spinal injuries is notable for informative chapters on the pathology and conservative treatment of this distressing condition. Some aspects of spinal surgery remain obscure or puzzling. That enlightenment is not to be found in these excellent volumes about the role of surgery in common spinal pain, or of decompression in spinal cord injury, must mean that no answer is available.

The work is well illustrated and, if one can ignore the frequency with which one is tripped up in one's progress through the text by the politically correct "his or hers", well written. It should prove invaluable to trainees and practitioners in the specialties at which it is principally aimed.

TT KING

Cervical Spondylotic Myelopathy (Contemporary Issues in Neurological Surgery Series) Edited by R L SAUNDERS and P M BERNINI (Pp 219 Illustrated; Price: £49.50) 1992. Oxford, Blackwell Scientific Publications. ISBN 0 86542 193 5.

This book deals with all aspects of cervical spondylotic myelopathy and describes the various surgical treatments available. The main uncertainty about the correct treatment of spondylotic myelopathy stems from lack of information about the natural history of untreated or conservatively treated disease. It can also be difficult to interpret correctly the results of conservative treatment and compare them with patients treated surgically.

The chapter on anatomy deals mainly with the bone, ligament, and disc structures but relatively little attention is given to the blood supply of the cervical cord. It is suggested that the main supply is from the anterior and posterior spinal arteries but as Abdullah and Bowden showed the main supply is from the radicular arteries. Damage to these vessels, the distribution of which is inconstant, may be one reason why the results of surgery are less good than had been anticipated.

The chapter on pathophysiology describes the main factors causing cord compression. These are a congenital narrowing of the antero-posterior diameter of the spinal canal, the presence of spondylotic bosses or bars, infolding of the ligamentum flavum and instability or hypermobility of the cervical spine secondary to disc degeneration. Cord compression is likely to occur if the antero-posterior diameter of the cord is less than 11 millimetres. The chapter on neurology gives a good review of the literature and of the symptoms and physical signs which may occur. The chapter on imaging details the various techniques and is well illustrated.

Ossification of the posterior longitudinal ligament is covered in Chapter 14. It is described as a benign progressive hyperplasia and calcification of the longitudinal intervertebral ligament and has an incidence of 2% in Japan and 0.7% in adults in the USA. When marked, especially if there is a congenital narrowing of the AP diameter of the spinal canal, this may cause cord compression. Whether this is a separate entity or part of the generalised spondylotic process is difficult to say.

Treatment may be conservative or surgical. Where there is instability the authors recommend stabilization and if there are

signs of increasing cord compression, decompression. Anterior stabilization with decompression is in most cases preferred to posterior decompression. Any surgical interference may cause complications partly be due to the fact that damage has been caused to the vascular supply. Operations on the cervical spine are a major undertaking and the complications include acute myelopathic worsening and spinal destabilization.

This is an interesting book which deals with all aspects of cervical spondylotic myelopathy and should be read by all those interested in the subject.

MARCIA WILKINSON

The Dementias: Diagnosis & Management Edited by MYRON F WEINER (Pp 350; Price £47.95) 1991. London, The Eurospan Group. ISBN 0 88148 297 4.

This is a multi-author book from the University of Texas and the Mount Sinai School of Medicine, New York. The first quarter of the book deals with the identification, psychodynamics, investigation and differential diagnosis of dementia. The diagnosis of dementia defers reverentially to the lists of symptoms included in the DSM-III-R manual of the American Psychiatric Association.

The section on investigation is rather heavily weighted toward brain imaging and the author's personal experience of single photon emission tomography accounts for almost half the chapter. Neuropsychological assessment is surprisingly discussed separately in the management section of the book. The chapter on differential diagnosis attempts to describe the clinical features and investigations of a wide range of diseases manifesting as dementia. As a result common causes of dementia are sometimes dealt with summarily, undue weight being given to rare disorders. There is no mention of cortical Lewy bodies in the section on Parkinson's disease, to which less space is devoted than to the differential diagnosis of adult onset leukodystrophy.

The management of dementia forms the middle chapters and consists of good practical advice on psychological and behavioural management and a thorough coverage of these problems which may be helped by drugs. Some tips have a strong North American flavour and techniques are described to aid the safe removal of a patient's supply of firearms. The book ends with a 43 page appendix containing several questionnaires and assessment scales and nearly 40 pages of references.

The text is more likely to appeal to psychiatrists than to neurologists.

D NEARY

Movement Disorders in Neurology and Neuropsychiatry. Edited by AB JOSEPH and RR YOUNG. (Pp 762; Price £95.00). 1992. Oxford, Blackwell Scientific Publications Ltd. ISBN 0-86542-146-3.

Movement disorders are one of the most intriguing of the conventional but artificial bridges which span neurology and psychiatry. The influence of the mind in every organic disturbance, the motor retardation

of depression and dementia and the tics and stereotypes of schizophrenia are familiar reminders. Marsden and Fahn, Shah and Donald, and others have provided texts in the past, and so this big, largely American, volume comprising 95 chapters in 738 pages promises a comprehensive modern survey.

Drug induced disorders, dementia and neurodegenerative disorders, mood and movement, and a range of essays on tics, myoclonus, startle, ballismus, chorea, tremors and dystonias, and sleep disturbances are the main headings. The result is a very mixed bag both in content and quality. Many chapters are only 3 or 4 pages long, reducing the depth of analysis and description sought by the reader. Other sections (e.g. those on tardive dyskinesia) are unbearably repetitive. It leaves the impression that the editors sketched out titles for every possible variant and context of movement disorder, told the contributors to get on with it, but failed to eliminate the overlaps or to edit the final product. This said, there are some fascinating and authoritative essays which will enlighten and entertain. Rabbit syndrome, pathologic laughter and crying, startle epilepsy, autism, bruxism, the alien hand, and mirror movements are but a few of these engaging accounts; but are these really to be classified as movement disorders?

There is much of value in this book, but Joseph and Young have been too ambitious in trying to be all embracing, and too modest in the exercise of editorial prerogative.

JMS PEARCE

Tourette Syndrome: Genetics, Neurobiology & Treatment (Advances in Neurology, Vol. 58). Edited by T N CHASE, A J FRIEDHOFF, D J COHEN. (Pp 377; Price \$144.00). 1992. New York, Raven Press. ISBN 0-88167-922-4.

This is the second volume in the "Advances in Neurology" series to address the subject of Gilles de la Tourette's syndrome—now abbreviated to "Tourette Syndrome". Volume 35 in 1982 has now been updated by a decade in a comprehensive volume with contributions detailing progress in the understanding of this condition and its associated behavioural and psychiatric phenomena.

There are no less than 112 authors contributing to a volume of 362 pages and there is much repetition and overlap between contributions. But as the neurochemical and neuropharmacological discoveries in Parkinson's Disease in the 1960's profoundly changed the thinking about "degenerative" neurological disorders, so discoveries in Tourette syndrome are changing our thinking about behavioural neuropsychiatry and neurogenetics. This is therefore an important review of a condition with wide clinical and basic science interest.

The natural history of the disease and its clinical manifestations are described. A number of suggestions are made concerning pathogenesis with an interesting section on genetics. And the pharmacotherapy of tics, obsessive-compulsive disorder and attention deficit hyperactivity syndrome are reviewed.

This volume is an important marker of the current status of Tourette Syndrome research, diagnosis and management. It

should be available for reference for neurologists, psychiatrists and paediatricians as well as geneticists and investigators in this field.

RB GODWIN-AUSTEN

Spinal Cord Dysfunction Vol III. Functional Stimulation. Edited by L S ILLIS. (Pp 360; Price £50.00). 1992. Oxford University Press. ISBN 0-19-261919-5.

This is a timely monograph on spinal cord stimulation and forms the third volume of a trilogy devoted to spinal cord dysfunction. The editor draws together several contributions about the role of functional electrical stimulation in the rehabilitation of the damaged nervous system. As far as is possible only data derived from human studies is discussed. Most authors describe very recent work as well as giving a comprehensive review of the older literature. For the general reader, the chapters on spinal cord stimulation are probably the most useful.

The first third discusses the basic science "aspects" and a well balanced summary is given by the editor. The middle third assesses electrical stimulation of the peripheral nervous system. Little benefit is observed in chronic upper motor neurone syndromes, but useful advances have been made in the management of impotence and bladder control in paraplegics and in the management of faecal incontinence. The last third of the book discusses spinal cord stimulation. This is perhaps the most interesting of the three principal sections and starts with an excellent account of the role of spinal cord stimulation in the management of neurogenic pain syndromes. Bearing in mind that this therapeutic avenue is usually used as a last resort the reported results are heartening. Benefit seems also to occur in patients with various ischaemic conditions though the mechanism is unclear. An interesting chapter then follows on the neuropeptide changes in the spinal cord attributable to chronic stimulation. Future research in this area is likely to be fascinating. The last chapter on spinal opioidergic activation discusses the practical difficulties in the use of intrathecal morphine for spasticity and bladder irritability.

Overall the book is very readable and would be of interest to readers only vaguely familiar with this area.

JEREMY DICK

Stroke: Pathophysiology, Diagnosis and Management 2nd Edition. Edited by HJM BARNETT, JP MOHR, BM STEIN, and FM YATSU. (Pp 1270 Illustrated; Price: £165). 1992. ISBN 0-443-087326-6. Edinburgh, Churchill Livingstone.

This massive compendium costs £165. There are 73 contributors, mainly from North America with a few contributions from Japan, France, Germany, Italy, Switzerland and Israel; the UK is noticeably absent. The coverage is wide-ranging and includes pathophysiology, imaging, clinical manifestations and therapy both medical and surgical; there is also a good section on medical diseases and stroke. Each contribution is accompanied by an extensive bibliography.

The book suffers, however, from lack of strong editorial direction. There are no cross references; the work is in effect a compendium of 73 separate articles, which causes problems. For example, under completed stroke it is stated that anticoagulants serve no purpose after major infarction and their value for more modest ischaemia is unproven. It goes on to say that their superiority to aspirin and ticlopidine is unknown implying the latter are of proven value which must be doubted. One has to look elsewhere to find that anticoagulants for infarction are of value, when the infarct is embolic in origin. Readers knowledgeable about strokes will no doubt find their way around; the less well informed person who is 'looking something up' could well be misled by the lack of cross reference between sections.

The contribution by JP Mohr on classification is particularly helpful as is that on platelet function and antiplatelet therapy by Babette B Weksler. However, in the latter, the account of ticlopidine (which is unwisely hailed in the preface to the entire volume as a flourishing advance) is inadequate. The side-effects, including the dangerous neutropenia, are faithfully recorded but no attempt is made to make a risk benefit analysis. Comparison with aspirin is confined to the reduction in the number of further vascular events; the incidence of side-effects and their seriousness are not compared. A cautious but encouraging attitude is adopted in the section on thrombolytic therapy.

The section on carotid endarterectomy relates the widespread, indiscriminate use of this operation which was followed by intemperate criticism leading to a dramatic retreat from an operation which has now been shown to be of value for symptomatic stenosis greater than 70 per cent. Although the book includes the word management in its title, a derisory 13 of the 1270 pages are devoted to rehabilitation.

It therefore provides useful access to a lot of information but as a definitive guide to the management of cerebrovascular disease it is disappointing.

JOHN MARSHALL

Neuromethods 21: Animal Models of Neurological Disease, 1 Neurodegenerative Diseases. Edited by AA BOULTON, GB BAKER and RF BUTTERWORTH. (Pp 368; Price: £76.00). 1992. Published by Humana Press. UK Distrib: Chichester, J Wiley & Sons Ltd. ISBN 0-89603-208-6.

Experimental animal models have played a major role in evaluating both pathophysiological mechanisms and treatment approaches to a variety of neurological disorders. Such studies will continue to be of prime importance in complementing data obtained from patients. The focus of the book is on both common and uncommon diseases including Alzheimer's Disease, Huntington's chorea, Parkinson's disease (both rodent and primate models), genetic dysmyelination, non-genetic models of myelin disorders, the cerebellar ataxias and the rare Lesch-Nyhan disease.

There is an opening chapter on the ethics of animal models of neurological diseases which cogently discusses various general ethical principles underlying animal

experimentation in particular assessment of pain. Legal aspects of such work are also included, an original idea. The remaining chapters vary somewhat in length but they are all first-rate, wide ranging and show a considerable uniformity of style. The general format has been to give a general introduction to the disease which is then followed by practical details which vary in their extent. For example, some chapters such as the ones on Parkinson's disease and Alzheimer's disease give detailed experimental protocols which would allow the reader to carry out his/her own experimentation. The rationale, advantages and disadvantages of the various techniques are described clearly and even for the non-specialist such as myself it is possible to gain very useful insights into the methodologies. In some cases, such as the chapter on genetic dysmyelination, one is given details of the various animal models rather than detailed protocols. In discussing non-genetic myelin models, there is an extensive general discussion of virally induced CNS myelin disorders which is useful, especially for the non-virologist.

Overall this is an excellent book. The chapters are very comprehensive on the whole, topical and well-written. It is also an impressive general review of experimental animal methods. My only negative comment is the price £76.00.

PETER GE KENNEDY

SHORT NOTICES

Neuromethods: 19 Animal Models in Psychiatry, II. Edited by AA BOULTON, GB BAKER and MT MARTIN-IVERSON. (Pp 386; Price £80.00). 1991. Chichester, Wiley (UK Distributors) Clifton NJ USA, The Human Press Inc. ISBN 0-89603-177-2.

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MRI of the Brain III Neoplastic Disease: The Raven MRI Teaching Series. Series Editors R B LUFKIN, WM G BRADLEY, JR and M BRANT-ZAWADZKI. (Pp 216; \$75.00). 1991. New York, Raven Press. ISBN 0-88167-702-7.