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 whittling 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_1-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 subserve 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 prosections 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-

ily" illustrated text, highly priced.

I recommend a copy for the Neurosurgical Library.

DAVID HARDY

The Neurofibromatoses. A pathogenetic and clinical overview. Edited: SM HUSON and RAC HUGHES. Pub: Chapman and Hall, London 9.12.93. Pp 487 £79·00 ISBN 0–412–38920–7.

Clinically, and as a problem in biology, the neurofibromatoses represent something of an adventure playground for clinical scientists. The impact which these diseases make on the lives of affected individuals and their families calls for all the practical and pastoral skills on which clinical medicine is based.

Several candidates, other than von Recklinghausen, can claim priority for description of the NFs. The most recent is the unknown sculptor of an Hellenistic votive offering, catalogued in 1921, but not seen since the second world war. Much has since happened. Molecular geneticists know about the neurofibromin locus on 17q11·2 and the fragment of 22p12·1 which encodes the NF2 gene and cell biologists have shown that defects in tumour suppressor genes lead to uncontrolled Schwann cell proliferation. The differential diagnostician can sharpen up on the eponymously challenging syndromes of McCune-Albright, Dercum, Bannayan-Riley-Ruvalcaba, Klippel-Trenaunay-Weber, Maffucci, Bannayan-Zonana, Jaffe-Campanacci and Aarskog and for the unwary, the spots of NF1 may turn out to be a LEOPARD. Even if the frequency of tumours affecting the central or peripheral nervous system in the NFs has been exaggerated, their diversity has not and for the neuropathologist there are tumours galore—dermal, nodular and plexiform neurofibromas; neurofibrosarcomas, Schwannomas, cafe au lait macules, Lisch nodules, astrocytomas, meningiomas and hamartomas. On the topic of macrocephaly, heads may swell even more at the news that Lock's of London now stock larger hat sizes than in the days when Admiral Lord Nelson had his 57 cms cranium hatted out for the battle of Trafalgar. The most celebrated person not to have neurofibromatosis was Joseph Merrick. The editors have here arranged an intellectual exhumation of his remains, and preference is given to the diagnosis of Proteus syndrome, named after the old man of the (Aegean) sea who was given the power to change his shape at will. Sadly, those bits of Merrick which might have allowed modern molecular genetics to settle the issue of diagnosis were destroyed after dry rot infested the pathology museum at the London Hospital in the 1940s.

Although *The Neurofibromatoses. A pathogenetic and clinical overview* is the product of 25 pens, the editors have produced a text which maintains an easy narrative; Susan Huson and Richard Hughes bring to their subject a breadth of knowledge, common sense and infectious enthusiasm, drawing on considerable experience of the neurofibromatoses in all their clinical, social and psychological manifestations. The right topics are selected and the quality of reproduction for radiographs, clinical photographs and the few colour illustrations is uniformly (and unusually) high. In *The Neurofibromatoses. A pathogenetic and clinical overview*, Susan Huson and Richard Hughes have presented a scholarly and coherent account of one of medicine's most fascinating problems; it is an important book.

ALASTAIR COMPSTON

The Central Nervous System in AIDS: Neurology, Radiology, Pathology, Ophthalmology. Edited by J ARTIGAS, G GROSSE, F NIEDOBITEK. Published by Springer-Verlag, Heidelberg 1993. Pp 237 Illustrated DM283,00 sFr 280,00 ISBN 3–540–55839–X.

Many practising neurologists in the United Kingdom still have had little exposure to AIDS in their clinical practice. However, this subject has become a major topic at most International Neurological Conferences. AIDS must be considered in the differential diagnosis of disease at all levels of the neuraxis and may be considered as the modern "great mimic".

This compact book in five chapters and 236 pages covers the clinical neurology of AIDS, diagnostic imaging, neuropathology and clinical and pathological ocular features. The three editors of this volume, from the Auguste-Viktoria-Krankanhouse, produced the extensive third chapter on the neuropathology.

As a clinical neurologist I was interested in the initial chapter of fifteen pages which covers the statistics of neurological involvement in this disease. Although short, it is well laid out with useful tables, which will make helpful teaching slides. The therapy of the complications of AIDS covered and the chapter is supported by more than one hundred and fifty references.

The second chapter involving the diagnostic imaging of intracranial manifestation of AIDS is clearly laid out. It considers radiological features of all the manifestation of AIDS and its complication. It is well illustrated by good figures, some showing serial changes in the evolution of AIDS in the nervous system. This chapter is also supported by in excess of four hundred and sixty references.

The centre of the book is dominated by an extensive chapter on the neuropathology of AIDS, which is covered in one hundred and seven pages. The text is punctuated by very useful tables. The introduction covers practical problems of collecting specimens from AIDS autopsies. The introduction and, indeed the chapter as a whole, emphasizes one of the opening statements that "the neuropathological finding in AIDS autopsies reveal a very broad spectrum of findings". These refer to the classical neuropathological features of disease, as well as the special AIDS-associated changes. The chapter takes us through HIV, encephalitis and leukoencephalopathy, the opportunistic infections and the CNS tumours. Again the chapter is well supported by more than six hundred references. The final two chapters cover the clinical ophthalmology of AIDS. This is enhanced by good illustration. I think it would be helpful if the retinal pictures could be in colour, though I suspect that this will add excessively to the cost of the volume.

This book is consistent in its style, well laid out, provides clear script and a good bibliography. It lies between a book to read and a reference book. It is clear from the literature that the bibliography on AIDS is changing rapidly, however, this volume presents a comprehensive selection of references up until 1993. The production of the volume is good quality. I think many may find the price of 283 DM somewhat excessive, but I would recommend this Volume.

LESLIE FINDLEY

Epilepsy in Children. Second Edition. International Review of Child Neurology Series. By JEAN AICARDI. Publisher: Raven Press, New York 94. Pp 571 $120·00 ISBN 0–7817–0111–2.

Paediatric epileptologists have a difficult time. About 75% of patients with epilepsy start to have their seizures before 18 years of age. Seizures are more common in the first month of life than at any other time. In children seizure types change with age and so do the underlying causes for the seizures. The classification of seizures and epilepsy syndromes changes with the years and it now seems increasingly important to identify the syndromes accurately—some of them (eg, benign familial neonatal convulsions) may be the result of a single gene defect. Life becomes more complicated.

Perhaps adult epileptologists have a more difficult time. They may have to deal with the medical, psychological and social consequences of seizure disorders and syndromes that have started in childhood. Are paediatricians inventing these complicated stories to keep themselves occupied? The best way to find out is to read a good book on the subject. Aicardi's book may be the best one to get. Professor Jean Aicardi is the ideal man to write a text book about epilepsy. He has extensive clinical experience, he has a wide knowledge of the literature, he is intellectually rigorous and he produces better written English than most of us. His book is a good length—about 550 pages—and it is packed with information. The text is lucid despite its density.

The book is divided into 4 parts. The first is general and deals with definitions and the classification of epileptic seizures and syndromes. The second describes the major types of epileptic seizure in childhood and the corresponding epileptic syndromes; this takes the reader from infantile spasms to the Landau-Kleffner syndrome via the Lennox-Gastaut syndrome and others. The third deals with clinically important seizure problems in children—neonatal seizures, febrile convulsions, status epilepticus etc. Finally there is a discussion of aspects of diagnosis, prognosis and treatment. Each chapter is a distillation of much research and clinical experience and the author provides both critical comment and sensible advice. The references occupy 100 pages at the end of the book and there are 2552 in all. References relating to a particular subject have to be winkled out of this list with some effort.