of 20 pinealectomised patients of whom 16 developed migraine or a cluster headache-like syndrome.

All conferences are patchy and most is learned from discussion after the presentations and outside the conference hall. This one is no exception.

JN BLAU

Mitochondrial Encephalomyopathies (Progress in Neuropathology, Vol. 7). Edited by TAKESHI SATO AND SLAVATORE DIMAURO (Pp 258; Price \$100.00). 1991. New York, Raven Press. ISBN 0-88167-824-4.

This book contains the proceedings of the International Symposium held in Tokyo in 1990 as a satellite to the XIth International Congress on Neuropathology. It covers the biochemical, molecular and clinical aspects of a group of diseases increasingly being recognised as important causes of neurological illness. It is therefore a timely addition to the field.

The major strength is that it presents in certain chapters essential details about the basic science of mitochondria (chapters by Clayton, Schatz and Attardi *et al*) which are important if we are to understand these diseases. Another important chapter describes the problems with the clinical classification of these disorders. Other valuable chapters include those describing the mitochondrial DNA defects and the treatment of patients with ubiquinone.

Weaknesses of the book are firstly that the field of mitochondrial encephalopathies is moving so fast that certain parts of the book are now partly out of date. An additional problem is the inclusion of three chapters detailing the finding of the same mutation in the same disease.

Overall, I think this text is a valuable contribution to the field. I think that clinical neurologists or research scientists will find much to interest them and to initiate them to the increasing but complicated world of mitochondrial encephalomyopathies.

DM TURNBULL

Clinical Efficacy and Outcome in the Diagnosis and Treatment of Low Back Pain (Bristol-Myers Squibb/Zimmer Orthopaedic Symposium Series). Edited by JAMES N WEINSTEIN (Pp 293; Price: \$120.00). 1992. New York, Raven Press. ISBN 0-88167-841-4.

This multi-author book forms a record of the proceedings of the 6th Annual Bristol-Myers Squibb/Zimmer Orthopaedic Research Symposium. The first stimulating chapter should be required reading for any one who has to treat back pain. Although it is written from the American perspective, where rates for both medical and surgical intervention are higher than anywhere else in the world, it forms a powerful plea for audit both locally and more widely.

Chapters on clinical decision analysis form a useful introduction to a subject that is likely to become much more topical in the United Kingdom where the recent Purchaser/Provider divide places even greater emphasis on "best buy" management. A review of the

efficacy of non-operative care looks at the literature for the period 1966-1990 and found few studies which met the minimal criteria for internal validity. The conclusion reached was that the advice "Go to bed, take two aspirin and don't call us in the morning!" was at least no worse than any other form of management. Three good chapters on MRI and CT are careful to distinguish between the undoubted effectiveness of the two modalities in demonstrating pathology and the cost effectiveness of these sophisticated investigations.

Quantitative functional muscle testing is critically evaluated with the conclusion that present methods are subject to tremendous variability and of unproven safety: Clinicians are advised to rely on more clinical diagnostic tests. Those chapters discussing the role for surgery in lumbar disc herniation emphasise the importance of the American Academy of Orthopaedic Surgeons' criteria for intervention and stress that these are met by only a very small proportion of those who initially present. Whilst in this group the initial results are shown to be better than for those conservatively managed, that difference has disappeared by 7 years.

The second half of the book deals with spinal pedicle fixation and with various forms of artificial disc—the latter happily dismissed by the final Author as "... bordering on the question of Medical Ethics to even propose such a solution."

As with all volumes from this Publisher, the book is handsomely produced and each chapter is copiously referenced. I found it a most stimulating text and would strongly commend it to any one involved in the treatment of back pain.

AE BOOTH

Brain and Bannister's Clinical Neurology. 7th Edition. Revised by SIR ROGER BANNISTER (Pp 622; Price: £50.00). Oxford University Press. 1992. ISBN 019 261989 6.

Sir Roger Bannister has assembled the best illustrations and best diagrams of any textbook of Neurology. Even so, a 600 page hard-back volume presents problems in marketing, despite being the 7th edition of an established tome. The new compromise title is a misnomer and fails to explain the nature of the opus. A much better book is striving to get out. Notwithstanding my respect for my former chief, this is no longer Brain's easy reader; all credit is due to the present author, and he has devoted more industry and thought to its contents than can be claimed for the majority of rapidly produced textbooks of Neurology that have appeared on the scene. Bannister's strengths pervade the book. He has never lost an essentially neurophysiological approach to clinical neurology and has taken the greatest care to upgrade the text with respect to advances in genetics, basic sciences and investigative techniques. These are presented with a commonsense approach. Thus, he differentiates primary immunological disease, the results of cell destruction, and epiphenomena.

The contents are selective rather than comprehensive, perhaps with Membership or N. American Board exams in mind, but they are occasionally too abbreviated. The explanation of neurological examination and his-

tory taking, though simplified, is inadequate for the non-neurologist. One remnant of Lord Brain's schema remains, a final chapter on psychological factors in neurology. The chapter is introduced with an unusual burst of humour, worthy of repetition:—

"The brain and mind constitute a unity, and we may leave to the philosophers, who have separated them in thought, the task of putting them together again."

This book will not sit idle on my shelf. I expect to find it useful when preparing talks to ensure that nothing essential is omitted, and I will give full regard to the diagrams and classifications into which Bannister has put so much preparation.

EMR CRITCHLEY

Excitatory Amino Acid Antagonists Frontiers in Pharmacology & Therapeutics Series. Edited by BRIAN S MELDRUM (Pp 350; Price: £55.00). Oxford, Blackwell Scientific Publications. 1991. ISBN 0 632 02737 1.

This is an excellent introduction to the topic of excitatory amino-acid antagonists. Acronyms have proliferated in this field—NMDA, EAA, DHE, AMPA—what can they possibly mean? Are we going to have to learn about them? This book goes a good way to explaining their meaning and significance. Brian Meldrum has edited the first book devoted specifically to Excitatory Amino-Acid Antagonists (EAA Antagonists). He has invited experts in key fields to contribute, thus the book is well co-ordinated and without repetition. It moves from a historical introduction to excitatory amino-acid pathways, then on to receptor sub-types, specific antagonists of the different EAAs and the behavioural effects of N Methyl D Aspartate (NMDA). The last third of the book is devoted to clinical applications, most particularly in the therapy of epilepsy and stroke.

The future applications of EAA Antagonists are enormous. Clinical trials of non-competitive NMDA antagonists in epilepsy are likely to proceed shortly. The value of EAA antagonists in stroke is likely to prove more difficult to demonstrate. Pre-clinical data suggests that EAA antagonists are potentially therapeutic in preventing brain damage from cerebral ischaemia. A starting point may well be using these agents in predictable cerebral ischaemia, for instance following open heart surgery or neurosurgery for aneurysm. The therapeutic time-window following stroke is difficult to forecast, and there is an inability to select an outcome measure with clinical meaning. Chronic degenerative disorders such as Huntington's disease, could respond to EAA antagonists if the final mechanism for neuronal destruction is activation of NMDA receptors. Parkinson's and Alzheimer's diseases are possible candidates for drug trials. Motor neurone disease is probably the best disorder of this group to proceed with trials, as there is substantial evidence of abnormalities in the metabolism of EAA. Pre-clinical studies are promising; provided there are not unacceptable side effects neurologists can expect several new drugs in their armamentarium. These are exciting times for the Neuroscience. Dr Meldrum has edited an excellent and timely review of an important new area of research. It proved to be a difficult read for

one immersed in clinical neurology, but will prove to be essential reading for all involved, however tangentially, in this area.

C G CLOUGH

Lasers in Neurosurgery. (Lasers in Medicine and Surgery Series 3). Edited by R V JEFFREYS (Pp 298; Price: £40.00). London, Chapman & Hall Medical. 1992. ISBN 0-412-30950-5.

This hardback book comprises 20 chapters totalling 300 pages on various aspects of the use of lasers in neurosurgery. The list of contributors is impressive and the sequence of chapters is logical.

The first 60 pages comprise what is an almost obligatory section on the physics and engineering aspect of lasers. Included is a discourse on the interaction of laser energy with neurological tissue, which is admirable for its detailed content, but which must strike a chord only for a limited audience. For the average neurosurgeon who uses a laser it is analogous to an explanation of how the micro-circuitry of a colour TV works—and just about as useful. I found it too detailed to be of any practical value, but it does provide a good over-view of the experimental work on lasers and neurological tissue.

There is an excellent chapter on the safe use of lasers in the operating theatre, which is recommended to all who are responsible for surgical lasers. There follow five chapters on different types of laser (CO₂, Nd-YAG, Argon laser, contact laser and tunable lasers). One of the best chapters in the book concerns techniques in laser neurosurgery and should be read by all neurosurgeons proposing to use this instrument.

The second half of the book is taken up by a series of chapters concerning the use of lasers in different clinical conditions. The chapter by P J Kelly on Stereotactic and CT Assisted Surgery is recommended. The contribution by Fred Epstein is an excellent monograph on the management of intramedullary tumours in childhood, but with only a brief reference in passing to the use of the laser. The book is concluded by a brief chapter by the Editor, who sees neurosurgeons either as laser enthusiasts or laser antagonists.

I strongly recommend this book for anyone who uses the neurosurgical laser or is proposing to do so. I suspect it will enhance the quality of laser neurosurgery and its prag-

matic presentation should convince even the laser-sceptic.

R A JOHNSTON

Intracerebral Hematomas. Edited by H H KAUFMAN (Pp 240; Price: \$150.00). New York, Raven Press. 1992. ISBN 0 88167 843 0.

In the preface the Editor states that there has been no summary of recent developments regarding the pathophysiology, diagnosis and treatment of spontaneous intracerebral haematomas, and the book sets out to remedy this situation. At the outset one should state that in general it succeeds very well. The authors are drawn from the USA, with the exception of two authors each from Japan and Germany; however the facts and discussions range worldwide. The magnitude of the problem is illustrated by figures from the USA where 500,000 new cases of stroke occur each year, of which approximately 75,000 are a result of intracranial haemorrhage; in 1988 there were 2,930,000 survivors from previous years, of whom 440,000 were survivors of intracranial haemorrhage (and this is in a country which has a low incidence with respect to other countries).

All the chapters are in reality review articles and are well up to date. The initial topics cover epidemiology, pathophysiology, hypertension, clinical features and radiology. These are followed by some good chapters on topics that are not easy to research oneself, such as haemorrhage due to infections, neoplasms, vasculitides, drugs and haematological conditions, and haemorrhage during pregnancy. These latter topics would be a Godsend to anyone wishing to review the literature for an unusual problem or a case presentation. Finally a case is made for a more aggressive surgical approach for some patients with haematomas; the arguments are fairly proposed and allow the reader to make up his/her own mind. There is some repetition between chapters, but this has allowed the chapters to stand alone and thus they can be read out of sequence. The illustrations, which essentially are radiological, are of variable quality ranging from excellent to old and poor.

The price is perhaps a little expensive for the book's size, but I certainly would recommend it to the libraries of every neurosurgical and neurological department, as well as to postgraduate libraries in general hospitals.

R V JEFFREYS

SHORT NOTICES

The Experience of Psychopathology. Edited by MARTEN DE VRIES. (Pp 429; Price: H/b £55.00; \$110.00). Cambridge University Press. 1992. ISBN 0 521 40339 1

Neuropsychological Assessment and Intervention. By CHARLES J GOLDEN, ERIC ZILLMER AND MARY SPIERS (Pp 306; Price: \$46.75). 1991. Illinois, Charles C Thomas. ISBN 0 398 05754 0

This beautifully printed book reviews theories of brain function and neuroanatomy; then it details intelligence scales, the Halstead-Reitan and Wechsler test batteries and Luria's neuropsychological tests. Their applications to neurological disorders and a rehabilitation programme conclude this useful volume. If the neurology section is very weak and in places inaccurate, the neuropsychology is much more explicit and authoritative.