
This volume contains 27 chapters, largely consisting of reviews of recent advances in basic scientific studies of demyelination. Although the title of the book suggests that the contents refer to naturally occurring demyelinating disease, the majority of the chapters relate to studies of experimental demyelination in sub-human species, and not to multiple sclerosis itself. Indeed, those reviews concerned with multiple sclerosis contain little that is new, although they do provide convenient sources of information on the use of evoked potential analysis in the diagnosis of the disease, and of the pathology of the disease. Nonetheless, it must be admitted that these aspects are covered in more detail elsewhere. The strength of the book lies in the chapters in which the electrophysiology of conduction in normal myelinated and demyelinated axons are reviewed, particularly in the chapters by Rasminsky and by Sears and Bostock. The presumed clinical correlations of these studies of the factors influencing conduction in demyelinated and remyelinating axons are explored both by these authors and by others in associated chapters in which the implications of this new understanding of the pathophysiology of demyelination are explored. Regan has examined the possible psychophysical tests that might be used to delineate visual and hearing disorders in patients with multiple sclerosis in a chapter which nicely complements that by Halliday on visual evoked responses in demyelinating disease. There are several somewhat inconclusive chapters on neuroelectric blocking factors and other circulating toxic factors which may or may not be important in symptomatic multiple sclerosis and reviews of ionophores, the distribution of sodium and potassium channels in myelinated nerve fibres and the pharmacological properties of these channels in nerve membranes. Kimura contributes an interesting chapter on refractory period analysis in nerve conduction studies of patients with the disease. However, these contributions are largely of theoretical interest. The last part of the book is particularly valuable since it consists of a group of chapters on the trophic interactions of neurones and an outstanding contribution by Robertson on membrane structure with special emphasis on the ultrastructural anatomy of transmembrane channels.

Altogether, this is a most stimulating and timely volume which will be read with great profit by all those concerned with the care and investigation of patients with multiple sclerosis.

M Swash


This is a useful and up-to-date book comprising 69 fairly short chapters (averaging eight pages) by many and various authors, each chapter with its own references. The editors and many of the authors are French, but the predominant style is American. English. Technical and scientific aspects are covered, but the main emphasis is clinical as the title implies.

The chapters are grouped and sub-grouped according to subject, so that in the section on visual evoked potentials (VEPs) there are groups of chapters dealing with the VEP in optic nerve lesions, in chiasmatic and retrochiasmatic lesions, on clinical applications in "Neuropaediatry", and on clinical applications in encephalopathies, dementia and heredodegenerative disease. Brainstem auditory evoked potentials and somatosensory evoked potentials are then similarly fully dealt with, and finally there are 21 chapters on various aspects of the clinical application of evoked potentials in multiple sclerosis, a major neurophysiological growth industry of the last decade. Thus there are on occasion several successive chapters dealing with almost the same subject, as viewed from various neurological centres; for example the last six chapters which all attempt to assess the value of follow-up evoked potential studies and their correlation (or lack of it) with clinical progress in multiple sclerosis. This duplication is not entirely useless, as it offers the reader an insight into the range of opinion extant. Some significant technical and methodological differences, too, are evidently not yet resolved; for example, whether the reference site for cervical spinal evoked potential studies should be on or away from the head, and the worth of foveal VEPs or the blink reflex.

Inevitably in a book of this sort the quality of different contributions does vary, but on the whole the standard is high. The book is well-produced, as befits its price and the series it joins.

D N Rushston


Well-thumb first editions of Alpers have been in the pocket of many American undergraduates on elective period at King's College Hospital. Their outstanding performance may have been at least partly due to reading this book. It is undoubtedly among the best of the many American aids to develop clinical skills. The book first describes the basic examination of the nervous system in thirty-four pages followed by a clear, accurate and dogmatic account of the interpretation of neurological symptoms and signs. This can be heavy going, as for example in the table of