Book reviews

Sleep/Wake Disorders. Natural History, Epidemiology and Long-Term Evolution. Edited by Christian Guilleminault, Elio Lugaresi. (Pp 302; \$58.50.) New York: Raven Press, 1983.

This is the third volume sponsored by the American Association of Sleep Disorder Centres. The first volume (Orem J, Barnes CD, eds. *Physiology of Sleep*, Academic Press, New York, 1981) is a good up-to-date survey of the physiology of sleep. The second volume (Guilleminault C, ed, *Sleeping and Waking Disorders: Indications and Techniques*, Addison-Wesley, Menlo Park, California, 1982) is an outstanding technical guide to the investigation of sleep disorders. It is well-written, and well illustrated, destined to become a classic well-thumbed work like Gibbs and Gibbs on the EEG department bookshelf.

The present volume attempts something completely different, explained on the cover blurb—"this volume presents the first comprehensive, international study of the epidemiology and long-term evolution of sleep disorders. Reflecting the emergence of circadian medicine as an autonomous discipline . . . eminent sleep researchers examine the results of in-depth longitudinal studies of sleep disorders in diverse populations".

The book is fortunately much better than the blurb. It explodes with facts. Many enormous case series are presented: 8,000 sleep-wake disorder patients from the United States, Canada and Italy, 2,000 impotent men from Texas, and a modest by comparison 850 sleep apnoeics, with only 100 tracheostomies, from Stanford. A management consultant firm was needed to do the survey of 2,347 inhabitants of Houston—plus another random 293 individuals with Spanish surnames and Mexican heritage—; and an Italian medical student was paid to interview 5,713 citizens of San Marino, using a 123 item questionnaire. Also, Stanford University undergraduates made 7,465 phone calls to survey insomnia in the San Francisco Bay area. Despite all this largesse, there is still room for individual cases: as with the propositus of a large family with restless legs, a 68-year-old monk.

What do all these extensions of the pioneer studies of Russell and McGhie add up to? Some of the knowledge is banal: it is perhaps to be expected that men in Finland, America and Mexico sleep in slightly different ways. Also, a fact stressed by the

authors, community or sleep disorder clinic population surveys may not represent the true overall magnitude of a real problem: thus the incidence of disabling insomnia, symptomatic sleep apnoea, and significant leg restlessness may all be much lower in European general practitioner surveys than amongst the inhabitants of California. Many important questions remain unanswered: the contribution, if any, of sleep apnoea to the aetiology of systemic hypertension remains unclear, and it is still uncertain whether peptic ulcers in night workers are due to shift work itself or to patient self-selection.

That all these facts are important to medicine in 1984 remains undisputed. The nuclear power plant accident at Three Mile Island in 1979 occurred at 4.00 am in the morning, with a crew that had been on night duty for only a few days and who had been rotating on a weekly basis around the clock for the previous 6 weeks.

Although the search for good sleep seems to have overtaken that for happiness in the American Declaration of Independence, perhaps the two are not very different. So congratulations are due to the authors as well as to the editors on a well produced compendium of important facts about how we sleep and wake.

JD PARKES

Advances in Epileptology: The XIVth Epilepsy International Symposium. Edited by Maurice Parsonage, Richard HE Grant, Andrew G Craig, Arthur A Ward Jr. (Pp 342; \$53.50.) New York: Raven Press, 1983.

This volume is based on the 14th Epilepsy International Congress held in London in August 1982 and covers a wide range of related topics. Considering that these symposia are now held annually in different countries, one cannot fail to be impressed by the vast amount of thought and attention being given to the subject of epilepsy in many parts of the world. There are 44 contributions from 14 countries with three main themes. The first contains some useful chapters on education about epilepsy, covering the problems of training medical undergraduates and postgraduates, non-medical professionals, and the help required for patients and their families, and the need to process information for teachers, employers and the public in general. The second section concerns the relationship between epilepsy and various neurological disorders, and then between

epilepsy and psychiatric disorders. The last third of the book is devoted to various aspects of epilepsy in childhood.

There are several excellent reviews and reports of recent research, some of which have not been published elsewhere. Some of the growing points in this field and areas requiring further study are outlined, and the book provides a useful source of references for those wishing to keep up to date with current concepts.

MICHAEL ESPIR

The Cerebral Veins: An Experimental and Clinical Update. Edited by LM Auer, F Loew. (Pp 369; \$65.20.) Vienna: Springer-Verlag, 1983.

These symposium proceedings have appeared within six months of a meeting devoted to the rather neglected subject of the cerebral veins and imaginatively organised by the Department of Neurosurgery in Graz, Austria. There are 47 separate contributions but unfortunately no report of the discussion that took place following each paper. The first 100 pages are devoted to some elegant studies, beautifully presented, of various aspects of the anatomy of the cerebral veins both in man and lower animals. From the functional standpoint, there is emphasis on the need for immunohistochemical staining techniques to be applied in order to try and identify the contractile elements in the smaller veins which do not have the usual smooth muscle cells in their walls. However, to physiological stimuli these veins constrict, requiring little active tension to overcome the low intravascular pressure. Hence, large diameter changes are noted *in vivo* in pial veins in response to various stimuli whereas the contractile tension of cerebral veins *in vitro* is rather small.

The sections on the venous blood brain barrier, neurogenic regulation of and pharmacological effects on cerebral veins review what is known of various aspects of the reactivity and barrier permeability in this segment of the cerebral circulation including the response to pH, potassium, sympathetic stimulation and ablation, amines and some peptides. The section on cerebral blood volume and intracranial pressure addresses the difficult problems of how far the cerebral veins act as a capacitance system both under normal and abnormal circumstances and how the arterial pulse wave is transmitted through the cerebrovascular bed under a variety of circumstances. Unfortunately, there is no

review of the methodology of sequential determinations of cerebral blood volume in man and only one study that examined the problem in man of the role of cerebral blood volume in intracranial hypertension following intracranial haemorrhage. The vulnerability of cerebral veins to injury following head trauma and following arterial occlusion is discussed together with the sequence of events that follows venous occlusion. The final section is devoted to some surgical aspects of the cerebral venous system including discussion of fistulae, thrombosis and the venous disturbances following removal of parasagittal meningiomas.

This book is a very useful source of reference to the literature on many aspects of cerebral veins but the great bulk of the work referred to has already been published in refereed journals.

JD PICKARD

Pain Measurement and Assessment. Edited by Ronald Melzack. (Pp 309; \$40.00.) New York: Raven Press, 1983.

Pain Measurement and Assessment is a book that will be of value to psychologists who work in Pain Clinics, and particularly to North Americans who are accustomed to the jargon in which most of the chapters are written. It will also be of interest to those who wish to know about the contribution of North American psychologists to the study of patients with pain. It includes a large number of contributions that examine the language which patients use to describe their pains.

Crawford Clark and JC Yang contribute a chapter on sensory decision theory, which is clear and convincing. Its argument that it is a necessary method in the laboratory is forceful. They quote evidence that even analgesic drugs alter the report criterion as well as the index of sensory discriminability: this fact has been neglected in most investigations of analgesic and other drugs.

The spatial pain charts introduced by MS Margolies are worth trying out. He calls them "a nonspecific, adjunctive diagnostic tool. They do not supplant the need for good clinical evaluation of the patient". But they may help evaluation and treatment.

Berthold Wolff contributes a well-written and important chapter on laboratory methods of measuring pain. There is also a thoughtful chapter comparing various ways of inducing pain experimentally

by GB Rollman. This paper is better than many in this volume as the author clearly knows and is able to assess the extensive literature on this subject. What comes out of his chapter is how at present there is little agreement on many aspects of experimentally induced pain.

The final chapter is on Ethical Consideration in Pain Research by Richard Sternbach. This is the most important chapter in the book. It concerns subjects extending far beyond its title, and it ought to be reproduced elsewhere, so that it reaches a much wider audience than it will in this book.

PW NATHAN

Dilemmas in the Management of the Neurological Patient. Edited by Charles Warlow, John Garfield. (Pp 285; £23.00.) Edinburgh: Churchill Livingstone, 1983.

Books on Recent Advances in . . . , Modern Trends . . . , etc. and Proceedings of Conferences with unedited and barely related papers roll off the press, often out of date by the time they appear. Peer group criticism follows and cannot influence the published text. This book has elements of both types but uses most successfully a new formula. A group of friends and colleagues met in Green College, Oxford, in 1982 to discuss a number of controversial neurological topics in turn. (One contributor refers to "deepended" controversies). Each speaker pre-circulated an abstract of his views and argued them for ten minutes. An invited discussant (from the group) then led a discussion and the chapter prepared for publication incorporated the constructive criticism. The result has been very successful and indeed enjoyable. This review is written a few days after receiving the request from the Editor as I found myself dipping into the book at odd times, including the lunch break. It is that kind of book, interesting, stimulating and informal as well as instructive. Naturally I did not agree with all the (presumably consensus) views: there would be no dilemma if practising neurologists were unanimous and their opinions soundly based. This collection of unrelated topics makes it quite clear that we rely on unsubstantiated theory, advocacy by "leaders of the profession", or the "what has been said three times is right" factor.

It is not practicable to criticise each of 26 chapters, and indeed they are all excellent, but readers require some indication of the

subjects covered. Three chapters on multiple sclerosis discuss the roles of spinal cord stimulation, immunotherapy and evoked potentials. Five on cerebrovascular disease discuss anticoagulants in prevention of cardiogenic cerebral embolism, surgery of cerebral haematomas, anti-oedema therapy, antifibrinolytics after subarachnoid haemorrhage, and timing of surgery for ruptured berry aneurysms. Then there are provocative chapters on the values of speech therapy for aphasia after stroke, ergotamine for migraine and the disadvantages of levodopa in which the authors' personal assessments challenge conventional beliefs. Should surgery be the first resort for involuntary movement disorders, when can anticonvulsant drugs be stopped, are prophylactic anticonvulsants needed for febrile convulsions in children, what is lumbar puncture headache and can it be avoided? These are four practical questions for the neurologist.

The neurosurgeon is asked to question the values of biopsy and any surgery for supratentorial malignant gliomas, the indications (if any) for operating in cervical spondylosis, degenerative lumbar spondylosis, chronic subdural haematoma, normal pressure hydrocephalus, trigeminal neuralgia, and syringomyelia. Is "aggressive" management of severe head injury justified ethically and economically? If any single thread runs through these chapters it is the clarion call for audits and the necessity for surgeons to recognise the need for adequately controlled trials even if they require randomisation. A thought provoking chapter by a statistician on the evaluation of treatment and the positive dangers of non-randomised trials, and pre-trial assessment of the power of a trial (a technical term), accounts for the continuing controversies about apparently well established treatments and makes it clear that no clinician, or even a small team, can have enough patients to recognise genuine treatment advances unless these are dramatic.

Absence of basic data is stressed by chapters on herpes simplex encephalitis (do we really require better anti-viral agents or are we ignoring the proximate pathogenesis?) and how much of the brain mantle is needed for normal development after infantile hydrocephalus? Even the best multi-centre trial is useless if the wrong questions are asked.

These are valuable essays on aspects of everyday practice which are subject to differing points of view because of poor medical auditing or incomplete knowledge. But