

BOOKS RECEIVED

DECISION MAKING IN NEUROCRITICAL CARE. 2009. By Jennifer A. Frontera. Published by Thieme Medical Publishers, Inc. 340 pages. C\$68 approx.

IMMUNE-MEDIATED NEUROMUSCULAR DISEASES. VOLUME 26. FRONTIERS OF NEUROLOGY AND NEUROSCIENCE. 2009. Edited by Rahman Pourmand. Published by Karger. 170 pages. C\$220 approx.

HANDBOOK OF CEREBROVASCULAR DISEASE AND NEUROINTERVENTIONAL TECHNIQUE. 2009. By Mark R. Harrigan, John P. Deveikis. Published by Humana Press. 743 pages. C\$200 approx.

THE THREE CULTURES - NATURAL SCIENCES, SOCIAL SCIENCES, AND THE HUMANITIES IN THE 21ST CENTURY. 2009. By Jerome Kagan. Published by Cambridge University Press. 311 pages. C\$25 approx.

THE CEREFY ATLAS OF CEREBRAL VASCULATURE. CD-ROM. 2009. By Wieslaw L. Nowinski, A. Thirunavuukarasuu, Ihar Volkau, Yevgen Marchenko, Val M. Runge. Published by Thieme. CD-Rom. C\$225 approx.

A CIRCLE OF SOULS. 2009. By Preetham Grandhi. Published by Sweetwater Books. 339 pages. C\$30 approx.

BOOKS REVIEWED

DEMENTIA IN CLINICAL PRACTICE. VOLUME 24. FRONTIERS OF NEUROLOGY AND NEUROSCIENCE. 2009. Edited by P. Giannakopoulos, P.R. Hof. Published by Karger. 184 pages. Price C\$240 approx.

The introduction to this book proposes that “new evidences from basic and clinical sciences should be available in a simple and comprehensive form for general practitioners and mental health professionals”. That is certainly a laudable goal – the field of dementia is important and confusing, and family physicians, specialists, and even at times neurologists, need some clear up-to-date information on how to best diagnose, treat, and manage patients. Family physicians tell us that they desperately need brief and clear guides to diagnosis and therapy. The authors who have been brought together to produce this volume are well-known academics, and work largely in Europe (especially Geneva), but also North America (including Serge Gauthier from Montreal and Andrew Kertesz from London). The approach- separating Alzheimer’s Disease, Vascular dementia, Lewy Body dementia, and Frontotemporal dementia as different sections – seems appropriate. Unfortunately, this book fails to live up to its promise. It is not in fact a volume addressed to the needs of general physicians, but a set of chapters focused on the research (and somewhat, the clinical) interests of the authors.

The volume, in short, seems to be unclear of its intended audience. I found some of the chapters (such as the chapter on “Pathological substrates of cognitive decline in Alzheimer’s Disease” by Drs. Giannakopoulos and Gold and their teams in Lausanne and Geneva), to be well-written reviews for the neurologist, but of little practical value to family physicians. Similarly, chapters on functional imaging and quantitative EEG in

Mild Cognitive Impairment and early Alzheimer’s Disease, conflate research and clinical to the point where the non-specialist will be quite confused as to how to utilize this new knowledge in his or her daily practice.

Furthermore, there were actually some statements and positions that really contradict the needs of Canadian physicians. For instance, de Souza and Dubois and colleagues in Paris basically state that “the neuropsychological evaluation is crucial to establishing the nature of memory impairment and remains the cornerstone for diagnosis” (page 6) – suggesting that the evaluation of a dementia patient MUST include evaluation by a neuropsychologist. Since few Canadian family physicians (and even internists) have ready access to such individuals, how are we to proceed? Certainly the 2008 guidelines on dementia published in the CMAJ based on the Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia (CCCDRD3), in no ways suggested that this was essential in proper evaluation of all dementia patients!

Later in the same chapter, the same team spends several paragraphs promoting the (as yet unverified and unconfirmed) position that it is possible to diagnose Alzheimer’s Disease without a “clinical dementia syndrome” as a defining feature. Recent “research criteria” proposed by Dubois and colleagues promote diagnosis based on memory loss supported by the presence of ancillary biomarkers such as PET scanning. It is disturbing that what were last year proposed as “research criteria”, are being stated uncritically in a book for clinicians as new clinical criteria! I must admit that once past the Alzheimer’s Disease chapters, the book settles down to address a more general readership. Chapters on the Vascular, Lewy Body, and Frontotemporal dementias were more designed as comprehensive and up-to-date background for

the general reader, and would be excellent resources for Neurology residents. The Canadian contributions of Drs. Gauthier and Kertesz were of their expected high caliber, mixing good reviews with the latest research findings. Even in these sections, however, the personal research interests of the writers overshadowed appropriate information. In the one chapter on imaging of Lewy Body Disease, for instance, author Armin von Gunten focuses on his own interest, MRI imaging, rather than the far more clinically useful and important possibility (only available as yet in Europe) of using SPECT with dopamine transporter ligands such as Iodine-beta CIT to specifically delineate LBD.

So who can be recommended as the intended readership for this book? Students and Neurology residents may be unwilling to spend the \$240 list price for a 184 page book. Clinicians and related health professionals? Will they benefit from a book that will still leave them in need of clear guidelines for diagnosis and therapy of dementia at the end of their reading? Perhaps this is a volume for the few highly motivated family physicians who crave the latest news on research frontiers in neuroimaging. And of course the cognitive neurologists who want to keep abreast of the thinking of European colleagues.

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STROKE ESSENTIALS FOR PRIMARY CARE: A PRACTICAL GUIDE. 2009. Edited by David Alway, John Walden Cole. Published by Humana Press. 202 pages. Price C\$90 approx.

This hard covered ~200 page volume is a pleasure to read. The book is multi-authored and includes chapters by Harold Adams, David Alway, one of the editors, Steven Kittner, John Cole and Anand Vaishnav among others.

The book includes 12 chapters, which cover a spectrum of stroke-related topics of interest to clinicians and will prove useful not only to primary care physicians but as well to emergency room physicians, internists, residents and house staff, and also will provide a valuable review to physicians who manage stroke on a day to day basis.

As is explicit in the title the book provides practical and essential information required in the management of stroke of various types, including ischemic stroke, parenchymal and subarachnoid hemorrhage. Initial chapters discuss diagnosis of stroke subtypes, hyperacute and acute and preventative management of ischemic stroke and intracranial hemorrhage and ruptured and unruptured intracranial aneurysm. The second half of the book includes chapters on specific topics including headache and stroke, hypercoagulable states, carotid artery stenosis and cerebral venous thrombosis.

A credit to the editors is the ease of readability and minimal overlap of information between chapters. The chapters are well laid out. References are not overly extensive and easy to utilize. Several chapters provide key information in tabulated format or in a summary form at the chapter ends. A somewhat more liberal use of figures related to imaging, particular vascular imaging would

have been welcome. As well information for patient resource access would have been helpful particularly for primary care physicians.

Overall I recommend this book as a valuable and practical resource. I enjoyed reviewing it and will direct our residents, who pass through our stroke clinic to read this as an excellent foundation for developing expertise in stroke management.

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SPLENDOURS AND MISERIES OF THE BRAIN. LOVE, CREATIVITY AND THE QUEST FOR HUMAN HAPPINESS. 2009. By Semir Zeki. Published by Wiley-Blackwell. 234 pages. Price C\$33 approx.

From the dawn of recorded history humans have struggled with eternal questions concerning love, the origins of creativity and how one finds the elusive entity called human happiness. Dr. Semir Zeki has approached these difficult questions initially focusing on his long history of scientific research involving the visual system and then branching out into the realm of art, music and literature to help define the problem and search for answers.

In the *Phaedo*, Plato comments:

“The brain may be the originating power of the perceptions of hearing and sight and smell, and memory and opinion may come from them and science may be based on memory and opinion”¹ Mentation in Plato’s conceptualization proceeds by an orderly sequence involving: 1) reception of external sensations 2) based on this acquired sensory input; reasoning can take place, which 3) takes into account memory and previous experience. The problem of where love, creativity and happiness fit into this conceptual framework continues to be unexplained.

Dr. Zeki has attempted to update this concept by exploiting experimental and human fMRI investigations into the visual system, which have demonstrated the essential importance of specific areas of the occipital cortex intimately concerned with colour and appreciating movements. He suggests that the brain is a knowledge acquiring machine, which uses sensory information to activate “inherited” conceptual systems, which are further developed using “acquired concepts”. These conceptual pre-programmed hereditary systems, if not activated during early life by the appropriate sensory input, fail to develop thus, in a sense erasing these conceptual programs. If adequate sensory input occurs, these programs are activated and can be continually modified during one’s lifetime by numerous inputs from multiple brain areas. Human fMRI data suggests that specific brain areas are activated by specific sensory inputs such as the pictures and voices of loved ones, beauty and nature. Since the underlying cortical regions associated with more complex human behaviours have not been well defined, Dr. Zeki then uses multiple examples in art, (Michelangelo, Cezanne and others) literature, (Dante, Thomas Mann) music, (Wagner) and psychiatry (Freud) to flesh out his ideas concerning the brain’s conceptual framework for the human creative experiences.