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. Gumnit. 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-

658

tations of ambulatory cassette recordings, computer application for data reduction and seizure and spike recognition, and the power and pitfalls of monitoring techniques in differentiating "fits from faints". Broad applications including the pre-surgical evaluation are well-covered. Although some chapters give good descriptions of subcategories of primary generalized and complex partial seizures, this material is available in other more general texts on epilepsy.

Unfortunately, I feel the weaknesses outweigh the qualities of the book. There should be a more clear definition of research versus routine clinical application of the technology. Throughout the book the value of such monitoring is repeatedly stressed, yet there are no controlled studies to support its superiority over conventional clinical and EEG evaluations. The case for this technology would be more convincing if it were not so over-stated in many of the chapters. Although intensive monitoring may be occasionally of value in some of the primary generalized epilepsies (particularly for genetic, biochemical and drug research), it is likely seldom necessary in the vast majority of cases. The statement that "The development of more and more specific anticonvulsant drugs for individual seizure types has mandated the identification of individual seizure types with greater accuracy" (Page 15) in my opinion is inaccurate. The recommendation that such technology be applied to patients with episodic aggression (Pages 203-217) is unjustified, in that only a handful of such cases have been identified in the world's experience.

Soon after Laennec invented the stethoscope, many physicians expressed unwillingness to depend on instruments over conventional diagnostic methods. It is the hope of this reviewer that the flaws in this book will not lead neurologists to be biased against the considerable value and promise of this developing field.

> G. Bryan Young London, Ontario

SYRINGOBULBIA — A CONTRIBUTION TO THE PATHO-PHYSIOLOGY OF THE BRAINSTEM. 1986. By N. Jonesco-Sisesti. Translated into English, edited and annotated by Dr. Robert T. Ross. Published by Praeger, New York and London. 315 pages. \$65 Cdn. approx.

In 1932 the Rumanian neurologist Dr. Jonesco-Sisesti, student of Guillain at the Salpetriere, published a monograph on syringobulbia. It is an excellent example of the descriptive neurology that was so well done by the neurologists of that era, and which was so important in the development of neurology.

Jonesco-Sisesti describes eleven cases of syringobulbia, four with autopsies, and carefully correlates the signs with the pathology. For those interested in the development of knowledge and understanding of the brainstem and its function will find this a very useful source book.

One of the pleasant experiences for me in reading this volume was a view of an age of neurology when names such as Bischoff, Cajal, Volkmann, Winkler, L'Hermitte, Lermoyez, Guillain, VonMonakow, and Dejerine are mentioned as contributors to the thought and ideas of the time. I wonder if the neurologists beginning practice today revere the "greats" as in past generations. But then knowledge and change was preceding at a slower pace, and the prominent and powerful were leaders for a generation. Perhaps the pace and change of current knowledge may lead to the rapid productive careers of young clinical investigators and scientists being replaced sooner by the next group of young Turks.

The clinical reviews of cases by Jonesco-Sisesti are painstaking, and it's salutary to again see the careful clinical observation that formed the basis of modern neurology. How long has it been since we saw someone recording Oppenheim's, Gordon's, Schaeffer's reflexes as part of the clinical examination. One must pause when reading that the "mediopublic reflex produced a definite inferior response and a weak superior response", but the pause is enjoyable as it recalls the impeccable respect for the neurological examination prior to the age of technology.

Dr. Ross was given the idea for this project may years ago by the late Dr. J. Godwin Greenfield, and it clearly was a labour of love. In an unusual format Dr. Ross has translated Jonesco-Sisesti's text, and then added an addendum to each chapter bringing the information up to date, and adding techniques such as CT and MRI scans to demonstrate the ideas and principles. However, it works very well, and added to the interest of the historic text.

I enjoyed this return to a past age of neurology, and feel that Dr. Ross has added an important contribution to the neurological literature by translating this volume into English, and again bringing it to the attention of clinicians and scientists.

> T.J. Murray Halifax, N.S.

TOPOGRAPHIC HISTOCHEMISTRY OF THE CEREBEL-LUM. 1986. By Enrico Marani. Published by Gustaf Fischer Verlag, Stuttgart and New York. 169 pages. \$84.50 Cdn. approx.

Professor Marani of Leiden University, The Netherlands, has demonstrated an organization of the cerebellar cortex in mammals not previously suspected from classical histology, Golgi impregnations, or electron microscopy: alternating longitudinal bands in the molecular and granular layers correspond to high and low concentrations of enzymatic activities associated with afferent neurotransmitter systems. This histochemical topography denotes the distribution of mossy and especially climbing fibres originating outside the cerebellum. A similar pattern is found in the inferior olivary nuclei.

This small, soft-cover book, representing volume 16, number 4 in the series "Progress in Histochemistry and Cytochemistry", is a summary compilation of Professor Marani's investigations spanning the past decade, integrated with related studies by others. Conclusions are based mainly on histochemical evidence, with confirmation of some details by quantitative biochemical and immunocytochemical techniques. Two enzymes are the focal points: acetylcholinesterase and 5'-nucleotidase. The longitudinal band pattern is demonstrated in the cerebellum of mammals ranging from rodents to carnivores and primates. Ontogeny is considered briefly, but I would have preferred a more thorough discussion of embryonic development. A few chapters are written by guest authors. The book is well illustrated and the reference are extensive.

Though this book contains few if any new, previously unpublished data, it is a well organized, condensed survey of the topic and should save many hours of library work for investigators of cerebellar organization. The price is high, but worth it to those actively engaged in this domain.

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