represent an excellent introduction to the subject. They are unusually clear and concise. The remaining 23 chapters are organized partly along lines of what part of the nervous system is involved and partly along lines of particular symptom complexes – e.g. serotonin syndrome, Guillain-Barré syndrome. A very useful addition to the text is that in addition to the standard index there is a symptom index that allows the clinician to find parts of the text related to specific symptoms.

Dr. Jain is quick to acknowledge that in many instances, the evidence relating a particular drug to a particular neurological disorder is "weak" from an evidence-based standpoint. Nevertheless, he provides an important service by gathering these data into a very useable form for the clinician and citing the relevant literature. This compilation, almost certainly, will be of assistance to clinicians in helping them more readily and quickly identify drug-induced neurological disorders in their patients.

In addition to listing the drugs associated with a particular condition, most chapters also include brief sections on management of the condition. While these therapeutic recommendations are not exhaustive, they do provide a useful approach to the problem that is supported by references.

This is an excellent volume that I can recommend highly. It deserves a place on the bookshelf of every hospital library and clinicians would certainly be well-served by ready access to it. My only concern about recommending it for a personal library is that books like this can become dated rather quickly and while what it has to say about current drugs is likely to change only slowly, as new drugs come along the book will need to be updated continually or become obsolete. The cost of purchasing frequent new editions could be excessive for the individual library owner.

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ADVANCES IN NEUROLOGY VOLUME 86. PARKINSON'S DISEASE. 2001. Edited by Donald Calne, Susan M. Calne. Published by Lippincott Williams & Wilkins. 479 pages. C$253.50 approx.

Parkinson's Disease from the Advances in Neurology series arises from lectures presented at the 13th International Congress on Parkinson's Disease that took place in Vancouver, Canada in July 1999. This volume covers a wide range of topics that is broadly divided into five sections: The Melvin Yahr Lecture, Etiopathogenesis, Imaging, Medical Treatment and Surgical Treatment. These sections provide an up-to-date review focusing on the important new developments in the understanding of Parkinson's disease. There are 156 contributors that provide expert insight into the work that is being performed to better understand this disease from many different vantages.

The introduction of the dopamine precursor levodopa more than 30 years ago was a dramatic breakthrough in the treatment of Parkinson's disease. The first chapter, written by O. Hornykiewicz, gives a wonderful review of the development of levodopa that has remained the gold standard of treatment to this day from the perspective of his own work in the field for more than 40 years. He gives an overview of the current understanding and treatment options of the disease and introduces many questions that form the basis for future more in-depth chapters.

The background of the reader will determine how easy chapters are to read and follow. For clinicians, some chapters may quickly become too complex to be easily followed, however most have clearly written summaries that provide the important messages that are being discussed. One aspect of Parkinson's disease research that has exploded in the last few years stems from studies related to the genetics of the disease, and three separate chapters cover this topic. The identification of mutations in the genes α-synuclein and parkin in families with inherited forms of the disease has caused a shift in thinking of how "sporadic" Parkinson's may be caused. The abnormal aggregation, inadequate clearance and interaction of these genes'products is just beginning to be understood, but will provide exciting new therapeutic options for patients. The last chapter in this section attempts to provide a synthesis of the huge volume of basic science work that has been done in the last 10 years, but does tend to concentrate too much on the MPTPmodel of Parkinson's.

Many aspects of Parkinson's disease, from basic reception function to disease progression, have stemmed from neuroimaging studies. Seven different chapters are included that provide both basic background knowledge to the reader, as well as more advanced and complex studies of receptor interactions.

The medical treatment section of the book gives up-to-date information of not only the main therapeutic drug treatments, but also covers many other important topics that are common problems to patients but are often only discussed superficially. There are very good chapters devoted to vision, gait, sleep and sexual dysfunction that provide many helpful tips for any clinician who sees Parkinson's patients. The background for the development and use of the newly released dopamine agonists pramipexole, ripinirole, cabergoline (not in Canada) and the catechol O-methyltransferase (COMT) inhibitors are clearly presented. (One criticism of this section is why the chapter on neurophysiology was included here versus in the section early on in the chapter on pathogenesis). The final section on the surgical treatment of Parkinson's disease had each chapter written by the leading experts in the field, and deals with deep brain stimulation, lesioning procedures, and transplant therapies. Each technique is discussed in detail, demonstrating both their benefits and their limitations. The final chapter of the book by L. Laitinen, the modern pioneer of pallodotomies, highlights the main limitations for the future of these techniques being both economic and limited access to the procedures. He stresses the need to solve the primary cause of Parkinson's disease.

Our understanding of Parkinson's disease is evolving at a rapid pace, and this Advances in Neurology volume provides a relatively updated overview. Overall, this is a well-written book that is recommended for anyone interested in Parkinson's disease and wants an in-depth, well-referenced text that covers our current understanding and treatment of the disease.

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BRAIN DEATH. 2001. By Eelco F. M. Wijdicks. Published by Lippincott Williams & Wilkins. 223 pages. C$74.92 approx

This book is a comprehensive monograph on neurological issues encountered in treating patients who progress to brain death.

Scope: A comprehensive review of neurological problems relevant to all of the aspects that one encounters when dealing with brain dead patients.

Contents: This 223 page book is comprised of 10 chapters. The first chapter has a wonderful historical review of the development of the concept of brain death. It also includes international guidelines and highlights variations in brain death declaration in different countries. The second chapter is a review of the pathophysiologic response to brain death. It describes, in excellent detail, the effects of brain death on the endocrine, myocardial, pulmonary, renal, and hepatic functions, as well as the effects on the coagulation system. The chapter ends with guidelines to maintain the brain dead body. Next, the review of the pathological changes of the brain following brain death are reviewed in great detail. The concepts of intracranial pressure, CSF physiology, cerebral autoregulation, and blood-brain-barrier are reviewed briefly and succinctly at the clinician level. Pathological characteristics of "respirator brain" are clearly delineated. An interesting perspective on brain death from the forensic angle is also presented.

Chapter 4 is the core of the subject matter and presents, in excellent clinical detail, the neurological examination of the brain dead patient with wonderful illustrations of the brainstem reflexes. The important concepts of irreversibility, brainstem death variation of total brain death, and issues regarding the necessary "observation" period are discussed in a clear and logical fashion.

The fact that the declaration of brain death is difficult and that the physician's level of expertise and competency are paramount in the process are also well-presented. The problem of one vs. two physicians being required to pronounce a patient brain dead and variations in different hospital policies are delineated. The rational use of confirmatory tests are presented to the state of the art available technology.

Chapter 5 reviews some issues in the difficult subject of brain death in children. This was one of the best reviews that I have read on the topic. The entire 6th chapter is devoted, very appropriately so, to conditions that mimic brain death and the persistent vegetative state. This chapter was expanded to akinetic mutism and locked-in syndrome.

The 7th chapter is devoted to reviewing the cultural conditions, attitudes, beliefs and values regarding issues of brain death, afterlife, reincarnation, and organ donation. This is a must-read for anyone who works in a multicultural center and deals with patients of very varied cultural backgrounds.

Chapter 8 deals with the practical legal aspects of brain death. Although this chapter is mostly directed to the US audience, it has an important discussion on the errors in diagnosis and/or management of the patients with brain death. The illustrative cases really bring the message home. The legal aspects of irreversible loss of consciousness vs. brain death and the legal "slippery slope" are well-described.

Chapter 9 is dedicated to the philosophical and ethical aspects of brain death written by Dr. James Bernat. The historical philosophical and ethical developments around the concept of death and accepting brain death as a standard of death are presented. The issue regarding when death really does occur after the cessation of heart beat and breath are discussed at the philosophical level. Irregularities in brain death patients, eg. EEG activity and preservation of water homeostasis and lack of DI in brain dead patients, that has been challenged in the past, is present in the "Conceptual confusion and legal fiction" section in an unbiased way. The controversial issue regarding organ procurement in dying patients who are "beyond harm" and in anencephalic infants is also succinctly presented and the moral, ethical issues, as well as the public perception, are presented. The final chapter ends this wonderful manuscript with details regarding setting up an organ procurement center, reviews the legislative implications and the organ donation criteria. The reasons for organ donor shortfalls are explored. The chapter ends with the protocols for medical management of the organ donor brain dead patient.

Strengths: This book is one of several new neurocritical care texts. However, it is unique in that it is the only book that focuses entirely on the issues surrounding brain death. The writing is concise and presented in a clear and logical format. Almost exhaustive details of clinical examination of brain dead patients and pitfalls, need and use of ancillary testing, and protocols for the management of organ donor brain dead patients, are provided with lucid and practical clinical guidelines for the front-line clinician. Each section is up-to-date and reviews the state of the art technology as well as current ethical, legal, religious, philosophical, and controversial issues that, at times, involve the diagnosis of brain death.

Deficiencies: There are no significant deficiencies of this book.

Recommended Readership: This is a book which should be part of the personal library of all neurologists, neurosurgeons, internists, general surgeons, and critical care physicians. It also should be available as a reference to all ICUs of all subspecialties.

Overall Grading: 5/5

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THE CEREBELLUM AND ITS DISORDERS. 2002. Edited by M-U. Manto and M. Pandolfo. Published by Cambridge University Press. 589 pages. C$362.00 approx.

For those with an interest in the cerebellum, these are both exhilarating and overwhelming times. They are exhilarating because of the wealth of new information coming from studies using a variety of new techniques (from neural cell cultures and brain slices to fMRI). They are overwhelming because of the vast amount of new information and the difficulty of seeing how it all fits together. For clinicians, progress in the basic sciences has led to the eagerly anticipated possibility of new drug treatments for the cerebellar ataxias. But which new discoveries are important? Which will lead to new treatments?

Twenty years ago when progress was slow and life was simpler, a book appeared which nicely summed up much of what was known about the physiology and neurology of the cerebellum. This book, "Disorders of the Cerebellum", consisted of 18 chapters and was written by three authors (Gilman, Bloedel and Lechtenberg). This has now been superseded by "The Cerebellum and its Disorders" edited by Manto and Pandolfo. The new book contains 40 chapters and was written by 70 authors. Consequently, a major strength of the new book is its breadth of coverage. This coverage includes six introductory chapters on embryology, neurotransmitters and function, three chapters on clinical signs and pathophysiology (including cognitive disorders of the cerebellum), 11 chapters on sporadic diseases affecting the cerebellum, three on toxic agents, one each on grafts and neuropathology, 10 on dominantly inherited progressive ataxias and five on recessive ataxias. Clearly, this book is a mine of information. The early chapters will be useful for teaching and general knowledge; the later ones for reference to

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