

interventions in Alzheimer's disease has also been included. While neuroprotection is still in its infancy, symptomatic treatment of cognitive function in some patients is now feasible.

Part III deals with "*Clinical and Management Issues*". There are several chapters that deal with functioning of rehabilitation programs. The chapters deal with diagnostic issues and emphasize the need for a precise diagnosis. There are numerous factors that contribute to successful rehabilitation. Within this context, the issue of assessment of outcome has been also addressed in various chapters.

Part IV deals with "*Neurorehabilitation Techniques*". In this part there are chapters describing the neurorehabilitation approaches to aphasia, attention, executive disorders, as well as rehabilitation of patients with traumatic brain injury and memory rehabilitation in the elderly.

In a multi-authored, edited book such as this, various opinions are expressed and this is refreshing. This book has brought together individuals with expertise from molecular, cellular, psychological, and society levels. Each editor has provided an overview and opinion about the subject matter. The diversity of opinions reflects the current understanding of this complex subject. While each reader will obviously come up with his or her own conclusions about individual chapters, it is important to be able to compare one's thoughts with those of others with expertise in this field. There are many developments of cognitive neurorehabilitation that require further research and development. Some aspects, such as neuroprotection, our understanding of neuroplasticity, and how this could be used in neurorehabilitation, are in their infancy. This book represents a thorough and comprehensive review of the subject of neurorehabilitation, both from a basic science, as well as a clinical point of view, and should serve as an excellent starting point for neuroscientists interested in cognitive function.

*Sultan Darvesh  
Halifax, Nova Scotia*

**PARKINSON'S DISEASE AND PARKINSONISM IN THE ELDERLY.** 2000. Edited by Jolyon Meara, William Koller. Published by Cambridge University Press. 251 pages. C\$73.42 approx.

This compact volume is a collaborative effort authored by a group of American neurologists and a group of geriatric and rehabilitation specialists from the United Kingdom and Ireland. The book addresses the diagnosis and treatment of parkinsonism, specifically in the elderly. Chapters are included which review the differential diagnosis of parkinsonism and discuss other disease processes which may mimic some parkinsonian features in older age groups. A very helpful chapter discusses "gait apraxia" and reviews the complex classifications that have been applied to patients with isolated gait disorders. This chapter helps clarify the fact that not all shuffling gaits in the elderly are caused by Parkinson's disease. Drug-induced parkinsonism and essential tremor are discussed in separate chapters. Treatment is reviewed in detail insofar as medical aspects are concerned, but very little is said about neurosurgical management, beyond the statement that few elderly patients are likely to be candidates. Unfortunately, not all of the discussions on treatment are of general applicability. For example, apomorphine is mentioned in several chapters as playing a major role in patient management, but this medication is not readily available in North

America. The authors emphasize the importance of a multidisciplinary team approach and of rehabilitation to the management of the elderly parkinsonian patient. Chapters on physiotherapy, occupational therapy, and speech and language therapy provide extensive discussion regarding the utility of these modalities. The value of community-based nurses in managing the elderly parkinsonian individual with home visits is a major component of the therapeutic approach advocated in this book. Although this appears to be a very efficient approach, it has not been widely implemented in our medical system.

This book should appeal to anyone who deals with medical problems in the geriatric population. It would be of value not only to neurologists and geriatricians, but also to nurses, physiotherapists, occupational therapists, speech therapists, etc. Its major strength lies in its advocacy for a multidisciplinary approach and for the importance of rehabilitation in patient management. It provides food for thought concerning how we might care for these patients better within our medical system.

*W. R. Wayne Martin  
Edmonton, Alberta*

**BENIGN CHILDHOOD PARTIAL EPILEPTIC SEIZURES AND RELATED EPILEPTIC SYNDROMES.** 1999. By CP Panayiotopoulos. Published by John Libbey & Co. Ltd. 406 pages. C\$141.75 approx.

The recognition of the childhood epileptic syndromes and their careful delineation has been a major contribution of the European pediatric neurologists during the past two decades. The book being reviewed, a single author text by Panayiotopoulos, outlines the experience and conclusions of a dedicated epileptologist over the past 25 years.

The book is logically arranged, beginning with a brief review of epilepsy and the benign partial epilepsies of childhood. This is followed by a detailed review of benign Rolandic seizures, by far the commonest of the partial seizure syndromes. In chapter 5, allowing for a misprint in the title, there is a review of the implications regarding children who have centro-temporal spikes, but no seizures, and the figures regarding the incidence of neurologic disorders are quoted. The question of whether this is guilt by association or cause and effect is still left unresolved, but such is part of the challenge of clinical medicine.

The occipital seizures and allied epileptic syndromes are described in great detail using, as a basis, the author's own data from his many years of research in the subject. He delineates carefully the more common early childhood onset form of benign occipital seizures (Panayiotopoulos' syndrome) and distinguishes this from the later childhood onset form. There is a discussion of the implications of occipital spikes both in normal children and those who are neurologically impaired, and an excellent description of the EEG findings both with and without visual fixation, and this is followed by a comprehensive review of the literature of these syndromes.

Because of the clinical similarities between basilar migraine and late childhood onset benign occipital seizures and the conflicting views expressed in the neurological literature, this receives the author's attention across two chapters. It is always heartening to see views forcefully and well-expressed in this era of mealy mouthed scientific timidity, and Dr. Panayiotopoulos reviews, dissects and

argues well to make the point that the two conditions are different and separate and not to be confused. I must confess that I still have reservations, but readers will reach their own conclusions.

The Landau-Kleffner syndrome is covered, although relatively briefly: indeed it is difficult to think of this as a benign syndrome even though it is age-dependent. In addition, the syndrome of epilepsy with continuous spike waves in slow wave sleep is reviewed.

The book ends with an overview of the electrographic and clinical features of the “seizure susceptibility syndromes” which are age-dependent. The book is accompanied by 837 references.

This is a good source book for clinicians dealing with childhood epilepsy and for encephalographers, and offers fresh and, at times, provocative views based on a lifetime of experience. I recommend it.

*John Tibbles*  
*Victoria, British Columbia*

**MOVEMENT DISORDER SURGERY. PROGRESS IN NEUROLOGICAL SURGERY – VOL. 15.** 2000. Edited by A.M. Lozano. Published by Karger. 404 pages. C\$367.13 approx.

The re-emergence of surgery for movement disorders in the past decade and the tremendous results attained with this surgery has led to the on-going rapid development of this field. Accordingly, this volume of *Progress in Neurological Surgery* is timely.

The book is divided into five sections. The first contains a single chapter on the history of movement disorder surgery by Gildenberg, which nicely sets the background for the following text. The second section is entitled “Anatomical and Physiologic Substrates” and contains three chapters that outline the scientific basis for basal ganglia surgery, including a chapter by Obeso et al, which provides a critical analysis of the commonly used models. This section appropriately leaves the reader with the impression that although we have learned a lot about the functional neuroanatomy of the basal ganglionic motor system, there is a long way to go. Section 3, entitled “Patient and Technical Considerations” is comprised of three chapters that provide a good balanced overview of these issues, and leads into the fourth section containing eight chapters under the heading “Procedures and Techniques”. This section looks at the three current major targets (GPi, Vim, and STN), approaches to these targets, and either lesioning them or stimulating them. Up to this point, the book concentrates almost exclusively on surgery for Parkinson’s Disease.

The fifth section is entitled “Controversies, Adverse Events, Emerging Insights and Indications” and, as the title suggests, contains a real grab bag of information. The dozen chapters range from comparing stimulation with lesioning, to gamma knife surgery, to surgical complications, to functional imaging of the basal ganglia. It is in this section that movement disorders other than Parkinson’s Disease are discussed – dystonia (including a chapter on surgery for spasmodic torticollis) and spasticity in particular. Excellent issues are discussed in this section, including: how does deep brain stimulation work?; what is the role of the neuropsychologist in a surgical movement disorder group?; what future surgical treatments might be used in this group of patients? The chapter on neurotransplantation, however, is the biggest disappointment in the volume, and does not really bring the reader up-to-date on this emerging field. This is in sharp contrast to the final chapter by

Freese regarding gene therapy for Parkinson’s Disease, which explores not only the science but also the many issues underlying the transfer of this new technology to clinical trials.

Overall, this is a concise volume which addresses current surgical approaches and their underlying rationale in the treatment of movement disorders, particularly Parkinson’s Disease. Although only occasionally explicitly stated in this book, it is made clear that this is arguably the area in neuroscience where the clinical treatment of disorders and the basic science underlying them are so closely interrelated, with each feeding back to the other. This is one of those books that movement disorder specialists in all fields, including neurosurgeons, neurologists, neuropsychologists, basic scientists, and others will want to have on their shelves.

*Robert Brownstone*  
*Halifax, Nova Scotia*

**NEUROGENETICS CONTEMPORARY NEUROLOGY SERIES # 57.** 2000. Edited by Stefan-M. Pulst. Published by Oxford University Press Canada. 458 pages. C\$176.00 approx.

This is a multi-authored textbook, published as part of the Contemporary Neurology Series. Initial chapters deal with DNA and chromosome structure and patterns of inheritance, and are followed by description of molecular genetic techniques. The clinical chapters deal with channelopathies, neuropathies, muscular dystrophies, tumors, phakomatoses, neurodegenerative disorders, epilepsies, multiple sclerosis, mitochondrial disease, and migraines. The last chapter discusses issues surrounding DNA testing and counselling.

The editor, Dr. Stefan Pulst, is a well-known expert in the field of neurogenetics and was involved in authorship in a number of the chapters. Most of the authors are also known experts in their fields.

The chapters are generally well written, informative, and thorough. All areas of neurogenetics are appropriately covered. A particular strength of this book is in the introductory chapters, which provide a useful overview to physicians not familiar with genetic principles and terminology.

The clinical chapters typically begin with a brief description of clinical features. Classification of related disorders is presented according to genotype, followed by an extensive discussion of the known gene abnormalities, and structure and function of the gene products. Animal models are mentioned briefly, if applicable. Much of the information is enhanced by being in table form, as well as described in the text. In some of the chapters, for example Phakomatoses, and Spinocerebellar Ataxias, a brief section on differential diagnosis and management is included.

The last chapter, dealing with genetic counselling and DNA testing, provides an overview of the practical and ethical aspects in this area.

The main weakness of such a book is that as this area is moving forward at such a fast pace, by the time this (or any similar book) is published, it is out of date with respect to new gene discoveries and advances in understanding of function of gene products. Nevertheless, this is a very useful addition to the library of any physician interested in neurogenetics, and it provides a good foundation of knowledge in this area. Any more recent advances since publication are easily accessible with a quick Internet search.

*Oksana Suchowersky*  
*Calgary, Alberta*