

neuropathology and electrophysiology, to explain consciousness. Although the book can be difficult to read (if you do not have a background in philosophy or psychology), much of it is extremely well written and provides insight into phenomena we all experience. I found the discussion on consciousness and sleep particularly interesting, and now understand why certain noises (i.e. the beeping at the crosswalk which sounds just like my pager) in my neighborhood wake me up when I am on call, whereas I am not conscious of hearing them otherwise. The discussions regarding the importance of language to the development of consciousness were also thought-provoking.

The book is not written for the clinical neurologist, and does not offer any guidance in the management of patients with impairments of consciousness. This is not a criticism of the book, as clinicians are not the intended audience.

In summary, this is an excellent, up-to-date review of the study of consciousness. It is well laid out, and follows a logical sequence. The discussions following each chapter are particularly insightful. It is designed for those readers interested in understanding the questions regarding consciousness, but will not be helpful to the clinical neurologist for patient care.

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STROKE THERAPY. 1999. Edited by Leonard P. Miller. Published by: A John Wiley & Sons Inc. 436pp C\$187.50 approx.

Stroke neurology received a big boost with the introduction of an old drug (rtPA) as the first therapy for acute ischaemic stroke. Even as interest has heightened in stroke care, the failure of a lengthy list of neuroprotective drugs has been underscored. Drug development is a complex bench-to-bedside sequence of which few have an intimate knowledge of all the steps. Dr. Miller's book, *Stroke Therapy*, explicitly aims to explain and elucidate the bench-to-bedside science of drug development and trial design in the field of stroke.

This is a multi-authored text with 16 chapters in three sections. The first is introductory with two chapters on the pathophysiology of stroke and animal models in basic stroke research. The second comprises ten chapters, each discussing one aspect of the ischaemic cascade to neuronal death and potential therapeutic avenues within it. The final section has four chapters discussing stroke trial design, treatment, clinical aspects of peri-operative ischaemia and future directions.

The book covers a large amount of information and, in places, is excellent. Thus, as a reference manual it succeeds and will be useful to the physician with a particular interest in stroke. In its entirety, however, it is slow going, with a lack of consistency of style across the chapters. Many of the authors repeat what the previous authors have said. Where some chapters have a flowing prose, others read like lists. The text is irritatingly marred by glaring typographical errors in the majority of chapters, something that should not occur in this age of automatic spell checking.

Several chapters are worth noting. The introductory chapter, *Cellular and Vascular Pathophysiology of Stroke* by Vaughan and Bullock, is an excellent review which highlights the

important targets for potential neuroprotective drugs. The middle section of ten chapters shows the diversity of potential therapeutic approaches to stroke. Many of these were not imagined 10 years ago. The chapters on NMDA receptor antagonists, nitric oxide and apoptosis respectively all deserve attention. Finally, del Zoppo, Zivin and Miller in their two clinical chapters emphasise the importance of early treatment as the major lesson learned from both the success of the NINDS rtPA trial and the failure of the neuroprotection trials. They imply that the unsuccessful results of neuroprotectant drug trials may not be due to lack of efficacy but instead due to problems with trial design.

Overall, the book contains a plethora of important information that the student, scientist or clinician will use as a background reference. The book looks to the future of stroke care by embracing the vast potential of neuroprotection and encouraging ischaemia researchers to continue to improve trial design. I recommend it for only those with a defined interest in cerebral ischaemia and its therapy.

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DIZZINESS, HEARING LOSS AND TINNITUS. 1998. By Robert W. Baloh. Published by F.A. Davis Company. 256 pages. C\$84.50 approx.

Dizziness, tinnitus and deafness are the three ugly symptoms of the Neurology Outpatient Department, in part because they are perceived as hard to diagnose and usually impossible to remedy. To Dr. Robert Baloh, however, the appearance of such symptoms is welcome as his lifetime works spent characterizing them has induced knowledge and, as a result, understanding. He does a service in transforming his insights into a text which is compact yet comprehensive, clear and authoritative. His approach is traditional – anatomy and physiology; clinical evaluation; diagnosis; and treatment but it is lightened by callout boxes, flow charts and over 80 visual aids in 200 or so pages. The book contains all that a neurologist needs to know in order to replace suspicion of these symptoms by interest and will streamline their analysis and enhance their ability to manage these symptoms effectively. Every neurology department should have a copy of this book for residents and any clinical neurologist who feels a need of any further updating in neuro-otology could not do better than purchase this book.

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OPIOIDS IN PAIN CONTROL: BASIC AND CLINICAL ASPECTS. 1999. Edited by Christopher Stein. Published by Cambridge University Press. 359 pages. C \$133.00 approx.

The editor comments, in the preface to this book, that there have been no recent books that focus on analgesic actions and integrate basic research with clinical applications with regard to opioids. He states that the past several years have seen some exciting research developments shedding new light on mechanisms of opioid analgesia and have stimulated novel