Prognosis of Neurological Disorders

Neurologists will be asked on a virtually daily basis, "What is the prognosis?" for any given condition, not only by our patients and colleagues but also increasingly by the legal profession. With the increase in complexity of intervention in neurological conditions both medical and surgical, it is also often impossible for a Neurologist or Neurosurgeon to be fully aware of trials and treatment regimes which have taken place in other than his own specialist field of interest. More publications may involve considerable "searching" through literature to answer a specific question.

This volume, edited by Evans, Baskin and Yatsu, is therefore timely, given that their stated aim is to provide "a comprehensive guide to the prognosis of neurological disorders derived from the viewpoint of prognosis". Each chapter discusses the natural history, if known, of a given disease and its various subtypes. It contains current clinical predictive information and prognostic factors and then discusses how medical and/or surgical intervention has modified the outcome.

In summary all the contributors have produced high quality assessments of natural history and the consequences of intervention. The chapters are heavily referenced.

The Editors have succeeded admirably in their stated aims and have produced a volume which I believe will prove invaluable to the practising Neurologist or Neurosurgeon, particularly if they are involved in medicolegal practice.

WJK CUMMING


Most neurologists will have had cause to be grateful for earlier editions of this compilation, prepared for the USA National Multiple Sclerosis Society with the aid of a distinguished international committee. The task of presenting brief and accurate accounts of a multitude of therapeutic claims, informative both to physicians and the public, is far from easy. Each claim, from one extreme of those subjected to the full force of the randomised, double blind, placebo controlled trial, to the other of those reported solely in the more excitable press, is submitted to analysis under the headings of Description, Rational, Evaluation, Risks/Costs, Conclusion and the opinion of the Committee. The physician will regret the absence of detailed references but the conclusion is that neither of the two volumes available has been too selective or would have overloaded the book.

A section on treatment of acute exacerbation is followed by a chapter cautiously labelled "Methods used to prevent worsening of multiple sclerosis", largely devoted to manipulation of the immune system. It is interesting that the regimes of immunosuppression, corticosteroids, particularly cyclophosphamide, are treated with distinctly muted enthusiasm. A valuable section on symptomatic treatment and general management, including diet, is followed by an alarming long chapter on Empirical Treatments. Although this includes a great number of courses of treatment on which there is no information of scientific worth, it is highly informative. Many of these methods do not, fortunately, seem to have crossed the Atlantic, including, I believe, percutaneous vertebro artery decompression, implantation of pig brain in the abdominal wall, and hystereotomy. Our indignation at this pathological catalogue should be modified by the realisation that it is due to the failure of more "scientific" methods.

BRYAN MATTHEWS


"A modern approach" to neurological practice is certainly evidenced in this single author book that teachers of Neurology will find interesting. Indeed, this book reads more like a page without coming across some astute or provocative comment. The discussion on most topics contains a breath of fresh air and covers the breadth of neurology including diagnostic and rehabilitation issues. Part I covers neurological history taking and the principles of diagnosis, whilst in Part II the approach to certain common symptoms is described, and, in Part III there is a discussion of the chief neurological disorders. It ends with an approach to physical disability.

The book is aimed at Undergraduates and comparing it with other available texts demonstrates a lively and competitive book that stands out from the crowd. However, one can be forgiven for asking if any of the books for undergraduates demonstrate a modern or innovative approach to teaching and here this volume scores a more qualified goal. The book is quite long and the chapters organised if not written on fairly traditional lines. On the plus side it can be combined with the purchase of two videos on examination. Any modern approach needs to take account of the courses that we all run. It would be nice to have the opportunity to buy, not necessarily with every book, not only videos of the examination but integrated audio-visual examples of history taking and of dealing with particular diagnostic and management situations. More pictures in the text would make for a livelier book, as would more in the way of "problem solving" case histories with relevant interpretation of investigations. As hopefully, more medical schools move away from a week run neuroscience towards the end of course to a more integrated approach with basic neurosciences right from the beginning, the construction of such books may need to be altered and the ability of the generalist to cover all such areas competently could be questioned. Perhaps we need more research on what appeals to undergraduates and what they actually want to read as opposed to good value or at least ask them to review such books. Neurologists remain highly regarded as clinical teachers, though with some notable exceptions this has not always been reflected in our text books. However this book that blows away many cobwebs is certainly a step in the right direction, and though the approach is thoroughly modern I suspect as an undergraduate teaching tool such a format will soon be dated.

AC WILLIAMS


It is likely that the outcome of many serious neurological illnesses can be improved by prompt transfer to dedicated neurological intensive care units. Similarly the management of severe head injury even if there is no neurological lesion can be the responsibility of a specialist ICU. These are relatively rare occurrences, and a large catchment population is needed for sufficient patient numbers to justify the creation of such units. The call for "safe neurosurgery with Regional Units of at least 4 neurosurgeons should provide the impetus for neurological and neurosurgical ICUs serving a population of around 2-5 million. Neurosurgeons can no longer be the domain of enthusiastic amateurs. Disorders such as encephalitis, rapidly advancing Guillain Barré and myasthenia should be transferred early to Regional Neurological ICUs. Such units require not only anesthetists interested in the care of neurological disorders, but neurologists trained in evaluation and management of seriously ill patients. It may therefore be preferable for these neurologists to take on the management of head injured patients (without haematoma) to release valuable neurosurgical time.

Alan Ropper's book now in its third edition remains the definitive reference work. It has a multi-author format and provides both a general approach and specific chapters dedicated to Guillain Barré, myasthenia, encephalitis and status epilepticus. Most neurologists can be completely barmyed by the most junior anaesthetists when confronted by the array of tubes, flashing lights and wonderful machines that constitute modern intensive care. Reading this book will at least enable him to inspect his patient with some savoir faire. It should enable him to ask pertinent questions about the care of the endotracheal tube, the need for barbiturate coma and the indications for monitoring intracranial pressure. The management of a significant minority of neurological patients will require increasing sophistication. Buy this book if you want to keep up with the new generation of ICU technocrats.

CHRISTOPHER CLOUGH


The ability to make complex scientific discovery and the concepts which arise from it are intelligible to the layman is perhaps the hallmark of the real expert. These beautifully illustrated articles comprise a rare source of essays on the nature of science and the interactions between mind and brain in such fields as memory, learning, language, consciousness, neural networks, and ageing. The contributors, all virtuosi neurobiologists, particularly Grady Wyse, Gerald M. Edelman, Kimura, Damasio, and Selkoe. Jonathan Miller provides the epilogue.
A marvellous collection of concise, recondite essays in classical Neurology, it explores the present and seeks future evolution in understanding. It epitomises Ben Johnson’s remark in the Alchemist: “If his dream last he’ll turn the age to gold.”

JMS PEARCE


The authors, Consultants in spinal injuries in Salisbury, and accident and emergency in Weston-Super-Mare have updated the first edition of these BMJ papers in a splendidly illustrated format. These important injuries afflict 10 to 15 per million each year in the UK; and, 51% result from road accidents, 27% from domestic or industrial injuries, and 16% from sport. Mortality in those who get to hospital is 5% and for the survivors the death rate is doubled for incomplete paraplegia and tetraplegia, but increased threefold for complete paraplegia and seven-fold for complete tetraplegia.

The papers deal in practical fashion with attention at the roadside, transfer to hospital, radiology, and early management in the result in a range of the spinal injuries centre. Succeeding sections review medical, surgical, urological and nursing treatments and the details of rehabilitation and later the adaptation, social issues and complications after return home. These latter sections are written with social worker, occupational- and physio-therapists who add much to the solution of practical daily problems.

Neurologist may balk at the odd howler “... when the lesion is above the sacral segments—that is, when there is an upper motor neurone lesion” and perhaps at the persistent use of the obsolete MRC scales for motor power (developed for the 1947 polio epidemic), but overall the many issues are so clearly explicated that the articles or paperback deserve a wide readership. If the conclusions are heeded, the harrowing lot of these courageous patients should be improved.

JMS PEARCE


This book derives from a conference held at the National Institute of Health in 1991. It is the first in a planned series reviewing topics of new knowledge in Alzheimer’s Disease. The editors state their main aim is to present convenient summaries of topics that have not yet joined the mainstream of research. It is not therefore concerned with clinical material and many of the chapters are concerned with presenting the authors’ “pure” research. The book is divided into five sections, the first and unfortunately the shortest section deals briefly with current approaches to the treatment of Alzheimer’s Disease. The second and third sections look at some new approaches to the development of drugs, particularly agents acting on neurotransmitter systems and the potential uses of neurotrophic factors. Section four examines the interesting theory that there is an anti-inflammatory component to Alzheimer’s disease which may be treated effectively by aspirin! The final section of the book houses a variety of potential approaches to treatment. The possible prevention of Alzheimer’s disease is discussed in a chapter dealing with the cell biological mechanisms underlining the processing of the amyloid precursor protein.

As with many multi-author reviews readability is variable. There are rather too many chapters presenting a plethora of research with an inadequate discussion of findings. Some of the more accessible chapters such as those discussing the current state of clinical trials and the last chapter on the possible role of Acetyl-L-Carnitine seem all too short by comparison. In general the book is well produced and the figures of good quality.

Because of the rather prohibitive price it is more likely to be a library purchase. This book is not an easy read and probably has little in it to interest the clinician, but I would recommend it as one to be dipped into for anyone with an interest in Alzheimer’s disease and the future of research in this field.

DEIRDRE BONNER


This volume reports the results of several research projects on Parkinson’s disease which have in common a support grant from a Ministry of Education, Science and Culture of Japan between 1987 and 1989. The aim of the project was interdisciplinary research extending through molecular biology to clinical neurology. In fact, the net result is a series of 20 projects which only loosely interrelate. The studies in molecular biology stand rather distinctly apart from those in clinical medicine and, even within the separate domains, the extent of integration is not great. Despite these reservations, the book contains some very interesting studies. In fact, some of the findings, such as the 2-15 times greater relative risk of Parkinson’s disease in individuals with particular cytchrome P450 genotype may not get the wide readership and recognition that would be the case if it were published in a refereed journal. The studies in molecular biology, form an interesting series of research papers although the clinical studies are rather selective. Although interest in themselves, they do not clearly fulfill the wide remit of the publishers “clinical topics which are essential for clinical neurologists to diagnose or treat patients with Parkinson’s disease”. The book resembles more the proceedings of a symposium than a comprehensive text. Thus, it will gain a greater place as a reference source in a library than as a book for repeated personal use.

HJ SAGAR

Laboratory Reference for Clinical Neurophysiology. By A. LIVESTON and J. MA. (Pp 513; Price: £50.00). 1992. USA, F A Davis, Distrib. in UK by Williams & Wilkins Ltd. ISBN 0-8036-5641-3

The last two to three decades have seen a veritable explosion in the number and variety of techniques employed in the study of the peripheral and central nervous systems. The aim of the authors of this book has been to “provide a source of data for any and all procedures that could possibly be needed” in the neurophysiological investigation of patients.

The book is divided into three sections, the first covering conduction studies, the second evoked potentials and the third a miscellany of subjects. These are preceded by a brief description of some of the important pathophysiological concepts and the clinical value of the various neurophysiological techniques, as well as characteristics of evoked responses and the associated biological and technological variables that influence their recording.

A standard format is employed for each of the described procedures: this consists of a concise description of the structure to be examined, the simulation and recording arrangements aided by excellent illustrations, normal values gleaned from the literature and helpful technical comments.

The section on nerve conduction presents data on latency, conduction velocity and response amplitude and encompasses the cranial nerves, cervical plexus, brachial plexus, lumbosacral plexus and virtually all the accessible peripheral nerves emanating from the central nervous system. The authors are to be congratulated on the clarity of their writing and the care they have taken to make this a most comprehensive reference list is provided.

The authors of this book are to be congratulated for collecting all of this data in one volume and for presenting it in such a clear and concise manner for the clinical neurophysiologist.

PETER FAWCETT