Book reviews

Statistics with Confidence. By Martin J Gardner and Douglas Altman. (Pp 140; Price: £7.95.) London: British Medical Journal. 1989.

This useful paperback reprints and revises a series of seven papers and a leader in the BMJ series *Statistics in Medicine*. The reasons for preferring confidence limits to the conventional null hypothesis tests and p values are explained and the methods of applying this technique and calculating confidence intervals are provided with worked examples as demonstrations. Specially prepared tables are included and a computer program CIA is available for IBM compatible systems. Statistical guidelines for research papers, endorsed by the BMJ are a useful and necessary section in this inexpensive paperback.

JMS PEARCE

Neural Regeneration and Transplantation FCN Vol. 6. Edited by FREDERICK J SEIL (Pp 294; \$75.00.) Alan R Liss, 1989.

The subject of neural regeneration and transplantation, previously the almost exclusive preserve of laboratory scientists, has become increasingly relevant to neurological practice. Over the past two or three years there have been several reviews in general neurosurgical journals but now we see publications addressing the possibilities of clinical applications of laboratory experiments.

The first part of the book concerns nerve regeneration with authoritative chapters on regeneration of peripheral nerve and the neuromuscular apparatus. Two chapters are of particular clinical concern; the capacity of CNS neurones to survive injury and the effect of a variety of agents including growth factors and CNS implants. There is an excellent review of neuronal growth factors and a particularly interesting account of experiments in axonal sprouting.

The chapter on recovery mechanisms in spinal cord injury puts forward the challenging view that recovery from spinal cord injury is, in fact, commonplace. Procedures designed to produce regeneration of spinal fibres or transplantation of tissue to facilitate regrowth must therefore, be examined very critically.

The final section covers aspects of a large field of neural transplantation with accounts

of laboratory work largely with rodents and principally in neurochemical degenerative diseases. The classical experiments are described together with recent clinical experience with adrenal medullary transplantation for Parkinson's Disease. The authors are sensibly cautious about the value of this procedure without condemning it out of hand, a fortunate attitude in view of recent encouraging results in carefully studied clinical series. Hardly surprisingly, there is little information on experience with clinical foetal dopamine transplantation since the authors had presumably written the chapter before the growing number of foetal mesencephalic implantations for Parkinsonism. The excellent final chapter on immunology of transplantation covers all the obvious problems but raises new issues in an extremely readable form. This is one of the most important aspects of neural transplantation; the reader is led steadily through basic immunology and explanations of modern nomenclature to the special problems of the relative immunological privilege of the central nervous system.

The book is pleasantly bound and printed with good plates and diagrams, an adequate index and plentiful references. The editor is to be congratulated for an editorial control which has permitted the authors full expression whilst keeping to a very uniform format. This is a good basic text for clinicians interested in the topical subject of neural transplantation and a good general library text. Undoubtedly the clinical material will date quickly but the principles of neural transplantation so clearly expressed in this book are more secure, and the reviewer has no doubt that this will be one of the classic texts on the subject.

ER HITCHCOCK

Local spinal Therapy of Spasticity. Edited by H MULLER, J ZIERSKI, RD PENN (Pp 240; DM 100.00.) Berlin: Springer, 1988.

This book is based on a meeting on the intrathecal administration of drugs for the treatment of spasticity held in Gessen in April, 1986. Some 21 papers from that conference are published in this book which is divided into two sections. The first discusses the pharmacology of spinal neurotransmitters and drugs that relieve spasticity. These chapters are rather repetitive. Most draw attention to similar points, usually from the same reference source. A more focussed review of the uncertainties about the site and mechanism of action of these drugs would have been useful.

The next section is devoted to clinical studies on the treatment of spasticity. Much of the pharmacology is reiterated in this section. The clinical application of intrathecal baclofen, morphine sulphate, and benzodiazepines are discussed along with the technical aspects of implanting infusion pumps. The clinical experience of this technique is illustrated by many representative case studies. Unfortunately, these comprise an heterogeneous group of patients. Here lie the major deficiencies of this book. There is no concise discussion about what is and what is not spasticity. Some of the patients illustrated clearly have more widespread disturbances of cerebral motor pathways. The EMG illustrations of the objective benefits of intrathecal treatments do not convey as much information as one might have hoped.

With the growing importance of restorative neurology, the editors' aim of making this potentially useful information available to as many practitioners as possible, is timely and worthy. These new techniques appear to offer a new approach to the difficulties associated with symptomatic management of the long term motor complications of spinal (and brain) injury and will be of interest to all in this field. It is hoped that further critical evaluation of these techniques will take place in mainstream journals.

PD THOMPSON

Magnetic Resonance Imaging of the Spine.

By MICHAEL T MODIC, THOMAS J MASARYK, JEFFREY S ROSS. (Pp 280; £64.00.) Year Book Medical Publishers, Chicago. London: Wolfe Medical, 1988.

In a single manageable volume of 273 pages Dr Modic and his colleagues in Case Western Reserve University School of Medicine and UCLA have produced a textbook which aims to serve all clinical scientists who are interested in the spine and presents an up-to-date account in terms of MR technique and clinical applications, in a logical fashion. The focus of the book is firmly on MR imaging as the primary modality with only very brief reference to a couple of myelograms, angiograms and CT scans. The authors make it very clear that the demonstration of an anatomical or morphological abnormality must be assessed in conjunction with a thorough clinical examination and only then may the abnormality be assumed to be related to the symptom complex.

The contents are divided into ten sections covering image behaviour, normal anatomy, degenerative disease, postoperative and