Certainly give sufficient detail of the techniques to guide the new user. There is not a great deal of discussion on the philosophy and advantages of such techniques, however. The chapters on electrolyte balance could well have been written rather a long time ago and the companion chapter on recent advances tends to pick up any new concepts in a rather random fashion, without putting them into context or subjecting them to any realistic discussion. This tendency also seems to pervade the chapters on energy and metabolism and host defences, with the chapter relating to infections set out rather like a seed catalogue and dismissing infections of the central nervous system in a matter of about 33 lines. Most institutions have carefully evaluated and derived their own antibiotic policies, so that the time for generalistic advice, as opposed to more specific discussion of the underlying problems, has long past.

The extensive chapters on involvement of the central nervous system are again set at a variable but relatively elementary level, if it is assumed that the book is designed for an audience familiar with some of the elements of intensive care. The practical applications of the physiological background are not always made sufficiently clear to allow the book alternatively to cater for the new entrant to life support systems.

The bibliography attaching to some of the chapters is useful but one already has a very large number of reference manuals available for this purpose and therefore access to this information does not really justify the purchase of the book.

**ALAN E RICHARDSON**


This is a compilation of the latest advances in the management of cluster headaches. It is the first of a new series of monographs promoted by the American Association for the Study of Headache.

Historical aspects are reviewed by William Speed, revealing the difficulties in deciding who provided the first authentic description: the British favour Benjamin Hutchinson’s 1822 report of 28 cases, but Speed thinks this is a sketchy reference to earlier German writers. Romberg’s account in his Manual (1840) describes paroxysms with weeping and redness of the eye, but he stresses extreme photophobia, an uncommon accompaniment. The claims of Eulenburg and Sluder are well described, as are the better known accounts of Wilfred Harris, Dandy and Horton.

John Graham compares cluster headache with migraine and Kunkel gives an excellent account of acute cluster headache and the classification, though many would have doubts about the entities “Cluster-tic, Cluster-migraine and Cluster-vertigo”. If the collection of a miscellany of somatic and personal traits said to characterise the “cluster patient” are less than wholly convincing, the sections on autonomic abnormalities (Vijayan and Watson) and pathophysiological aspects (Edmeads) are detailed and informative.

Treatment is dealt with in two main chapters: one on acute cases which favours sublingual ergotamine, and discusses oxygen, steroids and intranasal cocaine; the other on prophylactic pharmacotherapy which reviews in detail all the standard drugs and includes a comprehensive if disproportionately long account of lithium. Campbell rightly denounces histamine desensitisation, but proceeds with a full and probably unnecessary review. Dalessio’s chapter on surgical therapy is aptly brief.

Overall this is a satisfactory account of an intriguing disorder. There is perhaps, too little known of basic mechanisms, but a more comprehensive essay on recent experimental work would have made this book more useful to those with a special interest. The editing is unfortunately unsatisfactory and has overlooked numerous spelling errors and grammatical gobbledegook. Even by 1984 standards £23-50 will deter some enthusiasts, though it deserves a place on certain library shelves.

**IRIS PEARCE**


Since their synthesis by Leo Sternbach in 1933, benzodiazepines have been one of the success stories of modern pharmacology. Chlordiazepoxide was first used clinically in 1960 and spawned a whole new series of drugs useful in the management of anxiety, epilepsy and muscle spasm as well as of insomnia. The mode of action remained unknown for almost two decades but there have been many exciting recent developments. GABA chloride channel benzodiazepine receptor activation may not be the entire explanation for the clinical effects of these drugs. A number of different kinds of benzodiazepine receptors have been recognised both inside and outside the brain including the basal ganglia and lamina 4 of the cortex. This may be an important site for sensory deafferentation during sleep and many other hypotheses have binding sites here. Endogenous ligands for benzodiazepine receptors, including melatonin, have been sought for, although as yet with little success. Pharmacologically similar drugs but with a non-benzodiazepine structure have been synthesised. The new field of benzodiazepine antagonists promises to be a rich field for anxiety as well as for sleep research.

This published symposium proceedings describes all these topics, but in particulars, the morning-after effects of benzodiazepines. Despite a vast amount of work it is still not clear whether a 55-year-old subject taking flunitrazepam 30 mg at night for some weeks is a fit person to drive a motor car early in the morning. Many of the scientific, as well as the clinical aspects of benzodiazepine therapy remain controversial. Doctors working in the British National Health Service might be envious of the advice from Stanford that detailed polysomnogram studies should always be done before starting benzodiazepines, but are unlikely ever to emulate it. Changes in metabolism and growth during sleep are a difficult field to study. These topics have been reviewed recently by both Horne, and Adam and Oswald (Clinical Science, 1983:65:569-78; and 561-7). Hindmarsh gives an excellent review of the effects of hypnotic drugs on waking performance, and Dorow describes the benzodiazepine radio-receptor assay, which is a valuable contribution to the correlation of pharmacokinetic with clinical effects in drugs with a multitude of active metabolites.

This is an unusually well produced book. It is well edited, with good illustrations and a good index. The first 10 index headings referred to in another recent Springer-Verlag book (Sleep Mechanisms; Borbely and Valatx, eds, 1984) were all paginated incorrectly. Is this a record? Altogether this is an excellent symposium proceedings although of highly specialist interest only.

**JD PARKER**