ambulatory EEG monitoring (or cassette monitoring, as it is often designated now on the basis that most patients are not ambulatory throughout the recordings!). Applications in patients with seizure disorders or with sleep disorders are each addressed by a technological section followed by a series of clinical studies. Most of the 21 chapters are written by North American authors, with contributions from Dr Eber-sole's team at Yale, and others from groups at Harvard and Duke Universities, San Diego, Ottawa, Montreal, Dallas, New York, Oxford and Newcastle.

Portable cassette recordings can provide unique insights into clinically relevant alterations in the physiology of patients occurring in their normal home and working environments. New techniques have made a major contribution, especially in the field of epilepsy. Ambulatory EEG recorders began to be used experimentally in the early 1970's and have developed substantially since that time. The advanced technology and analysis methods described for ambulatory EEG monitoring and the precise definition of applications and strategies have materially enhanced the clinical value of such recordings. It is, however, still a highly skilled task to obtain unequivocally reliable information with the limitations of electrodes glued to the scalp connected by several delicate cables to small, portable, battery-operated recorders. Those who use portable music recorders will be well aware of some of the hazards that can arise!

The strengths of the book lie in the immensely detailed, practical information, which occasionally borders on the pedantic or obsessive—but this may account for the success of the techniques in the hands of the authors! It is refreshingly honest to read from some authors that they "had seen that misinterpretation of artefacts as either epileptiform abnormalities or seizures was common" as a preamble to their methods for avoiding such problems. Aminoff's sceptical view of the value of detecting interictal or sub-clinical EEG abnormalities is quoted together with his emphasis that the place of ambulatory monitoring is in documenting events during actual or possible seizures. This opinion is confirmed by careful perusal of the propagation of the ictal discharges illustrated in samples from 8-channel recordings, particularly in the important material from pre-surgical evaluation. The wide variation in the quality of the illustrated recordings indicates the need for good replay systems and demonstrates the value of automated methods.

The sections on children and neonates are some of the most novel. The neonatal and the EEG/ECG monitoring exemplify the value of a polygraphic approach. This is best seen as one moves on to the somewhat shorter sleep disorder section. Here are given clear accounts of the state of the art with clear definitions of terminology perhaps less familiar to many neuroscientists than those for epilepsy. There is good coverage of the sleep disorders *per se* as well as of the related respiratory disorders and periodic movements of sleep. All in all this is a worthwhile book which merits a place in neurological and neurophysiological libraries. It will undoubtedly encourage more careful and thoughtful use of the modern ambulatory EEG monitoring techniques and this can only benefit our patients.

PAMELA PRIOR

Atlas of Spinal Surgery. By CHARLES A FAGER. (Pp 247 Illustrated; Price: £62.35.) London: Lea & Febiger (UK) Ltd, 1989.

First, let's get one thing straight. This is not an "Atlas of Spinal Surgery". The reader will find nothing about congenital, neoplastic or traumatic conditions of the spine, to mention just three of the areas not covered. What he or she will discover, however, is a most detailed account of one surgeon's experience in the treatment of degenerative diseases of the cervical, dorsal and lumbar spine.

It is an unusual book for this day and age. We are so accustomed to multi-author texts containing myriads of chapters, each focusing down on the contributor's chosen speciality, often with little sense of the editor's original concept and, in the larger volumes, considerable overlap between the chapters. A single author text dealing with such an enormous subject, particularly if written by a busy clinician, is clearly going to suffer from the omission of some essential subjects as, for example, the mechanics of the spine and patho-physiology of disc degeneration. However, a great deal can be gained. Despite the profusion of medical and surgical literature, there remains no substitute for the clear expression of experience and it is in this area that the volume under review scores so highly. In other words, it carries the unmistakable bouquet of having been written by someone who is actually doing the work.

The format is simple. The text has been kept to a minimum and most of the pages are filled either with well chosen radiographs or excellent illustrations by Anne Green (this proportion of illustrations to text presumably accounts for the book being described as "An Atlas").

Many will not agree with the author's surgical recommendations. For example, his operations are nearly always posterior in approach, whether the problem be in the cervical, dorsal or lumbar regions. A resident eager to learn the details of an anterior cervical fusion or a costo-transversectomy will search in vain for any description in these pages. What he or she will find instead will be a most detailed account of how to deal with the spinal degenerative conditions (as they present to the Neurosurgeon) in a way that has been tested countless times by the author, refined as circumstances have demanded and shown in his hands to be both safe and effective.

There is also no description of a micro-discectomy. The author has long been associated with opposition to this procedure but this interpretation of his views is simplistic. What he maintains, and it is difficult to disagree with him, is that in order to achieve an effective nerve root decompression in the lumbar region, a great deal more than the removal of a sequestered disc fragment may be required. A significant amount of bone work may also be needed and he disputes whether all the advocates of micro-discectomy are in fact able to carry out a sufficiently radical procedure through their more limited approach. The proponents of micro-discectomy, on the other hand, maintain that everything that is necessary for an effective operation can indeed be achieved if the instrumentation is used correctly. Only time will tell whose view is correct. At the moment, Dr Fager maintains that it is not how you do it which is important so much as what you do, and from his experience with "failed backs",

the micro-dissectomists may not always be achieving the goals they set themselves.

Overall, despite the limited procedures it covers (and which I have detailed above) I think this is an excellent book. It is beautifully produced and I would have no hesitation in recommending it to a resident who wished to embark upon a process of self-education in a branch of neurosurgery, noted not only for its prevalence but also for the morbidity which may follow its operative management.

RICHARD HAYWARD

Neurology: A Concise Clinical Text. Edited by MICHAEL SWASH AND MARTIN S SCHWARTZ. (Pp 400; £14.95). London: Baillière Tindall, 1989.

The publishers state this book is intended primarily for medical students. It meets this claim admirably. I only wish that, as a medical student, I had seen a book of such width and wisdom.

The section on "symptoms and signs" is a little gem. Students of my generation usually took years to learn—the hard way—what the authors trumpet in their very first chapter, namely that "the pattern of symptoms and signs is the consequence of the interaction between patient and doctor, rather than an absolute and immutable state of affairs". I particularly liked the discussion of pain, with its emphasis on the influence of cultural and educational determinants on subjective experience.

The effect of the observer on the thing observed is a central pre-occupation of modern physics. It is refreshing to see the notion applied to what we do in the consulting room. How many young doctors, even now, have fully grasped that it takes two not only to tango but to elicit most neurological signs? In practice this means that concentric constriction of the visual fields is much more likely to be due to a doctor in a hurry than to hysteria, retinitis pigmentosa or to poisoning with quinine.

Although the book (and its Index) runs to 400 pages it can easily be put in one's pocket. It is "concise" in that it deals with essentials. But it deals with them in a sophisticated and logical way, summarising the main facts in a series of well thought-out tables. The book, as claimed, is essentially "clinical", the student in search of wider pastures being guided, for each chapter, to well chosen references. Emphasising current concerns that students see their patients' problems in a wider perspective the book contains some useful addresses to which the afflicted and their relatives may turn for information and advice. These include the address of the Myalgic Encephalomyelitis Association. The condition is not however acknowledged in the Index—a realistic compromise.

After the plaudits, some protests. Gentamicin is consistently misspelt. Supranuclear palsies fit awkwardly in the section on diplopia. Enophthalmos is still described as if it were, in man, a cardinal—rather than an occasional, even a disputed—feature of an oculosympathetic lesion. Students will be startled to learn (p9) that "prior to Roentgen's discovery of x-rays in 1895 only the first cranial nerve could be visualised, using the ophthalmoscope". Or (p150) that

"decerebrate postures do not invalidate a diagnosis of brain death". On the contrary, such postures imply that the brainstem is still very much alive.

These blemishes corrected the book deserves to become part of the way neurology should be approached, both by medical students and by those envisaging higher qualifications. Further editions seem certain.

C PALLIS

Lesion Analysis in Neuropsychology. By HANNA DAMASIO AND ANTONIO R DAMASIO. (Pp 227; £34.00.) Oxford: Oxford University Press, 1990.

The traditional problems facing lesion analysis in neuropsychology have been the simplistic level of psychological analysis, the relative crudity and non-reproducibility of lesions and the naivety of theoretical models of explanation which have sacrificed psychological in favour of anatomical descriptions. This volume is written and illustrated by the Damasios, noted for their respective expertise in neuropsychology and neuro-imaging and represents an attempt to overcome the methodological difficulties of focal lesion analysis.

A comprehensive neuropsychological assessment is described and illustrated by cases of great interest; the methods by which accurate lesion siting on computerised tomography and nuclear magnetic resonance imaging can be achieved without undue artefact are exemplified in beautifully reproduced images, and a theoretical explanatory model is adumbrated in terms of information processing in a parallel distributed manner. The text is highly recommended to those with research interests in neuropsychology, the volume is attractively produced and given the high quality of the illustrations, sensibly priced.

DAVID NEARY

The ventricle of memory: Personal Recollections of Some Neurologists. By MACDONALD CRITCHLEY. (Pp 213; Price: \$49.00.) New York: Raven Press, 1990.

The reading itineraries of most neurologists will have already strayed from standard journals and texts through the "magic wardrobe" and into the bewitching lands of "*The black hole*", "*The divine banquet of the brain*", and "*The citadel of the senses*". These collections of uniquely personal essays flowing from the pen of our neurological paterfamilias Macdonald Critchley have afforded much pleasure and enlightenment. The arrival of another volume "*The ventricle of memory*" whets our appetite and nurtures a sense of excited anticipation. Has the master, now an octogenarian, retained his touch?

You may dismiss any such apprehension. Here are the personal impressions of a variety of neurological friends, now departed: a pastiche of impressions created "as their lives crossed mine". They are biographical vignettes, ranging from W James Adie, Geoffrey Jefferson, Riddoch and Walshe from England, through Alajouanine, Raymond Garcin, René Leriche, Jean Lhermitte and Kurt Goldstein from Europe, to his American colleagues, Bender, Irving Cooper and Wechsler. Graeme Robertson of

Australia, Monrad-Krohn of Oslo and Fritz Grewel of Amsterdam, *inter alia*, have further extended his remarkable circle of friends.

But the biographer's first duty, Samuel Johnson remarked, was not to dwell "on those performances and incidents which produce vulgar greatness," but to "lead the thoughts into domestic privacies". In these short essays Macdonald Critchley does just that. He gives anecdotes, affording us insights into these distinguished lives in his inimitable, scholarly, yet always engaging style. His writing makes compulsive reading and one must ration oneself to a chapter at a time for fear of devouring these intriguing histories all at once. He is self-effacing, but his profound knowledge of many languages and his erudite understanding of the arts shine out from every page. He is always generous in his commentaries, passing lightly over those oddities, quirks and foibles which many of his famous subjects possessed. No doubt they added to their charisma, but discomfited their colleagues from time to time. These qualities only add to the fascination of the spell they cast.

Like all good writers, Macdonald Critchley leaves us wanting more—much more!

JMS PEARCE

Rehabilitation of the Adult and Child with Traumatic Brain Injury. 2nd Edition. By M ROSENTHAL, E R GRIFFITH, M R BOND, J D MILLER. (Pp 652; £53.23.) Beckenham: F A Davis & Co. 1990.

It is only in recent years that adequate facilities for the rehabilitation of the head injured have been sought by the Regional Centres responsible for their immediate care within the National Health Service. Despite the fact that head injuries are so much more common than those of injuries to the spine, it is still unusual for the head injured victim to find a properly conceived and organised rehabilitation programme. This is the message given by Bryan Jennett in his foreword to the second edition of this book on "*The Rehabilitation of the adult and child with traumatic brain injury*". In the first edition Mitchell Rosenthal, one of the editors, in his preface suggests that the initial impetus for the writing of the book stems from a post-graduate course on rehabilitation held in 1977. He states this was the only course held on an annual basis in the United States and certainly there was no such course provided in the United Kingdom. He comments in his foreword on the dearth of previous texts or articles directed towards rehabilitation. This certainly requires no further emphasis.

The first edition was successful and has now been expanded to include head injured children and, to a lesser extent those subject to birth trauma. Dr Griffith, the co-ordinating editor, suggests that this work is the only one to encompass all disabilities resulting from brain injury both in adults and children. As colleagues in the editorial work, Griffith and Rosenthal have been joined by Michael Bond, psychiatrist from Glasgow and Douglas Miller, Professor of Surgical Neurology in Edinburgh. I feel, between them, with careful selection of authors from all areas of medical and surgical neurology and rehabilitation they have produced a most useful and comprehensive account of the problems and their potential solution. There are sections on early evaluation and man-

agement and a careful account of the neurological evaluation followed by a useful chapter on assessing and predicting outcome. Professor Jennett brings up to date his well known views and experience on the prediction of post-traumatic epilepsy. Movement disorders, communication disorders, cognitive defects, behavioural and psychiatric sequelae are all dealt with. There is a useful chapter on the rehabilitation of a minor head injury.

The book is comprehensive in its 617 pages and should provide advice not only for those responsible for the after care of the head injured but also help those involved in litigation work assessing the prospects of a given head injured claimant.

It was a little disappointing to find scant attention paid to birth trauma as a cause of ongoing disability and whilst the recommendations with regard to rehabilitation are available, there is little here to predict outcome and expectation in children severely afflicted by other direct birth trauma or indirect anoxic encephalopathy during the birth process. Although the question of early assessment is addressed, advice as to what may be anticipated with longterm prognosis is not considered. I feel this probably results from the fact that there are few studies available and perhaps this is a matter Dr Bruce may address in what I hope will be an early third edition. Browsing through the volume I found much that was of interest and of value but sorry to see that the medical-legal aspects of head injury were dismissed in some eleven pages and that these matters were seen from the Massachusetts field of legislation. Joy Cook who writes on returning to work after head injury, again is concerned with the American head injured victim and we have no mention of the United Kingdom DRO. courses on rehabilitation or the provisions of the National Insurance acts which figure so largely in assessing the financial implications of injuries to the head in the UK.

Despite these slight strictures and perhaps factors worthy of reconsideration in a further edition, I think this book is useful, draws attention to the distinct possibilities of an improvement in the longterm head injury services of the United Kingdom in particular, and by implication other countries in the western world.

J B FOSTER

The Cerebrospinal Fluid. Edited by ROBERT M. HERNDON AND ROGER A. BRUMBACK. (Pp 306; Price Dfl. 300.00, US \$110.00 UK £78.25). Dordrecht: Kluwer Academic Publishers 1989.

This book derives from the collaborative efforts of Herndon, with a strong background in electron microscopy of CSF cells, and Brumback with the clear view from paediatrics, especially infections of the CNS. They have gathered into their fold others from the previous Johns Hopkins Group (Brooks) and Washington St. Louis (Trotter). There are several others with equal expertise and/or prior interests. The team output is first class. They start with chapters on history, anatomy and physiology, hydrocephalus, CSF collection, and intrathecal therapy. They then move on to infections, immunoglobulins, and non-immunoglobulins.

The final portion is directed to cytology: