
In this very well-illustrated book, the emphasis is on radiological and neurological diagnosis, and on early treatment. The approach is a mechanistic one and the sections on functional anatomy and biomechanics are an elaboration of Dr. Penning’s monograph Functional Pathology of the Cervical Spine (1968).

The classification of cervical spine injuries has been carefully considered and has been simplified so that the aetiology and the radiological features can be related to the neurological symptoms and the treatment that appears to be indicated.

There are few details of the operative procedures that are mentioned, such as the application of skull calipers, laminectomy, and anterior cervical operations; and no illustrations of the patient’s management on pillow-packs or on turning frames. However, there are excellent up-to-date references, which are liberally quoted in the text. Indeed this book is also a good review of most aspects of cervical spine injury. It is wondered if this is a personal series of cases that the authors quote in the book, as this would obviously influence such aspects as the results of treatment and the prognosis.

The early management of patients with serious spinal injuries is still controversial, and the authors have reviewed the literature and give a schema for treatment, but the reviewer would have liked more details of their decisions concerning treatment and in particular about laminectomy; he feels that there are even fewer indications for this than the authors recommend. They prefer to treat hyperflexion luxations by reduction and fixation as early as possible and say that their treatment helps recovery of root damage. The earliest possible referral of patients with a cervical spine injury to a ‘spinal paralysis unit’ is recommended.

Half of the book is devoted to illustrated cases and comments; it would probably have been better to blend these into the main body of the text. As the volume is set out it would be invaluable to the reader to have page number references in addition to the figure references as this would save considerable time in searching for the ‘displaced’ figure.

Myelography is mentioned as having a place as an investigation for a selected number of patients with cervical spine injury, and rightly so, but it is not stressed that this investigation requires very special expertise when being carried out in the acute phase of injury.

The book is a valuable contribution to the literature on spinal injuries but is not very suitable for those who do not specialize in this sphere.

Phillip Harris


There has been a need for a long time now for a short, clear account of the development of movement in normal infants. This is necessary in order to recognize motor disorders early enough to instigate useful management of these deficits at a time when the plasticity of the nervous system is at its greatest.

The present book goes some way in fulfilling this need. The brief text is apt and very descriptive, but occasionally it lacks scientific precision. The introductory chapter stresses the importance of afferent input to the learning of movement, and the incorporation of reflex responses in the development of coordinated muscle responses which become purposeful movements. It would be nice to have references to the scientific work which elucidated the facts on these aspects of motor development.

The photographic illustrations are very important to this work and are well chosen to show the evolution and modification of particular reflex motor responses. However, the quality of the photographs is not very high, and their spacing between a very sparse text leaves a lot of blank spaces which I suppose could be used for one’s own notes.

I would expect that this little book will be used by paediatric neurologists and all who are interested in
cerebral palsy as a general guide to normal motor development.

GEoffrey Rushworth

It is hard to judge the purpose of this book. It begins with a five-page review of the concepts of generalized and centrencephalic epilepsy, but the main bulk of the book is a review of 300 'almost consecutive' patients with epilepsy from the electroencephalographic laboratory of the Johns Hopkins Hospital, whose electroencephalogram showed generalized paroxysmal activity. Cases of hypsarrhythmia and cases with generalized abnormalities such as follow cardiac arrest were excluded. The author admits that the material does not represent a homogeneous group either clinically or electroencephalographically, and attempts to separate his cases into, among other groups, a group of 'pure culture idiopathic seizure disorders', and another of 'common generalized epilepsy atypical form'. The distinction between the groups was 'prompted by the presence of mild signs of acquired brain discare in the history...'. Minor focal features in the EEG were also reasons for listing patients in the second group. An account of the EEGs of these somewhat arbitrarily divided groups is then followed by a discussion which is probably useful, though marred by some linguistic infelicities—for example, 'What genetic counseling has strictly to avoid is marrying a partner who is likely to carry certain epileptic genes', and 'While the genetic factor is extremely elusive, the factor of age indicates the zenith and nadir of the generalized epilepsies in longitudinal view'. The publisher's editor must share some responsibility for letting such fuliginous statements adumbrate our understanding.

Anthony Hopkins

Metabolism of the Nerve Tissue in Relation to Ion Movements In Vitro and In Situ  By M. Ruščák, and D. Ruščáková.  (Pp. 171; illustrated; $11.50.) University Park Press: Baltimore. 1972.
This book describes research in neurochemistry done by the authors during the last 10 years; it is practically a collection of research papers, translated from the original Czech and slightly shortened. To me (a neurophysiologist, not a neurochemist) the experiments seem well-designed and the inferences usually fair, though occasionally stated with more generality than the experiments support. The book is well-written in detail, but not well organized as a whole.

* Price not stated.

Non-expert readers will not easily see how its content is related to neurophysiology as a whole, or even to other aspects of neurochemistry.

G. S. Brindley

This book is basically about neuroanatomy, including histology, electron microscopy, and tissue culture. There are brief accounts of neurochemistry and electrophysiology and psychobiology, together with a chapter on the cybernetic approach to brain function. There are many good and original line diagrams but there are also many two-tone reproductions of brain sections which although well reproduced and clearly labelled are of somewhat limited value. The whole book is on sensible non-gloss paper which nonetheless takes all the illustrations adequately. The team of authors seems unduly large for the scope and level of the book, and inevitably the depth and style varies somewhat between them. At the student level for which the book is intended it relates to the North American scene; in the present climate of opinion about anatomy teaching in Britain it would be likely to be considered too complex. But for honours science students, and those working in the wide range of neurosciences, it would be a useful introduction.

Bryan Jennett

Two volumes of the Handbook are devoted to the vascular diseases of the nervous system (including the spinal cord). Many contributions are splendid and provide extremely valuable accounts of the anatomy and traditional clinical disorders of the cerebrospinal vasculature. Unfortunately, the work has an old-fashioned air about it. The recent major advances in knowledge about cerebral blood flow are not adequately dealt with, and one searches in vain for an appreciation of the importance of 'watersheds' in the localization of ischaemic lesions. The account of hypertensive encephalopathy is very good, but other contributions on the role of 'functional' disorders of the vasculature as determinants of apoplexy appear to be expressions of opinion rather than presentation of evidence. The two large volumes could be reduced considerably by judicious editing, as some items are duplicated. The section on EEG aspects is certainly excessive.