The wide range of weapons used in the armoury against brain tumours is therefore justified: these are reviewed in the second volume.

The more traditional treatments by chemicals and irradiation are now complemented by immunotherapy, hyperthermia and ultrasound; in fact, by any agent, chemical, physical or biological, which has the slimmest hope of improving the doggedly poor survival rate of patients with intrinsic malignant brain tumours. With the exception of multiple sclerosis, there is probably no other disease of the nervous system, or for that matter of any other organ, which has spurred human ingenuity to its full stretch in the quest for cure. Combinations of drugs, fractionation of irradiation, manipulation of the blood-brain barrier, alteration of body temperature and boosting of immune responses have all been tested; but the survival rate with glioblastoma multiforme has scarcely changed during the last 30 years. The promise of recent developments in the understanding of the molecular and cellular aspects of cerebral malignancy described so comprehensively in the first volume has yet to be fulfilled.

PL LANTOS

Sleep Mechanisms. Experimental Brain Research Supplementum 8. Edited by A Borbély and JL Valatx. (Pp 330; \$32.90.) Heidelberg: Springer-Verlag, 1984.

Zuoz is at one end of the Engadine ski marathon, Maloja at the other. The first few km from Zuoz to the Muottas Muragl lower station restaurant can be an exhilarating experience but it pays to remain at the Northern end. The contributors to this winter research symposium volume seem to have worked round the clock at the Hotel Castell, and the results are almost as exhilarating as the skiing. Seventeen European countries from Moscow to Naples, and Israel are represented but, reflecting the comparative lack of interest in sleep research, the UK is not. This is one of the best symposia on any sleep-related subjects I have read. The topics are physiology, neurochemistry, genetics, metabolism and hormones, evolution and circadian rhythms. There are outstanding reviews by Parmeggiani on autonomic nervous system changes during sleep, by Ursin on endogenous sleep factors, Valatx on the genetics of animal sleep-wake systems (the HLA system is involved with the sleep of mice as well as of men), Elmquist on cerebral circulation and metabolism

in sleep, and Wever on circadian aspects of human sleep. However, this selection is invidious. There is not a dull section in the book and the chapter by Mukhametov from Moscow on the way marine mammals sleep (the dolphin has unihemispheric sleep!) will intrigue anyone with the slightest interest in biology. The idea that endogenous depression is primarily a circadian rhythm disturbance has gained some credence in the last decade, and the section on circadian rhythmicity will be of great interest to psychiatrists. I suspect that the results of sleep studies in depressives may merely reflect previous sleep lack, and sleep deprivation is not an effective long-term treatment. However, the connection between sleep and mood is of fundamental interest. Borbély develops the idea that two separate processes underlie sleep regulation: one a function of sleep and waking itself whilst the other is controlled by a circadian oscillator. In depression both of these processes may be abnormal. For once the cover blurb is surprisingly accurate — "these contributions provide all scientists and clinicians interested in sleep research and its applications with rapide (sic) access to a wide range of recent results in an important area". Highly recommended.

JD PARKES

The Epilepsies: A Critical Review. By Robert A Aird, Richard L Masland, V Dixon, M Woodbury. (Pp 320; \$61.50.) New York: Raven Press, 1984.

The continued expansion of basic and clinical research into those aspects of neurosciences related to epilepsy presents a problem to busy clinicians who feel they should keep abreast of these developments, but are deterred by lack of time from reading the many publications from various symposia which have been published over recent years.

This book, by three eminent American authorities, brings together, summarises, and stimulates thought on the advances in our understanding of seizures and the epilepsies that have occurred during the last decade. Whilst it is written with the clinical neurologist in mind it covers a very broad spectrum of the neurosciences ranging from the basic mechanisms of seizure discharge at a cellular level, through to the social management and counselling of patients with epilepsy.

The book begins with an excellent review of the ionic, membrane and cellular

abnormalities of seizure discharge and the mechanisms of seizure spread. All the major hypotheses of control of seizure activity are discussed, and criticised. The clinician would be hard pressed to find a better overview of this particular subject. From here the book goes on to cover the controversial ground of seizure classification and places particular emphasis on problem areas including the vexed question of how partial are complex partial seizures, and to what degree their symptomatology may be related to spread to limbic structures either unilaterally or bilaterally. Further chapters provide a very comprehensive coverage of aetiological factors in seizures, and a great deal of up to date epidemiological data has been summarised. This section finishes with an appraisal of genetic aspects of epilepsy.

The second half of the book is concerned with the management of epilepsy. This is necessarily more discursive and less scientific but contains some excellent chapters including one on general pharmacokinetic principles of treatment and the mechanisms of drug actions. Subsequent chapters deal with the choice of individual drugs for specific epilepsies and there is a useful chapter on sources of failure in the management of epilepsy. Social aspects of epilepsy are also well covered.

There have been many recent publications derived from symposia held on limited aspects of research into epilepsy. The merit of this book is that it draws together and reviews a wide range of differing spheres of knowledge of practical relevance to the clinician faced with managing the patient with epilepsy. The text is concise, comprehensive, up to date, and as the title suggests critical. Clinicians will I am sure find the first half of the book on more basic aspects of seizures and epilepsies fascinating. One's only criticism might be the slightly less critical approach of the second more directly clinical part of the book. Here it is of some interest to read the recommendations of American clinicians for the choice of antiepileptic drugs for specific seizure disorders. It would appear that treatment with drugs such as phenobarbitone and phenytoin is more frequently initiated by the American physician than by his European colleague. It seems likely that this may be due to the more restrictive policies of the American Federal Drug Administration. This section of the book also fails to emphasise clearly enough the methodological inadequacies of studies which have been undertaken to compare the efficacies of anti-epileptic