However, the organization of the information is confusing. For example, blepharospasm is discussed twice, in two nearly identical tables within the same chapter, but nystagmus is not. The discussion of some diseases includes detailed clinical descriptions, while the clinical picture of other neurologic conditions is not described but discussed only in terms of possible causes. The sections on peripheral nerve disorders would have been much clearer and useful with diagrams of the relevant neuroanatomy. There is virtually no information on some common conditions, such as subarachnoid hemorrhage and multiple sclerosis. A number of disease specific neurologic scales are the only content of the chapter on neurorehabilitation, but their utility is not discussed, nor are commonly used scales, such as the Kurtzke EDSS scale, included. This is clearly a very individual compilation, with very few references.

The author wished to make this text a portable, easily available, single source of information. However, the material included is too variable to justify carrying this in one's pocket on the wards. The absence of any information regarding diagnostic testing, therapeutics and management also limit its usefulness to junior trainees. In the year 2001, most hospitals have computerized information sources easily available to clinicians, and the breadth and depth of evidence-based information and resources in neuroscience through those sources easily outstrips that available in this slim text.

A junior trainee would be best served by generating their own summaries and tables while studying from more inclusive texts. For the practicing clinician, this text does not contain enough information, or organize it well enough, to justify its addition to a crowded bookshelf.

Maureen R. Shandling Toronto, Ontario

**BEHAVIOR AND MOOD DISORDERS IN FOCAL BRAIN LESIONS.** 2000. Edited by Julien Bogousslavsky and Jeffrey L. Cummings. Published by Cambridge University Press. 554 pages. C\$117.60 approx.

Behavior and Mood Disorders in Focal Brain Lesions is an overview of the emotional and behavioral consequences that occur not only with discreet brain lesions (as the title may suggest) but also specific neurological diseases including epilepsy and neurodegenerative diseases. The true emphasis and strengths of the book are on the correlations between anatomy and the neuropsychiatric symptoms.

The first chapter takes on the daunting task of synthesizing available knowledge. The chapter dissects Jeffrey Cummings' theory of brain as it involves mood and cognition as described in instrumental, fundamental or executive syndromes. Each encompasses different aspects of mood and behavior including cognitive, neurobiological, anatomical and neurochemical substrates. The rest of the book fills in the details, usually from two viewpoints. For the behaviorist or psychiatrist who begins with a set of specific symptoms or clinical features, reviewing the appropriate chapter will help identify which anatomical areas and central nervous systems diseases are associated with the symptoms of interest. For those starting with a known lesion or anatomical dysfunction, for example the basal ganglia, a review of this chapter describes possible cognitive and mood disorders associated with

these areas of the CNS. There are several introductory chapters addressing some methodological issues inherent to the study and evaluation of mood and behavior on a practical level. The chapters include working definitions of terminology, an excellent critical appraisal of the scales used to measure these features, and other technical considerations probably more relevant to the clinical researcher than the practising clinician.

The remaining chapters vary in depth and organization with clear overlap between chapters exploring each syndrome from either end. In a cover-to-cover read, there is considerable repetition. For example, the frontal-subcortical connections are reviewed in chapters 1, 6, 8, 9, 10, and 11. However, possibly because of the perspective of individual authors, some pertinent references are omitted in some discussions, but included in others.

Chapter 6, dealing with mood and behavior in disorders of the basal ganglia, is particularly strong as an independent, comprehensive review from both the perspective of disease and anatomy. Chapter 17 on anosognosia is another good chapter that approaches specific agnostic syndromes with emphasis on behavioral, anatomical, symptomatic associations and experimental studies and finishes with possible mechanisms that give the reader a complete perspective.

Most of the references are from the 1980s and early 1990s when CT and MRI began systematically to confirm and identify lesion location and behavioral correlates. There are only a few references made to the use of functional neuroimaging, particularly fMRI or PETthat illustrate how a given lesion affects the neural systems that underlie clinical states. While several authors mention the inadequacy of studying acute focal lesions in isolation, this critical issue inherent in all attempts at structure-function correlation was unevenly addressed throughout the text. Clinical cases comprise the main substance of some chapters. This format serves more to illustrate structure-function relationships, rather than to unravel the associations. Those hoping to read a more experimentally driven model of behavior with lesion studies as a foundation will be disappointed but nonetheless intrigued.

Medical students, residents and clinicians seeking to generate a broad differential diagnosis for specific psychiatric disturbances, particularly those that accompany neurological diseases, will find having this book useful as a reference. No matter if you start with the "where the lesions is" or "what the lesion is" approach, you will be able to find a quick and useful review of the relationship between these two clinical questions. For those with more theoretical interests of the complexities of neural systems underlying mood and behavior, this text provides a good beginning.

Taresa Stefurak Toronto, Ontario

**MERRITT'S NEUROLOGY.** 10th Edition. 2000. Edited by Lewis P. Rowland. Published by Lippincott, Williams and Wilkins, New York. 1002 pages. C\$130.00 approx.

This new general textbook of neurology is intended for medical students, house officers, practising neurologists, non-neurologist clinicians, nurses, and other health care workers. It attempts to provide the essential facts about neurological conditions that are likely to be encountered. It succeeds admirably well in this task.

The table of contents is divided into 25 sections, starting with

"Symptoms of Neurologic Disorders" and ending with "Ethical and Legal Guidelines". It has the usual sections on peripheral neuropathies, movement disorders and other classical neurological subdivisions. It is surprisingly comprehensive, and has for example a chapter on neurologic disease during pregnancy. No textbook is perfect and, although this chapter mentions the higher incidence of carpal tunnel syndrome, Bell's palsy and meralgia paresthetica during pregnancy, there is no mention of lumbosacral plexopathy occurring as a result of prolonged labour or forceps delivery.

With its 165 chapters, this is a very comprehensive book. It has an interesting section entitled "Environmental Neurology", which covers issues like alcoholism, drug dependence, and a host of topics including heavy metal intoxication, and falls in the elderly.

In general, for a hard cover textbook, it is very up to date. The chapter on prion diseases for example has a good discussion of the 14-3-3 protein and its usefulness in Creutzfeldt Jakob disease diagnosis in CSF samples, and also a short discussion of new variant Creutzfeldt Jakob disease. The chapter on headache mentions all four of the triptans currently on the market in Canada. Surprisingly, this chapter perpetuates older terminology such as common migraine and classic migraine, and does not use the diagnostic terminology of the International Headache Society.

This is a multi-authored textbook, and the list of contributors runs to eight pages. It is very much an American textbook, with only six contributors from outside the United States. In fact, the great majority of the contributors come from New York.

In summary, this is a well-indexed and useful book. For those who want a hard cover neurology textbook which is succinct, relatively complete, and up to date in a 1000 pages, this book is a good choice.

Werner J. Becker Calgary, Alberta

NORMAL AND PATHOLOGIC DEVELOPMENT OF THE HUMAN BRAIN AND SPINAL CORD. 1999. By Maria Dambska, Krystyna E. Wisniewski. Published by John Libbey & Company Ltd, London, England. 212 pages. C\$118.50 approx.

This book is by two neuropathologists, and is divided into two parts. The first describes normal development and the second, pathologic development. The first part is somewhat disappointing. Although there is a good description of the embryology of the brain, with excellent black and white drawings of development, the text is somewhat laborious, and not without amphigory. For example, the authors write: "We conclude that neuronal death, which is necessary for the final maturation of connections in the CNS, requires further study." Also "the role of myelin sheaths is apparently complex." Peripheral neurons are referred to as "ganglionic gangliocytes." There are a number of important omissions. For example, olfactory neurons are stated to retain their dividing potential, but not the dentate granule neurons of the hippocampus. This accounts for the sensitivity of the dentate to the mitotic spindler inhibitor colchicine. Also not mentioned are any of the genes of development that are now known. The importance of homeobox genes in rostro-caudal differentiation and sonic hedgehog protein in ventral motoric differentiation of neurons could be given, but they mention only retinoic acid. Nevertheless, the first portion of the book does describe most of the important features of development such as the radial glia and timetable of myelination and gyration. Indeed, Table 3 on myelination is especially useful.

In the second part of the book, the authors do much better, reflecting their experience as neuropathologists. Here, there is authoritative, if brief, coverage of the phakomatoses, CNS malformations, developmental disturbances due to chromosomal aberrations, and late and secondary developmental abnormalities. The justification of this last category, which includes schizencephaly and porencephaly, as separate from the long chapter on malformations of the CNS, is not entirely justified in view of our understanding of these conditions. Indeed, this brief chapter adds only hydranencephaly and cystic encephalopathy to form a loosely coherent, short chapter. The final chapter, entitled "Delay of the CNS maturation" is even shorter, constituting less than two pages. The concept of a disease consisting solely of CNS delay in maturation, is not entirely justified, although the authors refer to numerous conditions including "severe gestosis" or pre-eclampsia of pregnancy. In view of work in the UK, however, I doubt that "chronic hypoxia ... leads particularly often to retardation of myelination of the CNS pathways." Nevertheless, part II contains excellent photographs of cerebella hypoplasia, lissencephaly, heterotopias, holoprosencephaly, agenesis of the corpus callosum, diplomyelia and Chiari malformation. There are fewer photographs of the phakomatoses, but then, this is a short book.

In spite of the above anomalies in English (not the authors'first language), I generally like the book and learned things while reading it. Important questions are addressed even in part I with its omissions, such as invasion of mesenchyme into the ectoderm, which brings not only blood vessels but microglia into the brain. The authors have important considerations in mind, and this is apparent when reading this book. A future edition could be enhanced by correlating with molecular knowledge, tightening the English and style of prose, and adding a few more illustrations of some of the important conditions described.

Roland Auer Calgary, Alberta

MYASTHENIA GRAVIS AND MYASTHENIC DISORDERS. First Edition. 1999. Edited by Andrew G. Engel. Published by Oxford University Press (Contemporary Neurology Series), New York. 310 pages. C\$157.95 approx.

Engel presents a multi-authored scholarly work detailing current concepts about myasthenia gravis (MG) and myasthenic disorders. The volume is clearly organized in three main parts: approach to diseases of the neuromuscular junction, myasthenia gravis, and myasthenic syndromes and related disorders.

The first part on the approach to diseases of the neuromuscular junction presents much sophisticated experimental work detailing the anatomy and molecular architectures of the neuromuscular junction. An extensive section on the structure and kinetic properties of the acetylcholine receptor follows, with the last chapter outlining the electrodiagnosis of endplate disease. This part of the book proved informative and useful in collating much diffuse material into a compact format which is readily assimilated.

The second part of the book provides information about MG starting with the immunopathogenesis, including a chapter on experimental autoimmune MG, and then progressing to the