

## BOOK REVIEWS

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**Motor Neurone Disease.** Edited by AC WILLIAMS (Pp 755, Illustrated; Price: £85). London, Chapman & Hall Medical. ISBN 0-412-54780-5.

Few neurologists would disagree that Motor Neurone Disease is one of the cruellest disorders which we see. The progressive whitening away of motor function in patients who suffer usually with such gentleness seldom fails to touch even the most battle hardened clinician. Exacerbating neurologists' frustrations is the feeling that we understand so little of the pathogenesis of this group of diseases. From Professor Williams comes this attempt at "... a lively overview of where the action is in Motor Neurone Disease circles". It seems that we have gone some way from the extraordinarily unexplanatory concept of 'Abiotrophy of the motor neurones' with which most of us grew up.

The first section contains valuable chapters on the clinical features of MND/ALS, the Spinal Muscular Atrophies and of the various inflammatory and hereditary neuropathies which may confuse the diagnosis. Included here is the infuriatingly elusive Multifocal Motor Neuropathy with conduction block and its attendant unresolved story of the anti GM<sub>1</sub>-antibodies. Fully covered are the Post Polio Syndrome and the enigma of the Guam MND-Parkinsons-Dementia complex. Few chapters in this section fail but in the Wisconsin group's on the natural history thought seems to have been drowned in data. However Nick Murray follows this with excellent coverage of the clinical neurophysiology of MND.

The section on clinical management will be of great practical value to clinicians. UK neurologists, challenged by the more aggressive management of respiratory complications promoted in the USA may feel that they are too nihilistic about the techniques available for symptom control as opposed to prolongation of life. The comprehensiveness of this section is exemplified by Rosalind Pegg's articulate and moving chapter recording her nightmare journey with her husband through all the stages of his MND. This is compulsive reading for those doing their inadequate best for MND patients.

Least satisfactory is the section covering the neuroscientific background to MND research. Certainly there is good coverage of

the molecular biology of familial MND/ALS, including recent identification of the CuZnSOD gene mutation, although later this has to be an addendum to Hardev Pall's thorough commentary on metals and free radicals. Elsewhere authors are too personal in their presentations. For example Patten mars a helpful (though hypodiagrammatic) chapter on excitatory amino acids with such statements as "... although I have respect for the work of others, I tend to trust my own data more", which does not sound like a healthy scientific attitude. This section does however review the growing points in MND research, reinforcing the hope that the answer to this horrific disease lies somewhere in the new neuroscience of neurotrophic factors, excitatory toxicity, neurofilament biology and free radical biochemistry.

Clinicians will be the most helped by perusal of this book. I suspect those at the leading edge of MND research will be more critical, though Adrian Williams has probably succeeded in his aim of being "... outspoken and controversial ...".

CHRIS ALLEN

**Left Brain Right Brain**, fourth edition. Edited by SALLY P SPRINGER and GEORG DEUTSCH. Published by W H Freeman and Company, New York 1993. Pp 368 £16.95 ISBN 0-7167-2373-5.

It is said that much academic enquiry is driven by the pursuit of self-knowledge. Being right-handed yet left-footed, I approached this book with some interest. Written by two American psychologists and now in its fourth edition, this book remains one of the most accessible accounts of current thought on cerebral hemispheric function.

Hemispheric asymmetry of structure and function is firstly considered, aided by accounts of brain-damaged, split-brain and normal subjects, and by state-of-the-art investigation such as PET imaging and magnetoencephalography. Clinical disorders of higher cortical function and left-handedness illustrate aspects of hemispheric asymmetry. Geschwind's fascinating theory of lateralisation is described, in which left-handedness, auto-immune disorders, and learning disorders are attributed to relative excess of testosterone in foetal development. Further topics considered include the influence of gender on laterality, and the evolution and development of asymmetry.

The role of asymmetry in psychiatric illness is also addressed. There are tantalising hints that schizophrenia and depression may be left- and right-hemisphere disorders, respectively. It is also suggested that corpus callosum enlargement seen in schizophrenia may be a compensation for defective interhemispheric communication in this condition.

This text provides an excellent introduction to laterality for neurologists, psychiatrists and psychologists, and also illuminates current research on the neuroanatomical localisation of brain function.

JOHN GREENE

**Left Brain—Right Brain Differences.** By JAMES F IACCINO. (Pp 284 £39.95.) Publishers: Lawrence Erlbaum Associates, New Jersey 1993. ISBN 0-8058-1340-3.

It is well recognised that the two hemispheres of the brain tend to subservise different functions. This book sets out to review evidence relating to this phenomenon from a different number of perspectives. Work dealing with anatomical asymmetries in brain, handedness and neuropsychological studies in both impaired and normal subjects are all grist to the mill. A competent summary and integration of these areas of work would be a useful addition to the literature but this offering falls down in a number of ways. There is an extensive, if not always fully up-to-date coverage of the literature but the level of critical analysis of the information presented is poor, non-sequiturs appear far too often and the style of writing is sloppy. Faced with the passage 'Many of Wernicke's (1874) aphasics generated output that resembled something akin to a word salad . . . . when one patient was asked by Bradshaw and Nettleton (1983) how he felt . . . .' the reader is inclined to ponder on the remarkable longevity of subjects originally studied by Wernicke. This is despite the use of the italics, presumably to indicate that it is patients with aphasia of the kind described by Wernicke (1874) that are the focus of concern.

Over recent years Lawrence Erlbaum have published a number of good texts on aspects of neuropsychology. This is clearly below their usual high standard. Despite this, Iaccino offers the occasional snippet of interesting if offbeat information. This reviewer had not realised that parrots are predominantly left footed before reading this book!

E MILLER

**Microsurgical Anatomy of the Brain—A Stereo Atlas.** Edited by GARY E KRAUS and GREGORY J BAILEY. (Pp 249 £180.00.) Published by Waverly Europe Ltd, London 1994. ISBN 0-683-04780-9.

This volume is accompanied by a series of stereo photographs in colour and a rather cute bright red viewer. The viewer and cards are a nostalgic reminder of the stereoscopic "views" of monuments and natural beauties which used to be generally available in the halcyon days before the camcorder and the video.

The stereoscopic images are of good quality and in colour. They are a mixture of anatomical projections and intraoperative photographs. Unfortunately, they are uncaptioned, and for those unfamiliar with the anatomy they require a rather laborious process of reference before or afterwards to the much duller black and white images in the accompanying text. The arrangement of the photographs both the stereoscopic images and the text conforms to the more commonly used surgical "approaches"—pterional, suboccipital, etc.

It is difficult to visualise at whom this manual is aimed. For the undergraduate anatomy student it is probably over elaborate. For the neurosurgical trainee it may be of some value but will surely prove to be no substitute for looking directly down the microscope at surgery, then referring to properly labelled illustrations, available in more conventional anatomical texts. However, both the stereo photographs and the textbook are elegantly produced, nicely packaged, and in common with most "heav-