potential for spontaneous recovery; more severely disabled patients were also by chance randomised to active treatment in this group.

Physiotherapy was offered only to patients in the relapse group, but since almost every individual receiving iv MP was discharged from hospital after one week, in practice none was treated in this way. Conversely, controls remained longer in hospital and received physiotherapy; if physical treatment improves disability during relapse

this arrangement will have underestimated the effect of iv MP during acute relapse. Some patients in the chronic progressive group were receiving muscle relaxants at presentation and these were maintained throughout the trial; no new treatments were introduced until after the assessment at one month.

We accept that there are limitations in the design and size of this study, but our practice is now to use iv MP on an open basis during relapse and as a means of reducing

motor disability in patients with chronic progressive disease.

Reference

- 1 Milligan NM, Newcombe R, Compston DA. A double-blind controlled trial of high dose methylprednisolone in patients with multiple sclerosis: 1. clinical effects. *J Neurol Neurosurg Psychiatry* 1987;50:511-6.

Book reviews

Survey of Functional Neuroanatomy 2nd ed. By Bill Garoutte. (Pp 210; £11.00.) California: Jones Medical Publications. UK Distrib: Wolf Medical Publications, 1987.

This short paperback is a carefully prepared and accurate introduction to neuroanatomy. It is succinct, clearly written and in broad strokes covers the main areas of the subject. In addition to the gross morphology, it touches briefly on the embryology of the emergent brain and outlines the essentials of histology. The text is liberally illustrated with clear schemata and line diagrams—many taken from older texts. At the end of each section there are clinical examples with questions for the student, followed immediately by a concise answer. These will add to the interest, though the examples are a bit too brief and sometimes glib.

The attempt to blend the physiology, a smidgeon of transmitter chemistry and some clinical tasties will appeal to the student reader. The coverage is however, uneven; for example the section on basal ganglia gives little information about the mechanisms or applied neuroanatomy of Parkinson's disease and the chapter on sensory pathways, perhaps wisely, evades the complexities of pain. It is nonetheless an attractive little book. For the 2nd MB student it is too superficial, except as an introduction. It does not rival, but would admirably complement the vastly improved recent editions of Manter and Gatz, Snell, or Barr. I think it would be invaluable for nurses, speech therapists or physiotherapists—"health science professionals" (sic).

JMS PEARCE

Clinical Applications of Computer Analysis of EEG and other Neurophysiological Signals. Edited by FH Lopes da Silva, W Storm van Leeuwen, A Ramond. (Pp 506; \$160.00.) Amsterdam: Elsevier, 1987.

This is part of a revised series of the *Handbook of Electroencephalography and Clinical Neurophysiology* covering various aspects of computer processing of EEG, evoked potentials and electromyography (EMG) data. Of the 13 chapters nine are devoted to EEG, three to evoked potentials and one to EMG. Although the book is entitled *Clinical Applications*, the opening chapter is on automatic artifact detection which provides a comprehensive assessment of the means of minimising or rejecting unwanted signals. As most of the methodology is described in Volume 1 its contents for cross reference would have been welcome in Volume 2. An area where computers have provided the much needed facility for data reduction and detection of certain trends is in the long term monitoring of EEG, but now the question is whether it is of value in monitoring cerebral function during surgery affecting brain circulation and metabolism. This and the more practical problems associated with long term EEG recordings are considered in detail but the role of evoked potentials in intra-operative monitoring is rather inadequately covered in three paragraphs.

The clinical applications considered in this volume are those of quantitative EEG in epilepsy, cerebral ischaemia, and renal disease. Clinical applications of evoked potentials have been omitted. This is a serious omission since evoked potentials have contributed significantly to differential diagnosis and now form a major thrust of any clinical neurophysiology department. The advantages of quantitative EEG and EMG in various conditions including psychoneuropharmacology are well illustrated showing how new avenues of research have made use of these measures.

The advances in microprocessors and their cheap memories have made quantitative EEG more accessible but, as the chapter on computer analysis in epilepsy concludes, there is a fair way to go before totally error free automatic detection of specific EEG patterns (eg. epileptiform activity) is possible, thereby making the analysis completely objective. Another technique only made practical with computer databases is neurometrics which provides statistical comparison of patient data with large normative database. This is comprehensively covered for both EEG and evoked potentials. The chapter on sensory potentials actually provides a normative database gathered from a large number of published studies. New techniques in the estimation of evoked potentials and their source localisation using large electrode arrays and spatial maps have been evaluated in terms of their practical value. This chapter concludes that the role of computers in the study of topographic maps is limited to the generation as the analysis is generally still subjective. The chapter on signals of cognition highlights the hypotheses and models of psychological processes associated with various event related potential peaks. As in the past, technological advancement and transfer to the study of electrophysiology will lead to a better understanding of the underlying neurophysiological processes. In this regard this volume provides an excellent account of the computer based analysis and applications of EEG and EMG as practised at present but I feel that insufficient emphasis has been given to evoked potentials.

D K PRASHE

Diabetic Neuropathy. Edited by Peter Dyck, P K Thomas, Arthur K Asbury. (Pp 322; £55.00.) London: W B Saunders, 1987.

This is a monograph on diabetic neuropathy.

Book reviews

compiled by some 50 contributors from six countries. It fulfils a special need for coverage in depth of the most common form of neuropathy in Europe and the United States of America. For the clinician there are excellent sections in the first two thirds carefully outlining the extent of neuropathic complications, their presentation, investigation and treatment. In particular the difficulties in determining the incidence and the basis for making the diagnosis (whether on clinical symptoms, signs, electrophysiological findings or combinations) are discussed. The classification and clinical features are well covered and there is special emphasis on autonomic involvement, with extensive sections by appropriate experts on the tests available, their clinical application and treatment.

The problems posed in treatment by metabolic control are discussed and there are sections on experimental work with myo-inositol supplements and aldose reductase inhibitors. The final section covers experimental work with extensive discussion of the pathophysiology relating both to pathological observations in man and laboratory work with animal models.

It is difficult to single out particular sections for many chapters are excellent although Peter Dyck's contribution on pathology is masterly. Inevitably there is some repetition (even identical figures) and perhaps a brief overall summary of the experimental work would help the clinician, but these are minor criticisms.

It purports to be an overview of diabetic neuropathy and succeeds in this aim. The work is well set out, has up to date references, and will I expect be the definitive monograph on diabetic neuropathy. It should prove most useful not only for the practising neurologist, but also the diabetic physician and the neurophysiologist. I recommend it highly.

T FOWLER

Psychiatric Aspects of Epilepsy. Edited by Dietrich Blumer. (Pp 345; £25.00.) Washington: American Psychiatric Press; UK: Cambridge University Press, 1987.

The relationship between epilepsy and mental disorders has been a source of great interest and controversy since the first literature on "the sacred disease". Until the beginning of this century the dominant view was that epilepsy was inevitably accompanied by lunacy or deterioration in intellect

or personality. Indeed it is only in the last 30 or 40 years that epilepsy per se, that is, without deterioration, has finally been dropped from most international or national classifications of mental disorders. In this century interest in the psychiatry of epilepsy has declined as the primarily neurological nature of epilepsy has been more accepted and in association with the increasing separation of neurology and psychiatry. Furthermore the studies of Lennox in the 1930s first showed that most epileptic patients have normal mental states. However, in more recent years there has been renewed interest in this subject in view of the more modern epidemiological studies which suggest that one-third or more of epileptic subjects may have significant psychological disorders and in view of some of the overlapping phenomena of certain types of seizures and some psychological disorders. Interest has been renewed also in view of the relationship between specific seizure disorders, such as temporal lobe epilepsy, and certain psychiatric problems such as psychoses or personality change. Such considerations led in 1981 to the publication of a multi-author British textbook on epilepsy and psychiatry¹. This has now been followed by an all American multi-author work on psychiatric aspects of epilepsy.

As the title implies this is not a comprehensive textbook and there is surprisingly little overlap with its British counterpart. The editor provides an excellent and detailed historical introduction on the *Psychiatric Dimension of Epilepsy*. This is followed by another fine *Epidemiologic Overview of Epilepsy* by Zielinski. The chapters on *Neurological Aspects* (Niedermeyer) and *Medical Treatment* (Rodin) would grace any standard book on epilepsy. We then come to the five more specifically psychiatric chapters. Two of these deal with behavioural aspects of temporal lobe epilepsy (Bear *et al*) and temporal lobe surgery (Earl Walker and Blumer), one with psychosis (Ferguson and Rayport), one with major mood disorders related to epileptic changes (Himmelhoeh) and one with pseudoepileptic seizures (Rodin). The latter is the least controversial. Rodin refers the reader to other recent reviews and bases his chapter on his own considerable experience. Since an electrophysiological study by the Gibbs' in 1948 first suggested an association between anterior temporal discharges and personality disorder arguments have raged inconclusively about whether there are specific psychological consequences of temporal lobe epilepsy. Bear and colleagues, with the aid of detailed case studies, favour

the hypothesis and believe that "the ictal behavioural syndrome is a frequent and specific consequence of limbic epileptic discharge". However, this is a less than balanced summary of the evidence and scant attention is paid to the studies of fellow American Dr Janice Stevens over the last 30 years who comes to rather different conclusions. Psychoses of epilepsy have always generated interest out of proportion to their frequency in view of the potential for illuminating non-epileptic psychoses. Here the arguments have arisen from differing Anglo-Saxon and European viewpoints, much of it based on terminological confusion, as emphasised by Ferguson and Rayport. The most controversial chapter is by Himmelhoeh who reports that 10% of patients attending an affective disorders clinic have subictal or ictal mood disorders. Although claiming to break new ground it is in fact in line with a centuries old tradition of associating anything vaguely paroxysmal with epilepsy and will, I suspect, be unconvincing to most psychiatrists. It is a pity the book does not address the very common problem of depression in epileptic patients attending epilepsy clinics or in the community. Finally, there is a delightful chapter by the late Dr Geschwind on *Dostoevsky's Epilepsy*.

In summary, for those interested in history, epidemiology and the most controversial aspects of the psychiatry of epilepsy this book can be warmly recommended but for a more balanced and comprehensive view of the subject I advise the reader to consult both the British and American books.

EH REYNOLDS

Reference

- 1 Epilepsy and Psychiatry, edited by EH Reynolds and MR Trimble. Edinburgh: Churchill Livingstone, 1981.

Epilepsy: Progress in Treatment. Edited by Mogens Dam, Svein I Johannessen, Bengt Nilsson, Matti Sillanpaa. (Pp 290; £37.00.) Chichester: John Wiley & Sons Ltd, 1987.

This is yet another compilation of the papers read at an international symposium, this time a symposium held in November 1986 in Goslar, West Germany, the purpose of which was "To discuss the state of the art in the treatment of epilepsy". The neurologists and paediatricians who took part in this