

Book Reviews

CRANIOSYNOSTOSIS. Diagnosis, Evaluation and Management. 1986. Edited by M. Michael Cohen. Published by Raven Press, New York. 606 pages.

“Craniosynostosis: Diagnosis, Evaluation and Management” edited by M. Michael Cohen Jr. is the most recent general treatise on the subject of craniosynostosis since the 1982 publication by David, Poswillo and Simpson. This volume provides a clear and comprehensive overview of the literature as well as providing detailed discussions of the contributing authors’ personal experiences.

The book is logically divided into four sections. The first, composed of the introduction and three chapters written by Cohen, reviews the history of craniosynostosis and its clinical epidemiology. Etiological considerations are summarized completely. An excellent review of classifications is provided.

The next section deals with the embryological development of the normal and abnormal skull. Sutural histology, both normal and deranged is described. The current knowledge base dealing with craniofacial growth is covered. This section is authored by world-renowned authorities.

The clinical aspects of craniosynostosis are discussed in chapters that cover the radiology of the condition, the neurological and ophthalmological aspects and the current state of treatment. These chapters are generally well-written and superbly illustrated.

The final section is a free-standing compilation of the syndromes of which craniosynostosis is a part. This chapter is 177 pages long and serves as a comprehensive catalog of the syndromology to date. It is, to my knowledge, the most complete review of its type that Cohen has published.

This volume has several weaknesses which do not distract from its value but do make it difficult to read. The illustrations are magnificent and comprehensive. Unfortunately, some of the labels on the histopathology sections are difficult to find. A lot of page turning is required to coordinate photographs and text. While this is easy to do with clinical illustration, I found it tiresome in areas less familiar to me. The book’s binding proved fragile and there are several typographical and header errors.

The chapter by Fernbach and Naidich is basic with much of the contained material redundant and certain areas not even addressed. Specifically, I found the lack of a comprehensive discussion as basal sutures to be a deficiency. A book of this type should give some indication of the relative values of different imaging modalities in these conditions: no critical assessment of this type was provided.

The discussion in chapters by Tessier and Cohen regarding the differences between lumpers and splitters in reference to syndromology merely serves to illustrate individual spheres of interest; it is distracting.

Jane, Persing and Tessier provide comprehensive discussions of the past and present treatments available for craniosynostosis and its syndromes. The illustrations are excellent. Justification for certain surgical maneuvers should have been provided. I expected to find a comprehensive discussion of dural plication and could not.

Any future editions of this volume should include a discussion of the natural history of uncomplicated trigonocephaly and a discussion of the role of the dura in craniosynostosis.

The invited authors and the editor have composed an authoritative volume, superbly illustrated and exhaustively complete. It should be in the personal library of all dealing with craniosynostosis.

*D. Cochrane
Vancouver, B.C.*

THE ACUTE STROKE. 1985. 1st Edition. By Vladimir Hachinski and John W. Norris. Published by F.A. Davis and Co. 286 pages.

There has recently been a proliferation of books about stroke. The scope of these books has varied enormously, ranging from large comprehensive multi-author texts, to specialized books about stroke rehabilitation. Nowhere is the focus exclusively on the acute stroke, as in this excellent volume by Hachinski and Norris.

These two Canadians have been at the forefront of patient care and research of acute stroke patients for many years now. This book provides a thoughtful and practical approach to the management of such patients. The early chapters discuss epidemiology and terminology. Quite rightly the term “Cerebrovascular accident (CVA)” is frowned on and it is indicated that strokes result from identifiable, often predictable causes and are rarely “accidents”. It is pointed out that the term is confusing, because a left sided CVA means a left hemisphere lesion to some and left hemiplegia to others. Use of the word “stroke”, while not perfect, is certainly preferable. The lack of precision of other terms such as T.I.A. and “Stroke in evolution” is discussed in a provocative manner.

Several excellent chapters on the vascular infrastructure and cerebral ischemia follow. These provide a nice insight into our current understanding of the pathophysiology of acute stroke, reflecting current basic research in this area. These chapters are written in a comprehensive, yet easy to understand format and are well referenced for one who wants to look up current literature in this area. The chapters on diagnosis of transient ischemic attacks and stroke provide a personalized approach to assessment of these patients and many clinical gems, based on the author’s extensive experience or dropped in the course of the discussion. The deteriorating stroke is discussed at some length and it is emphasized that there are many different reasons why a patient with an acute stroke may deteriorate clinically. While propagating thrombus in an artery is often considered the major reason, new cerebral events such as edema, secondary hemorrhage and recurrent embolism are also important. Systemic causes such as cardiopulmonary metabolic complications and side effect of drugs are all factors to be considered in this context. Careful clinical assessment and investigation can of course often detect the cause for deterioration and help realize the patient’s full potential for recovery. Further excellent chapters on the Young Stroke, Cardiac Disease and Stroke as well as management and prognosis are all present.

So in conclusion, I believe this book is an excellent summary of our current knowledge about the acute stroke patient. It provides useful practical guidelines for diagnosis and management, it raises many questions about our current terminology and management of these patients and it points out how little we can often do to effect clinical recovery. On the other hand by emphasizing the basic anatomy, physiology and biochemistry of ischemia, the potential for a breakthrough in treatment becomes obvious, even after a stroke has occurred. I would highly recommend this book for all neurologists and neurosurgeons who manage acute stroke patients.

*Joseph G. D'Alton
Ottawa, Ontario*

NEUROHISTOCHEMISTRY: MODERN METHODS AND APPLICATIONS. By Pertti Panula, Heikki Paivarinta and Sepo Soinila. Published by Alan R. Liss Inc. New York. 710 pages. \$210 Cdn. approx.

This book is a collection of papers presented at a symposium in Helsinki in 1984, and is dedicated to the memory of Olavi Eranko, who demonstrated, in the early 1950's that formalin treatment of the adrenal glands induced fluorescence of the contained catecholamines.

The book consists of a number of papers contributed by 67 scientists from all parts of the world. There are three sections; the first deals with methods in histochemistry of the nervous tissue; the second is concerned with differentiation and development of neurons particularly those of the autonomic nervous system, and the third deals with the organisation and function of neurotransmitter systems in the central and peripheral nervous system.

The papers will be primarily of interest to basic scientists; the papers are based on studies of the normal nervous system, and there is little reference to findings in natural or experimentally induced disease. It is nevertheless exciting reading for the clinician; knowledge of the neurotransmitter systems has increased exponentially in the last several years, and it is fascinating to read how much is known, and how sophisticated technology has become. Of particular interest to this reader were the papers on the peptide and amino acid neurotransmitter systems.

*David M. Robertson
Kingston, Ontario*

EPILEPSY IN CHILDREN. 1986. By Jean Aicardi. Published by Raven Press. 425 pages. \$90 Cdn. approx.

Dr. Aicardi has written a complete, accurate, authoritative and scholarly work on epilepsy in children. Its value extends beyond the childhood epilepsies as many principles in this volume apply to epilepsy at all ages.

Following an introduction with definitions and the classification of epileptic seizures and the epilepsies, Dr. Aicardi describes completely and in detail the major types of epileptic seizures in childhood. As he has done in the past, the author is very careful to define the border zones between these overlapping entities and thus diminishes the unnecessary confusion which often surrounds entities such as the myoclonic epilepsies.

Dr. Aicardi recognises that instruction in epilepsy extends beyond a simple enumeration of the details of specific seizure disorders. Thus, the additional sections on epilepsy in relation

to age, etiology, and precipitating factors and the concluding section on diagnosis, prognosis, and management provide additional perspectives of the subject. Although the author states in his acknowledgements that he only undertook to write this volume after considerable hesitation, it is evident that he gave the matter considerable thought while hesitating. Typical of his scholarly approach is Dr. Aicardi's most complete discussion of the management of infantile spasms in which he compares the efficacy and unwanted effects of the several methods of treatment based on a thorough literature review and his own extensive experience.

For North American readers, a particular value of his work is the inclusion of contributions from around the world.

As evident from the foregoing, "Epilepsy in Children" will be particularly valuable for the clinician who wants an authoritative up-to-date review of the many aspects of childhood epilepsy. Therefore, one can recommend it to paediatric and adult neurologists, internists, paediatricians, and neurosurgeons who have more than a casual interest in this discipline. I have never read a better book on clinical epilepsy.

*W.T. Blume
London, Ontario*

PARKINSON'S DISEASE. Series: *Advances in Neurology*. Volume 45, 1987. Edited by M.D. Yahr and K.J. Bergman. Published by Raven Press, New York. 616 pages. \$131 Cdn. approx.

This book was long awaited since the 8th International Meeting on Parkinson's disease, held in New York City, June 9-12, 1985. Despite the delay, the information provided is timely as research on Parkinson's disease is leaping to new frontiers: preventive therapy with antioxidant therapy and nigral cells implants. Rationale and preliminary data on these topics is found in the first two sections of this book. The sections that follow are of direct interest to clinical neurologists: clinical variants of parkinsonism; autonomic dysfunction in Parkinson's disease with particular emphasis on breathing disturbances; genetics and environmental factors; dementia and depression; long term effects of Levodopa therapy; new dopamine agonists. For Canadian neurologists this book has a specific appeal: the summary by André Barbeau of his data and ideas about the interaction of genetic susceptibility and environmental factors in the pathophysiology of Parkinson's disease. This is *the* reference book on Parkinson's disease, year 1987.

*Serge Gauthier
Montréal, Québec*

INTENSIVE NEURODIAGNOSTIC MONITORING. Series: *Advances in Neurology*. Volume 46. 1986. Edited by Robert J. Gummit. Published by Raven Press, New York. \$74 Cdn. approx.

This volume contains 18 chapters and just over 300 pages written by North American and European experts in EEG and epilepsy. The focus is on the application of new EEG technology to epilepsy and to conditions which mimic seizures. Polysomnography and evoked responses are not included. The book will be of interest particularly to neurologists who work in epilepsy units.

A few chapters are excellent: the advantages and problems with EEG-combined video monitoring, the usefulness and limi-