotherapy, and external beam radiotherapy to prolong life in malignant gliomas, a great deal of research and pharmacological effort has been put into developing local therapies for gliomas.

The rationale for placing compounds or therapies in the cavity created following resection of a glioma is reviewed in the editors' preliminary remarks. Unfortunately, evaluating the effects of local therapies are also difficult because the therapy will induce radiological changes, which could be interpreted as reactivation of quiescent tumour. These difficulties in assessment are later discussed in a separate chapter. The first half dozen chapters cover current clinical investigation, management approaches, and assessment of gliomas with respect to state of the art technologies such as surgery incorporating image guided volumetric resection of gliomas, fluorescence guided resections, and experience with glioma surgery with intraoperative high field MRI, postoperative imaging after brain tumour resection, and the use of external beam conformal radiotherapy and interstitial stereotactic radiosurgery. These chapters are in a sense the ante pasta, because they set the scene for the latest novel local therapeutic approaches. They provide a solid, practical background for the subsequent chapters. The article on awake craniotomy in particular has thoughtful and useful information for those interested in the technique.

A variety of local therapies are covered in subsequent chapters. Some of these are well known techniques that simply involve local deposition of a chemotherapeutic compound (for example implantable drug releasing biodegradable microspheres for local treatment of brain glioma and intracavity chemotherapy for glioblastoma; present status and further directions), which have already reached clinical practice after phase III trials. The particular difficulties with local gene therapy for gliomas are well covered in two succinct chapters, which are comprehensibly referenced. Other chapters describe novel approaches using specific techniques (for example non-invasive transcranial high intensity focused ultrasound (HIFUS) under MRI thermometry and guidance in the treatment of brain lesions; intralesional radioimmunotherapy in the treatment of malignant glioma, clinical and experimental findings; radioimmunotherapy targeting fibronectin; and comparing monoclonal antibodies and small peptidic hormones for local targeting of malignant gliomas). The use of convection enhanced delivery techniques are described for the delivery of IL4 pseudomonas exotoxin (NBI-3001) for treatment of patients with recurrent malignant glioma, together with interim findings from ongoing phase 1 studies of IL3-PE38QQR for treatment of the same condition.

The remaining chapters reflect the editors' particular interest in glioma cell invasion, the potential use of anti-angiogenic therapies, and stem cells in neuro-oncology. Pathophysiological advances in these areas could provide the basis for novel local therapies in the future.

What does this book offer the neuroclinician interested in oncology? Firstly, there are some good overviews of the current state of treatments, their evidence base, and the ways in which surgery and radiotherapy are likely to change in the not too distant future. The second group of chapters on true local

therapies gives the reader an idea of the spectrum of current approaches, their biological basis, the simplicities and difficulties of their applications, and innovative thought of the developers.

Overall this is a compact book that is well written. The authors represent their topics from an extremely practical viewpoint, being healthily critical about the difficulties confronting clinicians in malignant glioma management. All chapters are easy to read, well illustrated, and well referenced. For those interested in neuro-oncology it is a very useful reference source that covers a gamut of approaches, and overall has something for everyone interested in neuro-oncology. The editors are to be congratulated for their contributions, the selection of authors, focusing on this important and evolving area, and addressing it in a very practical, clinically orientated fashion.

I R Whittle

Neuroepidemiology—from principles to practice

Edited by Lorene M Nelson, Caroline M Tanner, Stephen K Van Den Eeden, and Valerie M McGuire. Published by Oxford University Press, Oxford, 2004, pp 449, £47.50 (hardback). ISBN 0-19-513379-X

Everyone, at one time or another, feels misunderstood and unappreciated. Epidemiologists are no exception. They get fed up with hearing secondhand opinions that epidemiology is a blunt instrument or that epidemiological investigations don't allow inferences to be drawn about aetiology. Their hearts sink when they encounter people who believe that its methodology amounts to little more than counting cases. Eventually, exasperation drives them to write a book explaining what their subject is really about. If this was the motive behind *Neuroepidemiology—from principles to practice*, I hope the authors and editors found the process of writing it therapeutic. Whether practicing neurologists, who are identified as a target readership in the preface, will find that it changes their view is another matter.

The book follows a conventional format. Introductory chapters on methods are followed by accounts of specific neurological diseases. An attractive feature is the final section with descriptions of clinical trials, evidence-based medicine, and health services' research as they apply in neurology.

The trouble with epidemiological accounts of disease is that they often read like mystery stories without a dénouement. This isn't the authors' fault, of course. If the cause of a disease is still unknown, what can they do but describe investigations that are still in progress. They round up the usual suspects—things such as head injury, diet, cigarette smoking, and infections—and work them over. They tell us about the circumstantial evidence—such as global distribution, migrant studies, and time trends—that might provide a promising lead but which might equally turn out to be a red herring. In the end the story usually peters out and they rarely get a conviction. It's useful to have a summary of the research that has been done—although other similar accounts exist—but, on the whole, it doesn't make for gripping reading.

C N Martyn

Neurosurgical re-engineering of the damaged brain and spinal cord

Edited by Y Katayama. Published by Springer Wien, New York, 2003, pp 179, €108 (hardback). ISBN 3-211-00920-5

Katyama, on behalf of the Neurorehabilitation Committee of the World Federation of Neurosurgical Societies, has brought together essays presented at a Neurorehabilitation Committee Meeting held in 2002.

Each chapter represents multi-author presentations largely derived from Japan. The manuscript consists of nine subsections addressing aspects of coma, restorative neurosurgery, early rehabilitation, functioning imaging, neurosurgical intervention, pain control, and neural transplantation. The editors have achieved a comfortable balance between scientific and clinical presentation. For example, the first section on monoaminergic and cholinergic pathologies for sleep and wakefulness in the rat model demonstrates elegant physiology, followed by clinical papers that explore median nerve stimulation effects on conscious levels in comatose patients. Both address mechanisms relevant to the reticular activating system.

Novel methods for functional imaging of brain abnormalities are well represented, with particular reference to modern MRI sequencing. Specific surgical procedures to reconstruct nerve damage and therapeutic lesioning and muscular grafting for cerebral palsy are also covered.

Finally, there are a number of papers relating to various deep brain stimulators for the control of dystonia, pain, and other movement disorders. From a surgical perspective this is an interesting area showing expansion and considerable promise.

In summary, this volume represents a collation of mostly Japanese papers exploring different aspects of surgical manoevres which promise to improve outcome for a variety of brain and spine injured individuals. I recommend this book to those involved in the chronic rehabilitation of central nerve injured individuals and those neurosurgeons who seek subspecialisation in this area.

P J Kirkpatrick

Biopsychosocial approaches in neurorehabilitation—assessment and management of neuropsychiatric, mood and behaviour disorders

By Huw Williams and Jonathan J Edwards. Published by Psychology Press Ltd, Hove, 2003, pp 325, £59.95 (Hardback). ISBN 1-84169-945-4

As the title implies, this book is ambitious in its remit, encompassing the complexity of brain injury outcome for the sufferer and the wider community. The acknowledged aim is to highlight the ''interaction of biological, psychological and social influences on affect and behaviour'' (p 2) by presenting a compilation of information from several research fields to provide a focus for the development of clinical practice.

The 17 papers are grouped into five sections covering assessment, mood and anxiety, behavioural health, relationships, and community services. There is no formal division between sections and, inevitably, there is some overlap. However, cross-referencing between papers is good. Perhaps not surprisingly, the overwhelming emphasis is on outcome after traumatic brain injury (TBI), but depression after stroke and psychosocial effects of aphasia are both covered.

Among the contributions, Tate presents a comprehensive overview of attempts to tease out the respective influence of pre- and post-morbid factors on outcome and draws the conclusion that personality changes are largely independent of premorbid personality. She reminds us that psychosocial factors characterising the TBI population also characterise the age group in which TBI is most prevalent. A review of literature on substance misuse (Taylor *et al*) identifies the importance of inter-disciplinary collaboration, noting that rehabilitation professionals may lack specific expertise in substance misuse and its treatment. Zasler and Martelli present a useful paper on the effects of mild traumatic brain injury, which are still poorly understood despite their prevalence, but which might have been strengthened by acknowledgement of recent UK work findings (for example King, 1996[1]). In the final paper, Judd presents telling statistics to illustrate the mismatch that still exists, even in developed countries, between prevalence of traumatic brain injury and provision of adequate diagnostic and rehabilitation facilities.

Although quite expensive at £59.95, this compilation of papers serves to emphasise the multi-faceted role of modern neurorehabilitation and largely succeeds in its aim of providing a comprehensive information resource.

J Cockburn

Reference

1 **King NS**. Emotional, neuropsychological, and organic factors: their use in the prediction of persisting postconcussion symptoms after moderate and mild head injuries. *Journal Neurol Neurosurg Psychiatry* 1996;**61**:75–81.

CORRECTIONS

doi: 10.1136/jnnp.2003.026278corr1

In the Letter by Deschauer *et al* (*J Neurol Neurosurg Psychiatry* 2004;**75**:1204–5) the order of authorship is incorrect and should be: M Deschauer, P F Chinnery, S Shanske, S DiMauro, K Majamaa, E Wilichowski, D R Thorburn, S Zierz, A M Schaefer, D M Turnbull, R W Taylor.

doi: 10.1136/jnnp.2003.011262corr1

Soragna D, Papi L, Ratti M T, *et al*. An Italian family affected by Nasu-Hakola disease with a novel genetic mutation in TREM2 gene (*J Neurol Neurosurg Psychiatry* 2003;**74**:825–6). The correction in this paper regards the number of the nucleotide of the TREM2 mutation. In the paper the authors wrote that the mutation was at position 191 (191 C→T) in exon 2 of the TREM2 gene. The correct mutation is at position 97 (97 C→T) in exon 2 of the TREM2 gene. The mutation changes glutamine 33 to a stop codon (Q33X); this change is correctly reported in the paper. The authors apologise for the error.