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