

## Book Reviews

ADVANCES IN NEUROLOGY, VOL. 60; PARKINSON'S DISEASE: FROM BASIC RESEARCH TO TREATMENT. 1993 Edited by H. Narabayashi, T. Nagatsu, N. Yanagisawa and Y. Mizuno. Published by Raven Press, New York. 773 pages. \$205 Cdn.

This book originated from the proceedings of the 10th International Symposium on Parkinson's disease held in Tokyo in October 1991. The quality and impact of the 126 chapters are highly variable, as might be expected in a collection of this type, but more to the point, the emphasis on some topics is difficult to fathom, as is the arrangement of the chapters.

There are sections on basal ganglia function, etiology, clinical studies and treatment. Highlights include a masterful review by Wichmann and DeLong on functional aspects of basal ganglia circuitry and pathogenesis of parkinsonian manifestations, a necessarily superficial but up-to-date account of neurotransmitters, receptors and trophic factors by the McGeers and interesting reviews of dopamine-acetylcholine-glutamate interactions and the effects of D1 and D2 agonists in MPTP-treated monkeys by leaders in the field (DiChiara & Morelli and Bedard et al., respectively). Chase reviews the work performed in his laboratory on downstream changes in dopamine denervated animals.

The etiology sections comprises chapters on MPTP and related toxins, iron and oxidative reactions, mitochondrial function, genetics and epidemiology. These related topics are of great current interest, but have been reviewed elsewhere (*Annals of Neurology*, *Neurology*, *Movement Disorders*, *Neurologic Clinics*) in a more cohesive form. Apart from an excellent chapter by Agid (which appears in another section) there is no effort to tie the threads together and it is unclear to me why 6 chapters should be devoted to tetrahydroisoquinolines. There are worthwhile reviews on familial parkinsonism (*Duvoisin*) and dopamine receptor subtypes (*Jarvie & Caron*).

In addition to a rather tedious component devoted to clinical physiology, the clinical section contains good discussions of diffuse Lewy body disease, morphometric studies in dementia and observations on the cognitive responses to levodopa, as well as 11 chapters on imaging. Of greatest interest here are the studies of D1 and D2 receptors. Despite the rarity of the condition, there are 10 chapters on dystonia-parkinsonism, many of which add to the already prevalent confusion. Notable exceptions to this are the exhaustive review by Nygaard and the reports of normal 6-fluorodopa PET scans from the Vancouver group. Other worthwhile entries here are the discussions of clinicopathological correlations (*Hughes et al.*) and pathological changes following MPTP (*Forno et al.*).

The rather lengthy section on drug treatment contains little new, except for interesting preclinical studies of a COMT inhibitor which is now entering Phase III studies. The concluding section deals with transplantation. Most of this work has since been covered in greater detail elsewhere. Although growth factors are purportedly discussed in this section, this exciting area gets only superficial coverage in other sections of the book. A number of errors in content have gone uncorrected.

This volume contains some very worthwhile entries, but many sections consist of numerous short observations where a single comprehensive and critical review may have proved more helpful. The interesting original observations reported here have mostly since appeared in peer-reviewed form – some authors have updated

their references appropriately, others have not. For the practising neurologist who wants a digestible overview of the area there are probably better sources of less intimidating price and weight. Nonetheless, this book should find its way to most library shelves and will undoubtedly prove a handy reference source for those with a more dedicated interest in the area.

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SURGERY OF THE CRANIAL NERVES OF THE POSTERIOR FOSSA. 1993. By Daniel L. Barrow. Published by AANS Publications. Price not available.

This book represents another volume in the Neurosurgical Topics series published by the AANS Publications Committee. Dr. Daniel L. Barrow, as editor, has done well to gather together a number of authors with special expertise in the treatment of posterior fossa cranial nerve pathologies. As such, the thirteen chapters represent many years of neuroscience experience.

The first chapter provides a well organized overview of the microsurgical anatomy of posterior fossa cranial nerves. Dr. Rhoton's concise explanations and the excellent illustrations make this detailed subject readily understandable. In the next several chapters microvascular compression and decompression are discussed at length. Repetition is the hallmark of multi-authored texts and can be informative if a different perspective is presented. However, in this volume perhaps too much time is spent discussing the controversies surrounding the etiology and treatment of trigeminal neuralgia. In the chapter dealing with operative positioning and perioperative management, the authors recommend daily lumbar punctures as a means of preventing and treating CSF fistulae. This is a dated technique and most surgeons today would use temporary external lumbar drainage. Dr. Møller's review of intraoperative monitoring is very informative and will be beneficial to both the technician and clinician. Chapters twelve and thirteen deal with surgical approaches to tumors in the posterior fossa. In chapter twelve, the illustrations could be improved upon and in chapter thirteen, although the accompanying radiographs and MRI's illustrate the pathology well, there are no pictures to illustrate surgical approaches utilized for tumor removal.

This book is well referenced and the chapters are easily readable. The chapter on neuroanatomy is a must for all neurosurgical residents. Excepting some redundancy, this text is recommended to neurologists and neurosurgeons with special interest in cranial nerve pathology. It provides both practical and provocative information that should be of benefit to both the novice and the experienced neurosurgeon.

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MRI AND CT OF THE SPINE: A CASE STUDY APPROACH. 1993. By Robert Kricun and Morris E. Kricun. Published by Raven Press. 408 pages. \$156 Cdn.

As the title states, this book is written in a case study format. The book is 408 pages in length and presents 74 individual cases including a discussion of each case. There is a brief appendix