

reflexes are elicited differently in Czechoslovakia than in North America. For example, the Moro reflex is generally produced in neonates by a "swift removal of the base" or by "compression of the epigastrium" rather than by rapidly letting the head drop. A number of terms related to motility, most of which are unfamiliar to most western educated neurologists, are defined; examples include "dromokinetic", "kratikinetic", and "holokinetic".

Lesný describes several syndromes of dyskinesia in childhood, and his strong belief in the importance of the corpus striatum at all ages is emphasized. Some diseases considered rare in Canada apparently are much more common in Czechoslovakia, including ataxia-telangiectasia, a form of dystonia known as "lordotic dysbasia", and Hallervorden-Spatz disease. Lesný states that 20 to 30 percent of all cases of "infantile cerebral paralysis" in Czechoslovakia are dyskinetic forms.

The main purpose of this brief monograph, however, was to emphasize the crucial role of subcortical motor systems in the ontogenesis of motor control in the developing child, parallel to the concepts of the late Professor Derek Denny-Brown of Boston. The hypothetical or interpretative part of the text may best be conveyed by a few short quotations from Professor Lesný's concluding statement: "Basal ganglia do not exist as a functional organ. They are a fiction constructed by anatomists . . . Extra-cortical grey is a part of a large subcortical regulatory motor servosystem. . . In functional ontogenesis there develops the subcortical sensorimotor system most probably by the method of 'trial connections' . . .".

I found Professor Lesný's concepts provocative and refreshing, although admittedly largely speculative. I would recommend this small paperback to those interested in the conceptual foundations of motor integration in development, but I must caution that disappointment may be in store for those with expectations of a critical discussion of modern electrophysiological data. Although written in English (a translation from Czech), it is published in Prague and may be difficult to locate in North America. It may be ordered directly from the publisher: Univerzita Karlova, Ovocný trh 3, 116 36 Praha 1, Czechoslovakia.

*Harvey B. Sarnat,
Calgary, Alberta*

THE OLIVOPONTOCEREBELLAR ATROPHIES. 1st edition, vol 41, *Advances in Neurology*. Edited by Roger C. Duvoisin and Andreas Plaitakis. Published by Raven Press. 286 pages. \$59 Cdn. approx.

Research in the olivopontocerebellar atrophies has increased considerably in the last few years, most notably with the discovery of glutamate dehydrogenase deficiency in one variety. The preface of this latest addition to the *Advances in Neurology* Series informs us that "in this volume, the OPCAs are critically assessed with regard to their clinical, pathological, radiological and physiological characteristics in light of new knowledge". Most of the editors' goals are accomplished although the volume does suffer from the problems inherent in any multi-authored text. There is a great deal of controversy as to how to classify this group of disorders in view of their wide ranging clinical and pathological heterogeneity. This confusion is further aggravated by the lack of uniformity seen in multi-authored texts. Some authors prefer to include or exclude certain disorders and others do the opposite. We, therefore see both ends of the lumpers-splitter spectrum here. It could be argued that one possible example of excessive lumping might be the inclusion of a chapter on Joseph disease by Rosenberg and another dealing with a

"dominantly inherited ataxia with abnormal urinary glycolipid content" by Berenberg et al (without CT or pathological evidence for this being an OPCA).

Chapters on neuropathology and CT scan abnormalities are quite useful and informative. It is difficult to evaluate the importance of much of the physiological data presented by Narabayashi since most of this is based on experience with one patient. The concept of the inverse relationship between cerebellar and extrapyramidal features (the latter masking the former) is supported by his electrophysiological study. However, this is not a universal pattern of progression in all patients and so generalizations from this data may not be appropriate.

Disorders of ocular motility and autonomic dysfunction are dealt with in some detail. In the case of the latter, the multiple-author problem again becomes apparent. Chokroverty distinguishes Shy-Drager syndrome from the OPCAs emphasizing that it is a distinct disorder rather than one end of a spectrum. Other authors in the text seem to prefer the concept of "multiple system atrophies" instead. It is not clear whether the other authors mean the Shy-Drager syndrome when they are discussing OPCAs with autonomic dysfunction. To Chokroverty these seem to be two different things.

Chapters dealing with pharmacology and biochemistry are interesting. Perry has divided five different pedigrees of OPCAs into four disorders based on alterations in the levels of GABA, glutamate, aspartate, and taurine in various regions of the central nervous system. In view of the neuropathological heterogeneity of these disorders, it is unclear at present how useful this type of biochemical classification will be. As mentioned, one of the main driving forces for the production of this text was the discovery of glutamate dehydrogenase deficiency in one form of OPCA. Discussions by Plaitakis and Duvoisin, and Chokroverty provide a good review of the clinical, biochemical and possible pathophysiological aspects of this disorder.

This text will appeal to neuroscientists with a broad range of interests. Overall, it does add some useful information to the increasing literature dealing with this group of "degenerative" neurological disorders. The lack of uniform clinical and even neuropathological features in the OPCAs result in this volume suffering, possibly more than most, from the pitfalls inherent in a multi-authored text.

*A.E. Lang,
Toronto, Ontario*

ELECTROCLINICAL FEATURES OF THE PSYCHOMOTOR SEIZURE. 1983. By Heinz Gregor Wieser. Published by Gustav Fischer / Butterworths, Stuttgart / New York. 242 pages.

The medical and surgical therapy of psychomotor (complex partial) seizures remains imperfect. The neuronal substrates of ictal phenomena such as automatisms, autonomic manifestations, and psychosensory and effective auras are poorly understood. Detailed electroclinical studies of psychomotor seizures are required to understand their pathophysiology, improve localization techniques and rationalize therapy.

Wieser's monograph is an important contribution to this problem. The clinical features of seizures in 29 patients were meticulously analysed and correlated with the presence of ictal activity using an array of depth electrodes. This work was complemented by a further study of the effect of electrical stimulation, via depth electrodes, in a series of 31 patients. The

data were subjected to complex mathematical analyses and five subgroups of psychomotor seizures were identified. The commonest type was the temporobasal — limbic type and the less frequent ones were the temporal pole type, the posterior neocortical type, the frontobasalgulate type and the opercular type. These five subgroups, defined on the basis of their focus of origin using depth EEG recordings, showed preferential routes of electrical spread through the cerebrum. They also showed different, but overlapping constellations of clinical features. The author suggested strategies for the surgical treatment of the five seizure types. Proof of the value of these strategies, as compared to standard surgical approaches, is lacking at present because of the small number of patients studied to date.

The strengths of this work lie in the extensive review of the subject covering English, French and German language publications, in the provocative electroclinical findings and in the suggestions for improved therapy. The weaknesses relate largely to presentation. One third of the volume is devoted to mathematical analyses that this reviewer found incomprehensible. Also, the case reports were not presented in a manner that sufficiently emphasized the outstanding points of interest of each case.

Overall, the volume is a valuable contribution to the study of psychomotor seizures and should be read by all those with an interest in the field.

Sam Berkovic,
Montreal, Quebec

INFECTIOUS DISEASES OF THE CENTRAL NERVOUS SYSTEM. Edited by Richard A. Thompson and John R. Green. Published by S.P. Medical and Scientific Books. 256 pages. \$40.00.

This volume is a collection of papers presented at a symposium discussing infectious diseases of the central nervous system sponsored by the Barrow Neurological Institute and Foundation. It is the second in a series entitled 'Neurologic illness: Diagnosis and treatment'. The editors' remark in the preface that the book is not intended to be an exhaustive review of the title topic but does attempt to emphasize recent developments and new information. Thus, many important CNS infections, including tuberculosis meningitis, most fungal meningitides, neurosyphilis, and the bunyavirus and togavirus encephalidites are not discussed.

The editors of any book which is a compilation of papers submitted from a symposium will have problems maintaining consistency of content and quality of contributions, and this book is an example of such difficulty. The chapters generally offer one of three different approaches to their subjects. These include several chapters which provide complete and in depth reviews of their topics, such as slow virus diseases and prions. Other chapters, including the chapters on *Herpes simplex* infections and acute immune-mediated diseases provide more superficial reviews, and the absence of precise details limits their value for any reader searching for assistance with 'Diagnosis and treatment' of these problems. Finally, some contributors have chosen to discuss specific aspects of a given topic and the chapter content does not reflect the chapter title. For instance, the chapter on pathophysiology of bacterial meningitis limits its discussion to preliminary work studying the CSF polymorphonuclear response in that disease, and the chapter on parasitic infections discusses completely only the surgical aspects of the management of parasitic infections of the central nervous system.

The chapters on bacterial meningitis and brain abscess provide useful tables of antimicrobials and doses recommended for

treatment of these diseases. However, in the chapter discussing herpes simplex infections the appropriate dose and duration of antiviral therapy is never stated. Important and potentially useful chapters for practitioners, including those in CNS shunt infections and neurosurgical infections, are marred by a lack of critical evaluation of data, particularly with respect to prophylactic antimicrobials. While there is a need for clearer delineation of the appropriate use of antibiotics in prophylaxis and therapy of CNS shunt and neurosurgical infections, the authors of these chapters appear to endorse the evaluation of such therapy through retrospective, uncontrolled surveys rather than through properly designed prospective, randomized studies. The discussion of coccidioidomycosis infection would have been more useful if the author's experience and approach to management were presented in tabular form or as an algorithm rather than as an anecdotal collection of case histories. Therapeutic information provided in several instances, such as the use of third generation cephalosporins in the treatment of gram-negative meningitis and praziquantel for the treatment of cerebral cysticercosis, is already outdated because of recent reports of the efficacy of these drugs. Finally, there are numerous typographical errors, some of which are of importance, such as the use of 'litigation' for 'ligation', and 'microbacteria' for 'mycobacteria', and some merely irritating, such as the replacement of letters by numbers.

This text cannot be recommended for individuals, including most clinical practitioners, who are looking for a complete, concise and critical review of the subject of the management of infections of the central nervous system. However, individuals with an interest in some specific topics in this area may find certain chapters to be useful reviews.

Lindsay E. Nicolle,
Calgary, Alberta

PERIPHERAL NERVE DISORDERS — A PRACTICAL APPROACH. 1984. Edited by A.K. Asbury and R.W. Gilliatt. Published by Butterworth and Co. Ltd. 339 pages.

Peripheral Nerve Disorders is the fourth in a series of volumes published by Butterworth and Co. as the successor to *Modern Trends in Neurology*, the periodic reviews on neurologic topics that appeared between 1951 and 1975 under the editorship of Dr. Denis Williams. The current series of monographs was designed by its editors, C.D. Marsden and A.K. Asbury, to review areas of neurologic interest where there have been significant advances that have practical applications for clinicians involved with patients with neurologic disorders. *Peripheral Nerve Disorders*, edited by A.K. Asbury and R.W. Gilliatt, admirably fulfills this objective.

The opening chapter, written by the editors themselves, sets the tone of the monograph by presenting a practical approach to patients with neuropathy that incorporates a contemporary view of the histopathogenesis of nerve disorders, discusses their general clinical features, outlines the uses of electrodiagnostic tests, and commendably cautions readers about the restricted usefulness and potential hazards of nerve biopsy. Based on their acknowledged experience as peripheral nerve specialists, Asbury and Gilliatt include a flow-diagram approach for the assessment of patients with neuropathies. Such guidelines are particularly helpful to clinicians, whether residents or general neurologists, as they attempt to investigate and treat patients with chronic undiagnosed polyneuropathies, a syndrome for which even specialized centers fail to establish an etiologic diagnosis in as many as 25% of patients. The approach given in Figure 1.1 involves the clinical classification of peripheral nerve