BOOK REVIEW

Neuromuscular Function and Disorders — Alan J. McComas. Butterworths, 19 Cummings Park, Woburn, Ma. 01801 U.S.A. 363 pages, $39.95.

It is a pleasure to welcome this new book on neuromuscular disorders. Although several other books on this subject have appeared in recent years, for example the multi-author volumes edited by Dyck, Thomas and Lambert, and by Landon, and the smaller monographs by Bradley and by Weller and Cervos-Navarro, these have approached the subject from a primarily pathological standpoint with less emphasis on disordered physiology. Dr. McComas' book goes some way to redress the balance as it is concerned with function, and deals with structural problems only insofar as this is necessary for a full understanding of the physiology.

The first portion of the book, approximately one third, contains an excellent review of the normal properties of motoneurones and muscle fibres. It includes chapters on growth, aging, and on trophic interactions, as well as descriptions of impulse propagation, synaptic transmission, and muscle contraction. The phenomena are simply discussed with the aid of excellent diagrams, and this section forms an admirable introduction to the subject; the bibliography is particularly helpful.

The second and larger section of the book is concerned with disorders of function and deals with the electrophysiological abnormalities found in different neuromuscular disorders, such as myotonia, myopathy, myasthenia, local and generalised neuropathy and motoneurone degeneration. The concept of the sick motoneurone, derived from Dr. McComas' own work on motor unit counting, is extensively developed in the clinical chapters, and individual diseases are used to illustrate his approach rather than to provide a systematic account of the subject. Thus, six pages are devoted to the aetiology of motor neurone disease and the aging of motoneurones, whereas diabetic neuropathy receives only a brief mention in the chapter on demyelination, and the section of renal neuropathy consists only of a description of the author's personal investigation of a single case.

In general, the treatment of neuropathy is complicated by the fact that the author separates demyelinating from dying-back neuropathies, including the latter under the general heading of motoneurone degeneration. This is unhelpful to our understanding of conditions in which both degeneration and demyelination occur: the concept of secondary demyelination is not discussed.

For those who already work in the field of neuromuscular disease, this is an absorbing book which never fails to interest and to stimulate, even if the reader happens to disagree with some of the author's views. For the postgraduate student in clinical neurology or neurophysiology this book will be complementary to those standard textbooks of electromyography which provide more practical advice but less theoretical background and less discussion of abnormal mechanisms.

Roger Gilliatt

BOOK REVIEW

Diastematomyelia — F. B. Maroun, J. C. Jacob, W. D. Heneghan. Pub. by Warren H. Green, Inc., St. Louis, Missouri, U.S.A. 1976, 134 pp.

The authors of this small monograph were certainly not too verbose. More than ⅔ of the pages are occupied by single black and white photographs of uneven quality with a terse legend of a few words. This work was obviously not meant to be a comprehensive review and analysis of the problem of diastematomylia. After a brief summary of the literature and a short statement on embryology and pathology, the clinical features are accurately described but mostly illustrated with pictures.

A concise description of the surgical treatment is followed by the case reports of the 15 operated cases with a few comments; 11 other cases are also mentioned.

Except for the qualification "in detail" the brief conclusion of the booklet summarizes it quite well: "Even though diastematomyelia is considered as a rare disease, it is clear from our work that many cases can thus be collected if the entity of spinal dysraphism is analyzed properly. The clinical manifestations and radiological diagnosis has been presented in detail. We emphasize the importance of early diagnosis and advise surgical exploration, with a prophylactic goal."

The authors are to be commended for collecting this material within a relatively small population demonstrating the role of hereditary factors which may produce a high incidence of congenital defects of the central nervous system. A similar situation exists in French Canada concerning meningoceles and myelomeningoceles.

Claude Bertrand

BOOKS RECEIVED

Experimental Studies in Regeneration of Spinal Neurons. Tat' Yana N. Nesmeyanova. 1977. V. H. Winston & Sons, 1511 K. Street, N.W., Washington, D.C. 20005. 267 pages, $27.50.

Cerebral Vascular Disease — Proceedings of the 8th International Conference Sept., 1976. J. S. Meyer, H. Lechner, M. Reivich. 1977. Excerpta Medica, Amsterdam — Oxford, 281 pages, $54.50.