dissection or occlusion. Students could skip instruction about examination of the larynx with a laryngeal mirror or performance of caloric testing at the bedside in an awake patient which are presented as if these were part of the standard neurological exam.

There are a number of important omissions in the text. It would have been very useful to have a chapter devoted to neurological history taking and principles of localization rather then jumping right into the examination. No manual on the neurological exam should exclude mention of skull and spine exam, neck artery exam, detection of body asymmetries and common skin lesions associated with neurological conditions. Some retinal photographs would also have been useful. Techniques for examination of apraxia and agnosia are barely mentioned. The commonly-used Folstein Mini-Mental State exam would have been useful to include. No space is given to examination of the comatose or stuporous patient. No material specific to the pediatric neurological exam is found in the text.

In the various sections, there are a number of surprising omissions as well. Central (cerebral) causes of ptosis are not considered. Under the twelfth cranial nerve there is no mention of the fact that tongue atrophy often appears initially at the edges or of the importance of looking for fasciculations. Only ALS is listed under "diseases" of cranial nerve twelve. In the discussion of spasticity, velocity-dependence, one of its main characteristics, is omitted. Under reflexes we do not find the commonly-used four-point grading scale, mention of crossed adductor reflexes at the knees or mention of reflexes such as the Chaddock, which can be more sensitive than the Babinski. In discussing drift, pronation should have been highlighted as a subtle first sign of a drift due to weakness. There is no clear division in the sensory chapter between primary and cortical (integrative) modalities. The term "sensory extinction" is never used. Allodynia is missing from definitions of terms applied to pain or sensation.

There are also occasional errors. Most texts list L1-L2 as the main roots for the iliopsoas rather than L2-L3. To say that "jaw jerk, snout, and sucking reflexes are usually present" with the pseudobulbar syndrome fails to emphasize the commonly-seen increased jaw jerk. The statement "elevated blood pressure may cause disc edema" is misleading to a beginner since papilledema is seen only when blood pressure reaches extremely high levels. I would take exception to the advice that "the cheapest reflex hammer works exactly the same as the most expensive". Most neurologists have demonstrated time and again to students using the tomahawk hammer that, with the use of a properly-weighted hammer such as the Queen Square model, previously absent reflexes magically seem to reappear. The text is almost devoid of references and inclusion of selected references would be an improvement.

Despite these shortcomings, this text does a reasonable job in instructing students about the importance of first-hand observation in unravelling the diagnostic challenges presented by neurological patients. The clinical data have become even more important with the advent of costly and ever more sensitive tests such as specialized neuroimaging studies. This book, despite some of the reservations mentioned above, is a testament to that fact.

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NEURODEGENERATIVE DISEASES: NEUROBIOLOGY, PATHOGENESIS AND THERAPEUTICS. 2005. Edited by: M. Flint Beal, Anthony D. Lang, Albert Ludolph. Published by Cambridge University Press. 985 pages. Price C$500.

When I accepted to review this book, I did not expect this book to provide the most recent advances given that books normally take a long time from the writing phase to actual publication. I felt nonetheless that this was timely as the field had progressed rapidly over the last few years, so it was a good opportunity to stop and reflect. As presented by the editors, this book is intendedto provide the readers with the latest research from the basic aspects of neurodegenerative diseases to the various therapies. Their book is divided into ten sections covering basic aspects, neuroimaging, therapeutics, normal aging, Alzheimer's disease, Parkinson's disease and related movement disorders, cerebellar degenerations, motor neuron diseases and other neurodegenerative diseases. The authors are all internationally renowned leaders in their respective fields. The one feature of this book that I appreciate in other similar works, is the efficiency of the index.

In the first section, the first two chapters covers oxidative stress, whereas the subsequent chapters review the role of mitochondria, of excitotoxicity, apoptosis, protein misfolding, inflammation, ion homeostasis including Ca, Na, K, Cu, Zn. All these theories are explored comprehensively in a factual manner so no inference is made and no theory is editorially privileged over another. Some of these chapters are focused more specifically on selected diseases. There are also two chapters on animal models, genetic and toxic. Just prior to the imaging section, there is a chapter on the neurophysiology of motor diseases. In the imaging section, there are chapters covering anatomical and functional imaging and spectroscopy. Although the chapters on the different MRI technologies and spectroscopy are particularly strong, I would have wished for more on PET/SPECT aspects of diseases other than PD (e.g. amyloid marking, blood flow). The component on therapeutics consists of three chapters: the first deals with gene therapy and the other two explore stem cell therapy. These chapters provide an in depth understanding of the challenges of these futuristic but promising approaches. The section on aging focuses mainly on the effects of aging on memory from a clinical and pathological point of view. Very little is mentioned on the motor aspect and on the pathology other than memory related. The component on Alzheimer's disease covers mild cognitive impairment to the genetics and amyloid causes as well as the therapeutics. Definition of the different types of MCI, their evolution and paraclinical data and recent attempts at therapy are all covered. The clinical approach to AD is followed by concise chapters on pathology and genetics. After an introduction to therapy in general, the available treatments and those that are still under investigation are covered in greater details. Diffuse Lewy body disease, frontolobar dementia, fronto-temporal disease with parkinsonism associated to chromosome 17 are each summarized in a chapter. The different prion diseases (different forms of Creutzfeld-Jacob disease and fatal familial insomnia, Kuru, Gerstmann-Sträussler-Schenker) are reviewed in one chapter followed by one, quite comprehensive, dedicated to the biology of prions. The section on the parkinsonisms begins with chapters on the approach to parkinsonism and Parkinson's disease. The component on the pathology encompasses the pathology of the genetic forms of PD and the early markers of the disease. One chapter is dedicated to the genetics and another one deals with to the

different physiopathological avenues including oxidative stress, apoptosis, protein aggregation and inflammation. Available therapies and avenues for the future are outlined in a subsequent chapter but this does not include the treatment for motor and non-motor complications under investigation. Comprehensive reviews of multiple system atrophies, progressive supra-nulear palsy and corticobasal degeneration are provided in individual chapters. The component on the ataxias starts with a chapter on the clinical approach followed by chapters reviewing each autosomal dominant, Friedreich and other recessive ataxias, and ataxia telangiectasia. The part on motor neuron disease encompasses amyotrophic lateral sclerosis, the hereditary spastic paraplegias, Kennedy's disease, spinal muscular atrophies and the parkinsonism-ALS-dementia complex. One chapter covers the genetics of ALS and another addresses the treatment, exploring the compounds under investigation. The final section of the book covers Huntington's, dentatorubral-pallidoluysian atrophy, neuroacanthocytosis syndromes, iron disorders which includes neuroferritinopathy, aceruloplasminemia and Hallervorden-Spatz syndrome, Wilson's disease, mitochondrial disease and the relationship between mitochondria and classic diseases such as Alzheimer and Parkinson.

This book is certainly one that people interested in neurodegeneration should have in their library. The book is not meant as an introduction to the field. It provides a precise overview of where the field is and gives hints of where it will be going in the near future. A number of diseases and conditions are covered from their clinical presentations to pathogenesis and accepted treatments as well as future considerations. No place is given here for editorial comments and controversies. Each chapter's data is solidly built on the literature's evidence. Therefore, it fully fulfilled my initial goals. More technically, although it is not a light reading, the book is well organized so it is easy to obtain a precise piece of information to answer a specific question. Each chapter is richly referenced.

This book represents a milestone of where neurodegenerative diseases are today. It is definitively a commendable book.

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Endoscopic Anatomy of the Third Ventricle Microsurgical and Endoscopic Approaches. 2006. By Wolfgang Seeger. Published by Springer-Verlag Wien. 117 pages. Price C$115.

The stated aim of this book is to present and illustrate important anatomical aspects of microsurgical and neuroendoscopic approaches to the third ventricle. As such the book is mainly an anatomical atlas. The first 15 pages of the text introduce the four standard microsurgical approaches to the third ventricle – the translaminar, the transforaminal, the retroforaminal and the supracerebellar - while the remainder of the book provides 47 figures which serve to illustrate the anatomy relevant to the aforementioned approaches.

As the third ventricle is not a space in the brain that most neurosurgeons frequently access I looked forward to reviewing this text for any helpful information it may provide. Unfortunately I found this a generally disappointing experience. The organization of the text is such that one must constantly flip back and forth between text and illustrations, making it difficult to read. The discussion of the surgical approaches is terse and very basic. Any discussion as to why one may select one approach over another or how variations in the anatomy may affect one's surgical decision making is sorely lacking. While this may be understandable in an anatomical atlas, the authors do take it upon themselves to provide some cautionary notes to the surgeon. These are emphasized in heavy type followed by exclamation marks. Poor translation, however, renders many of these points of emphasis incomprehensible or slightly ridiculous – consider, for example, "Cave loosening of corpus pineale!" or "Danger of contralateral encephalomalazia!"

Frequent spelling mistakes, as well as grammatical and punctuation errors contribute to the impression that this book was carelessly translated and edited. The anatomic sketches themselves are very stylized, simplistic and repetitive. Photographs of the anatomy as seen through the endoscope would have been, I believe, more useful to the novice endoscopist than the anatomic sketches provided.

In short this is not a book I would recommend rushing out to buy. For the neurosurgical trainee a more comprehensive discussion of the approaches and anatomy can be found in the standard neurosurgical texts. For the more accomplished neurosurgeon this book contains insufficient new information to warrant either the price or the effort it takes to read.

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Diagnostic Criteria in Neurology. 2006. Edited by Alan J. Lerner. Published by Humana Press. 227 pages. Price C$150.

This volume is an ambitious and successful first attempt at providing diagnostic criteria for common and rare neurological disorders. It is comprehensive and detailed enough to be of great value as a ready reference, and will certainly benefit the diagnostic process in clinical neurology, if utilized on a not infrequent basis.

It begins with a thoughtful dissertation on Consensus, Disagreement and Diagnostic Labels by Dr. Brent Graham of the University of Toronto. This opening chapter is excellent and merits a careful read and reread after studying the book. Further, the author of the book, Dr. Lerner, points out in the Preface that the Book of Genesis sets out with naming the animals and that, by doing so one might gain control over the unknown and the emotionally terrifying. This is a unique insight into the need and desire of patients to want to know the name of their illness so that they can deal with the future and prognosis.

The book has sections on diagnostic criteria in cerebrovascular diseases, dementias, demyelinating disorders, coma, brain death, epilepsy, headache, genetic syndromes, immune disorders, infectious diseases, movement and neuromuscular disorders, pain, fatigue, trauma, and sleep disorders. Much of what is in this volume is well known to seasoned neurologists but numerous disorders are codified that are uncommon and rare. This is welcome in a single volume. The tables and written summaries are detailed and concise enough to be very useful.