Lyme Disease and the Nervous System.

By LOUIS REIK, JR (Pp 130 Illustrated; Price: DM 68,00). 1991. Stuttgart-New York, Thieme Medical Publishers Inc. ISBN 0-86577-394-7

This excellent overview of neurological Lyme disease will be welcomed and is undoubtedly the best account currently available. Since the discovery of the causative spirochaete by American researchers there has been an exponential increase in knowledge. Inevitably, knowledge has been accompanied by argument about the clinical spectrum of neurological Lyme disease and the criteria for diagnosis. One might ask whether the title of a monograph at this time should be "Current controversies in neurological Lyme disease" rather than conferring the authenticity of a text book. The point is illustrated by the furor at a Lyme disease conference reported in a recent issue of *Science*. In essence this incident concerned the efforts of Patient Support Groups who got a dozen rejected papers reinstated at a Lyme disease meeting angering researchers who had turned the work down as unscientific.

In fairness the author has made a courageous attempt to give a fair and well argued assessment of the current literature. He refers to all the sources of controversy about the validity and significance of a positive serological test for Lyme disease. Currently we do not have available an immunological diagnostic test diagnostic of active disease. Recent studies would suggest that intrathecal antibody production detected in the CSF may be more helpful in the diagnosis of CNS Lyme disease but even in this area controversy remains because of apparent discrepancies between experience in Europe and North America. False positive results are probably not a major diagnostic problem but the persistence of antibody production in patients with definite Lyme disease who have been adequately treated remains. Most importantly, it is clear from epidemiological studies that strongly positive results may be obtained in the absence of any clinical evidence or history of Lyme disease. In hyper-endemic areas for example, and also in patients who are vocationally exposed to tick bite, the incidence of positive results may be up to 25%.

The end result was expressed baldly by a researcher in the Lyme disease conference who was reported to say "You see many ... patients who do not have Lyme disease, but who think they do." The evidence for and against this spectrum of disease is carefully presented by the author in the text.

Lest this review should appear too critical it is important to say that the book is an invaluable source of reference to Neurologists who may see neurological Lyme disease only occasionally, provided the reader allows for the generosity of the author.

N F LAWTON

Neurology and Neurosurgery Illustrated/ 2nd Edition.

By K W LINDSAY, I BONE AND R CALLANDER (Pp 565 Illustrated; Price £24.95). Edinburgh, Churchill Livingstone. 1991. ISBN 0-443-04345-0

The first edition of this book provoked a lot of interest because of its profusion of figures and diagrams and these remain one of the

cardinal features of the second edition. They are particularly valuable in the sections dealing with history, examination and clinical presentation and for these sections alone the book can be firmly recommended. The other unusual feature of the book is the integration of neurology with neurosurgery.

As in any book it is possible to find minor things to criticise and as Professor van Gijn indicates in his foreword one can always quibble about details but what matters is the general organisation of a book and this is certainly excellent. The only weakness is at the same time the book's main strength, namely the use of diagrams. There are particular circumstances, such as when dealing with imaging and pathology, when real pictures are better than diagrams and although the diagrams of the normal CT and MRI scans are quite good, those illustrating the abnormal are inadequate.

Overall, this is an excellent book and one that will be attractive to both medical students and postgraduates. The appearance of a second edition so soon after the first indicates that the book must have sold well and I suspect and I certainly hope that the second edition will do better than the first.

NEF CARTLIDGE

Recent Advances in Epilepsy No. 5. Edited by T A PEDLEY AND B S MELDRUM (Pp 243 Illustrated; Price: £34.95). 1991. Edinburgh, Churchill Livingstone. ISBN 0-443-04494-5

This latest issue in the series of "Recent Advances in Epilepsy" maintains the interest and diversity of its predecessors, with authoritative reviews on topics from molecular genetics to behavioral therapy.

Of most practical utility must be the chapter by Scheuer on "medical aspects of managing seizures and epilepsy". This provides a helpful summary of the therapeutic problems, notably but not exclusively drug interactions, arising in patients with epilepsy associated with other medical conditions. Other informative clinical reviews address prenatal and perinatal risk factors for epilepsy (Wallace), post-traumatic epilepsy (Willmore) and seizures associated with HIV infection (Labar). Perlin and De Lorenzo under the title of "calcium and epilepsy" provide a review of the cellular mechanisms of epileptogenesis, considerably more wide ranging than the title may suggest, but curiously say nothing about the, as yet not very encouraging, results of clinical trials of calcium entry blockers in epilepsy.

Trials of three new drugs are reported, however, but several similar reviews of these have also recently appeared elsewhere. Other approaches to treatment are represented by a report of a surgical series of patients with cortical dysplasia (Janota and Polkey) and a stimulating account of behavioural therapy by Fenwick.

The very diversity of the material covered may mean that few readers will have sufficient breadth of background knowledge to be able to follow all the articles. One wonders whether future reviews in this series could not be targeted at a rather wider readership. Nevertheless there is much to justify the attention both of general neurologists and those with a specialist interest in epilepsy.

C D BINNIE

Understanding Neuromuscular Plasticity. A basis for clinical rehabilitation.

By G KIDD, N LAWES AND I MUSA. (Pp 122; Price: £14.99). 1992. Sevenoaks, Edward Arnold. ISBN 0-340-55244-1

This is a dangerous book in which the emperor, rehabilitation, is offered new clothes that are not only insubstantial but are in fact misleading. This book develops the thesis that because (a) change (recovery) occurs in the nervous system, therefore (b) therapists can modify the processes of change. It reviews evidence that change can occur within the nervous system especially after damage. Although the assumption is undoubtedly true (we all learn, and changes occur after every insult to the nervous system), the review is not good and its style is patronising to the target readership of therapists. At times it gives excessive biochemical detail, often irrelevant to the main thrust of the book. It is not a thorough or critical review of the evidence, but a biased presentation of selected studies.

Then the authors suggest that some therapies can in some way encourage, increase and modify these processes. Often the suggestions are simply stated as being 'true', sometimes they are simply hoped to be true. No evidence is ever presented to link therapy to the facts given about neural plasticity. However the two theses in the book are so intertwined that the reader who is convinced that the scientific detail given is correct may come to assume that the other assertions made are also correct.

I conclude that this book may be read by many therapists who will falsely believe it to be a valid justification of their techniques. It threatens to replace one group of unsubstantiated beliefs underlying rehabilitation (e.g. Bobath, for which no evidence was ever presented) with 'neural plasticity'.

DERICK T WADE

Recent Advances in Neurosonology

(International Congress Series 979). Edited by: M OKA, G-M VON REUTERN, H FURUHATA, and K KONDAIRA (Pp 556; Price US\$211.50/ Dfl.370.00). 1992. Amsterdam, Elsevier. ISBN 0-444-89269-9

It is over 30 years since the Doppler shift of ultrasonic waves was first used to measure blood flow through arteries but it is only recently that the technique has come into its own. This long gestation period was largely due to the fact that good results are very dependent upon the skill of the operator. Until recently few people have felt it worthwhile developing that skill; it was much easier to order an angiogram. As evidence of the value of carotid endarterectomy for certain categories of stenosis has accumulated, the need for a non-invasive screening test which could be applied widely has become apparent. This, together with technical advances which gives good pictures of the wall of the artery as well as the blood flow through it, has brought Neurosonology, as it has come to be called, into its own.

This is reflected in the present volume which contains over 100 papers presented, largely by Japanese authors, at the Fourth Meeting of the Neurosonology Research Group of the WFN at Hiroshima. The papers

give brief accounts of research projects covering a wide field including stroke, head injury, brain tumours and brain death. Basic haemodynamics as well as practical applications such as intraoperative monitoring are dealt with.

The volume is very much one for the specialist working in the field. It enables him or her to see what work is going on and the results being obtained. It would not be of interest to the general reader.

J MARSHALL

The Threatened Medical Identity of Psychiatry: The Winds of Change.

By THEODORE PEARLMAN. (Pp 270; Price: \$49.75) 1992 Illinois USA, Charles C Thomas. ISBN 0-398-05768-0

The author grew up in South Africa and worked there as a general practitioner before specialising in psychiatry and emigrating to the United States. He has written a series of essays on the present practice of psychiatry principally in the country of his adoption. These range from a critique of DSM3 (a USA classification of psychiatric disorders) to excursions into psychopolitics (Russian and South African psychiatry).

The tone is informal, loosely structured and highly personal. Idiosyncratic assertions and dogmatic opinions abound. Dr Pearlman agonises over the state of psychiatry and diagnoses an identity crisis. He deplores the medicalisation of behavioural disorders and is equally scathing about the claims of dynamic psychotherapy and biological psychiatric research. Psychopharmacology fares little better. In his scheme of things the psychiatrist is a hospital based general physician with an interest in psychological disorders, at the ready to diagnose organic aetiologies underlying psychiatric syndromes and to advise on adverse psychological reactions to physical disease. He has little to say about the chronic psychoses other than a half-approving nod in the direction of Lang and Szasz. The practice of psychiatry in the community hardly merits a mention. He is rather better on some of the more bread and butter issues that face American psychiatry: the influence of health insurance on the quality of care; the territorial battles between psychiatrists and psychologists; and the increasing bureaucratisation of medicine. This is very much one man's view of his own speciality and should be treated as such.

B K TOONE

Problems and Methods in Longitudinal Research: Stability and Change.

Edited by: D MAGNUSSON, L R BERGMAN, G RUDINGER and B TORESTAD (Pp 351; Price H/b £55.00; \$100.00). 1991. Cambridge, University Press. ISBN 0-521-40195-X

This is a collection of papers which were read at a workshop organized by the European Network on Longitudinal Studies on Individual Development (ENLS) within the framework of the European Science Foundation. The book is the fifth of a series of volumes dealing with various methodological problems in longitudinal research; the present one concentrating on problems of statistical analysis and interpretation of data. In particular, the aim of the present volume is to illustrate

an indispensable link between the correct method of data treatment and the explicit formulation of a substantive problem. With this aim, each chapter (written by different authors) sets out a particular problem and describes a particular approach to the solution of the problem. Presumably, in the workshop itself, there might have been discussion concerning alternative strategies for solving these particular problems, stressing relative strengths and weaknesses of the various statistical methodologies. This is completely missing from the book, however, and for this reason the book is rather unsatisfactory from the reviewer's point of view. There is very little link between the chapters and very little evidence of communication between the authors. For this reason the beginner in this area will not find this volume as useful as a well-written textbook. It is a book to dip into to see how a particular worker proposes to solve some particular challenge.

There are fifteen chapters. I found the later chapters the more interesting, starting with Chapter 7, by Pickles and Rutter, in which they discuss searches for 'turning points' in developmental processes. The chapter on the use of event history models in social mobility research (Blossfeld, Hamerle and Mayer) was also very useful. There were two chapters on modelling genetic effects in longitudinal research, but these are perhaps a little specialised for the general reader. Of more general interest is the chapter on structural equation modelling of intellectual development (Rudinger, Andres and Rietz) and one on latent structure models for discrete data (Anderson).

I do not think that I learnt a lot from scanning through the pages of this volume, however, except in the chapter by Shröder, Edelstein and Hoppe-Graff on qualitative analyses of individual differences in intra-individual change.

GRAHAM DUNN

Current Trends in the Treatment of Parkinson's Disease

(Proceedings of the symposium on Current Trends in the Treatment of Parkinson's Disease held in Venice on 3-5th May 1991) Edited by YVES AGID (Pp 106; Price £18.00) 1992. London, John Libbey & Co Ltd. ISBN 0861963393

This volume is the proceedings of the symposium held in 1991 to coincide with the European launch of Pergolide. The introduction suggests that the book will help clinicians make up their minds on the use of L-dopa and dopamine agonists in the treatment of Parkinson's disease. There is, however, little new data, but significant lobbying designed to help anyone take sides on important issues such as is L-dopa really toxic and does its 'early use accelerate development of fluctuations?' and the reverse: do agonists with or without some L-dopa, delay such complications or really have any neuroprotective qualities? L-dopa preparations have provided the staple treatment world-wide for two decades improving both quality and quantity of life. Perhaps we need a Dopa appreciation society to ensure that it is not found guilty before we have convincing evidence, particularly as polypharmacy has its intrinsic problems and the very long term effects of agonist therapy are not yet known.

Although disappointing in its proposed aims there are some worthwhile and informative chapters. Within the first section on cell mortality mechanisms, the group from Pisa gives an interesting review on MPTP toxicity and the possible involvement of excitatory amino acids, including some provocative comments questioning the importance of the mitochondrial defect, at least as an explanation for cell death. The next chapter brings up the question of dopamine neurotoxicity involving some well known proposed mechanisms though with little evidence that they are active in vivo, except under conditions of ischaemia. It is followed by a nice review by Olanow of the role of free radicals in Parkinson's disease and how they could interact with other mechanisms such as excitotoxic and mitochondrial defects. Walters reviews current therapeutic approaches and the theoretical background to both palliative and protective treatment, followed by Tolosa on current strategies for L-dopa, administration with comments on the unproven idea that controlled release formulations of L-dopa could be less toxic than conventional preparations. There are additional chapters describing the molecular biology of dopamine receptors and Lees reviews the current indications for apomorphine and possible future directions. The book finishes with two chapters giving a summary of the clinical data on Pergolide and some practical experience from both Milan and Houston.

Although this book does not come up to its stated aims there are a number of well written and interesting chapters from leaders in the field.

A C WILLIAMS

Disorders of the Cervical Spine. Edited by: M B CAMINS and P F O'LEARY (Pp 628 Illustrated; Price: £115.00). 1992. London, Williams & Wilkins Ltd. ISBN 0-683-01401-3

This is a large volume devoted to all aspects of diseases of the cervical spine, the contributors being mainly neurosurgeons and orthopaedic surgeons. It is not, however, unduly biased towards detailed descriptions of operative techniques and starts with good discussions with biomechanics, clinical syndromes, radiological investigations and neurophysiological monitoring. The scope of later chapters is wide enough to include enigmatic conditions such as thoracic outlet syndrome, cervical angina, and dysphagia and vertebral artery compression attributed to spondylotic spurs.

The section on trauma is notably good and includes excellent chapters on the classification of injuries of the cervical spine, basic principles of treatment and the use of Halo vests in management. There is much of interest in other sections including a good account, from Japan, of ossification of the posterior common ligament and on the use of decompressive laminoplasty.

Though the editors have chosen their subjects and authors so as to provide a very comprehensive account of the cervical spine, they have managed to avoid, on the whole, overlap between chapters. References are variable both in quantity and in up to datedness. The reviewer was unable to find any reference to very high doses of methyl prednisolone now used in spinal injury. There