

and radiological diagnosis would be of particular interest to these groups. The chapter on "Pathological Anatomy" is too brief to be of much value and would have greatly benefitted from descriptive photomicrographs. Furthermore, many of the descriptive terms are not current (e.g., neurinoma). The chapter on surgical therapy is not detailed or current enough to be of interest to neurosurgeons but does outline the principles of treatment, with attractive intraoperative photographs, in such a way to be of some benefit to junior housestaff.

In summary, this brief monograph is unlikely to be of much interest to practicing neurosurgeons or neurologist. It may be of some value to junior residents, medical students and nursing staff on a neurology or neurosurgery service.

*Michael G. Fehlings,
Toronto, Ontario*

ENDOSCOPY OF THE CENTRAL AND PERIPHERAL NERVOUS SYSTEM. 1997. Edited by: Wesley King, John Frazee and Antonio De Salles. Published by: Thieme. 272 pages. \$C \$219.70.

The view through the neuroendoscope has become much clearer with advancement of optics, cameras and instrument miniaturization. These technical advancements have been coupled to major technical breakthroughs in frame and frameless stereotaxy, to allow us to do more with minimal disruption of normal structures. This book in the first four chapters highlights these technical advancements both historically, those currently in use, and those that are in the development stages. However, technical breakthroughs such as neuroendoscopy, are not ubiquitously applicable to management of all neurosurgical diseases in terms of patient safety, efficacy and efficiency. Neuroendoscopy as the optimal management strategy in certain diseases I believe have been proven, with the limitation being the availability of instrumentation and operator expertise. Both these elements are of equal importance, as our ability to work with neuroendoscopes depends on the quality of the picture on the monitor, and hand-screen coordination and appreciation of a limited view of the anatomy that is somewhat novel to our conventional neurosurgical training. A chapter devoted to the endoscopic anatomy of the ventricle and use of excellent illustrations in this book aid the reader, however, hands-on training using cadavers at workshops or assisting experienced surgeons remains the main mode of training.

In general, endoscopy can be an optimal management strategy where the pathology lies within a cavity, which can be directly reached with little manipulation, is filled with a clear medium such as CSF or air. The ideal qualities of the pathology include ones which are cystic, relatively avascular, require biopsy or subtotal rather than total removal. Currently, intraventricular pathologies make up the bulk of neurosurgical diseases most amenable to neuroendoscopy, hence their justified discussion in several chapters. These include IIIrd Ventriculostomy for aqueductal stenosis (especially adult onset where the CSF reabsorption pathways are developed), ventricular cysts (benign or tumor related), ventricular tumors which require biopsy or subtotal removal. Within this latter category are colloid cysts, where the objective should be a total capsular removal, a claim that cannot be achieved under many circumstances even by experienced neuroendoscopists. This results from lack of inability to use two

instruments through a single endoscope required for bi-manual dissection, and proper visualization of the portions of the tumor extending posteriorly in the roof of the IIIrd ventricle. Admittedly use of lasers, bilateral endoscopes, refinement of cautery and other instrumentation are allowing greater removal of these and other solid tumors which may suffice in certain patients. However, whether they are overall any better compared to microneurosurgical transcallosal or trans-middle frontal gyrus approach in terms of forniceal injury, incidence of seizures and tumor recurrence still remains an open question. These issues were not adequately highlighted in the chapter comparing endoscopic vs. conventional approaches to these tumors.

Endoscopy is proven in the ENT management of paranasal pathologies, an area dealt with in this book but outside this reviewers area of expertise. Unilateral sympathectomies are also best undertaken with the endoscope, allowing direct visualization of the chain through 3-4 small portholes. General surgical endoscopes and much of their instrumentation can be utilized, though the 3D endoscopes discussed in a separate chapter provides an even greater appreciation of the anatomy. Limitations includes the relatively infrequent need for bilateral sympathectomies (where it cannot be staged), or those patients with primary pulmonary/pleural disease. The direct visualization of the sympathetic chain through the endoscope minimizes the risk of Horner's syndrome or injury to the lower elements of the brachial plexus. The chapter provides excellent drawings, however, actual pictures through the endoscope may have been more informative for the reader.

The role of neuroendoscopy, however, remains unproven for most neurosurgical diseases, requiring a detailed and rational analysis by dedicated surgeons. This book does justice in presenting an enthusiastic but realistic view of neuroendoscopy in the management of intraaxial, cranial base and spinal surgeries. I am sure that the limits of neuroendoscopy will broaden with advent of further instrumentation and technology. These chapters serve well to highlight the possibilities of neuroendoscopy, but it will require careful scrutiny to determine what pathologies and in which types of patients is endoscopy truly the optimal route of management. In addition to efficacy of achieving the desired management objective and minimizing patient risks, analysis of efficiency of use of operative and hospitalization time, availability of instrumentation and training should also be considered in coming to a decision regarding which cases are best managed endoscopically. I recommend this book to neurosurgeons who are interested in pursuing or at least being made aware of this rejuvenated/novel neurosurgical armamentarium, which will certainly evolve further in the future.

*Abhijit Guha,
Toronto, Ontario*

FALLS IN EPILEPTIC AND NON-EPILEPTIC SEIZURES DURING CHILDHOOD. 1997. Edited by A. Beaumanoir, F. Andermann, G. Avanzini and L. Mira. Published by Faber Book Services for John Libbey & Company. 223 pages. \$C50.70

This most interesting monograph is clearly an international work, with input from European and North American authorities, with the uneven input of a multi-authored text.

The most revealing aspect of this work pertains to the use of

EEG with polygraphic monitoring, particularly multi-channel EMG activity of extra-cerebral channels, that demonstrates the physiology of drop attacks, both epileptic and non-epileptic.

Although very focused in its direction, I feel that this work is worthy of a general audience, and would appeal to both neurologists, pediatricians, internists, and family physicians with an interest in this area. Its strongest appeal is to clinical neurophysiologists who are involved in the video EEG monitoring of children with paroxysmal disorders, such as epilepsy, drop attacks, and similar problems.

The references are reasonably up to date, although by no means exhaustive or comprehensive. There is a preponderance of literature from the European sources, but includes a good international review from other centres that have been devoted to the study of such paroxysmal and epileptic disorders as well.

For its modest price, it should have a place in the library of neurologists and clinical neurophysiologists, as well as hospitals and neurophysiology laboratories.

*Paul A. Hwang,
North York, Ontario*

NEUROPATHOLOGY OF DEMENTING DISORDERS. 1998. Edited by William R. Markesbery. Published by Oxford University Press Canada. 404 pages. \$C278.95.

This volume is an excellent attempt to provide an up-to-date review on the subject of dementing disorders, a subject which has witnessed tremendous advances in the last few decades. Many aspects of our present-day knowledge on the classification and diagnosis of dementias are based on neuropathological findings aided by the modern techniques in neuroimaging, immunohistochemistry, neurochemistry, molecular biology and genetics. This book not only covers the common dementias associated with neurodegenerative disorders but also the dementias related to vascular, infectious, metabolic and nutritional diseases. It is written by 33 leading experts in the fields of neuropathology, neurology, basic and clinical neuroscience. There are 18 chapters in the book with the first three serving as a kind of introduction to the classification, the neuroimaging and pathological changes of dementia and normal aging. The remainder of the book is structured with individual chapters devoted to a specific group of dementing illnesses which include Alzheimer's disease, Pick's disease, non-Alzheimer frontal lobe dementia, chromosome 17-linked dementias, dementia with Lewy bodies, progressive supranuclear palsy, Huntington's disease, corticobasal degeneration, amyotrophic lateral sclerosis-parkinsonism-dementia complex of Guam, vascular dementia, virus-mediated dementias, prion diseases and dementias related to nutritional and metabolic disorders.

Even though this is a multi-authored book the layout for each chapter is quite consistent. In addition to the pathological changes seen in dementias, sufficient information is provided by the authors on the clinical, genetic, epidemiological, neuroimaging, neurochemical and molecular biological aspects of most dementias. Although there are some duplications in different chapters, they are relatively minor. The illustrations and photographs are clear and adequate. More photographs, especially those in colour would enhance the quality of this book but would certainly add to the cost. There are few typographical

errors that are quite distracting, especially those involving the alleles of APOE. Even though it is the aim of the book to provide the most up-to-date information on dementias, many important new discoveries have taken place just as it is being published. For example, the significance of α -synuclein in neurodegenerative diseases is emerging. This, however, is inevitable because of the rapid advances made in these areas. The omission of any mention on the new variant of Creutzfeldt-Jakob disease in the chapter on prion disease could also be due to the same reason.

The book is well-written, comprehensive and informative with an extensive list of useful references following every chapter. I would strongly recommend this volume to neurologists, neurosurgeons, psychiatrists, neuropsychologists, gerontologists, and neuroradiologists because the understanding of the pathological basis of dementias will definitely enhance their practice in these areas. For anatomical and general pathologists, this is a handy reference especially when dementing disorders are common post-mortem diagnoses. This compact volume may also serve as a useful revision text and update for practicing neuropathologists.

*Lee Cyn Ang,
Toronto, Ontario*

RIGHT HEMISPHERE LANGUAGE COMPREHENSION. 1998. Edited by: Mark Beeman and Christine Chiarello. Published by: Lawrence Erlbaum Associates, Inc. 408 pages. \$C51.94

This edited book on right hemisphere language concentrates on comprehension from phonology to pragmatics. It is a multi-disciplinary effort with most of the contributions being linguists and psychologists but also a few neurologists and neuroscientists researching anatomy. Right hemisphere language capacity has been much debated. This is not a trivial topic from the point of view of neurobiology and psycholinguistics or even clinical neurology, although clinical issues are not prominent in this book. For instance, there is a chapter on right hemisphere contributions to creative problem-solving but not on recovery from aphasia. There is no chapter on PET scanning or fMRI that have thrown some light on right hemisphere language function, but there is a chapter in the book on event related potentials and some computer modeling of the semantic space that challenges the comprehension of nontechnical readers. Particularly interesting are the chapters that make an attempt at integrating hemispheric processing of language. There is no doubt that language deficits are subtle with right hemisphere damage but the evidence for right hemisphere participation in language processing is indeed extensive and some of this is highlighted and updated in this book.

Language comprehension is a complex phenomenon requiring phonological processing, the recognition of lexical units and their integration into meaning, the use of syntax (which the right hemisphere, by the way, seems incapable of doing). The processing of paralinguistic or pragmatic aspects by, language such as humor, context and other highly integrated functions, on the other hand, may be even specialized in the right hemisphere. Most of the chapters have a healthy mixture of theory and experimental data but the book is more than just a collection of articles. The editors should be commended for the selection of