Book reviews

warrant a separate section. Consideration should have been given to the role of transphenoidal surgery as well as transfrontal surgery in relieving chiasmal compression due to massive tumours.

Notwithstanding these comments this is an excellent book and can be highly recommended.

NF LAWTON

Diagnosis and Treatment of Pineal Region Tumors. Edited by Edward A Neuwelt. (Pp 393; £68.00.) London: Williams & Wilkins, 1984.

Tumours of the pineal region are uncommon but recently their treatment has become controversial. Put simply the problem is that neuroradiological investigations cannot certainly distinguish between benign and malignant pineal tumours. For benign tumours the treatment is complete excision but if the tumour proves to be malignant, tumour cells may be disseminated. Should the tumour be treated by trial of radiotherapy or should the diagnosis first be established by histology? These controversies are fully discussed in the book and the various managements presented very evenly. A firm but liberal editorial hand is evident throughout and most chapters have a brief summary. The bibliographies of these chapters are additionally meant to be combined at the end of the book although I noted several omissions.

There is a brief but adequate chapter on neuro-ophthalmology and a larger interesting chapter on neuroradiology outlining a diagnostic strategy. The author considers angiography is essential for all patients with a pineal mass although admitting that it is intended as an aid in surgery rather than diagnosis.

The book is profusely and well illustrated and the drawings and photographs of operative approaches maintain a high standard. The three major surgical approaches of infratentorial supracerebellar, occipital transtentorial and the transcallosal are described and illustrated. The chapter on microsurgical anatomy is first rate with excellent drawings and photographs some in colour and particularly valuable schematic drawings and colour plates giving the appearance at operation by different approaches. All the most modern techniques are described including stereotactic biopsy which in part ends the controversy about open biopsy with risk of

dissemination or observation of the response to irradiation.

The general conclusion must be that treatment of hydrocephalus and stereotactic biopsy is the first step followed by irradiation if the tumour is malignant or radical excision if benign. Tumour histology is therefore of great importance and is given full treatment including an excellent review of their immunopathology. The chapter on radiotherapy reviews the literature and finally suggests that large volume irradiation is preferable although not routine craniospinal irradiation.

A beautifully produced book amply justifying the forward "an outstanding contribution to neurosurgical literature".

ER HITCHCOCK

Neuromuscular Manifestations of Systemic Disease. By Robert B Layzer. (Pp 434; \$75.00.) Philadelphia: FA Davis Co. UK Distrib: Quest Publishing Agency, 1985.

This is an account of peripheral motor disorders (muscle and nerve) which affect man in the context of generalised disease and its treatment. The initial chapter deals with the diagnosis of various neuromuscular syndromes (for example acute generalised weakness, myoglobinuria, cramps) and makes some apposite remarks about the interpretation and necessity of certain laboratory investigations. There follow eight chapters covering mineral and electrolyte, endocrine, infective and inflammatory, neoplastic, renal, circulatory, nutritional and gastrointestinal disorders. Finally there is an excellent section on the complications of medical and surgical treatment. The book is comprehensively referenced, at least up to 1981 and early 1982, and is well indexed.

It is a pleasure to read a single author work on such a wide range of subjects: personal opinions are clearly stated, at times pointedly, and many difficult aspects of diagnosis and management analysed at some length. Of particular note are the discussions about electrolyte disturbance, a helpful section on the differential diagnosis of plexus lesions in malignancy and the analysis of iatrogenic neuromuscular disorders. One aspect not covered in any particular detail is poisoning with heavy metals.

Many physicians in the UK should find this a useful and easily readable book which bears closely on everyday referral practice in a general hospital setting. It

benefits from not being too large and in being somewhat selective in the topics dealt with in depth.

CM WILES

Psychiatric Ethics. Edited by Sidney Bloch and Paul Chodoff. (Pp 368; £6.95.) Oxford: Oxford University Press, 1984.

This is a very good book. It consists of 18 chapters on various aspects of psychiatric ethics. Authors are about evenly divided between both sides of the Atlantic and the majority are psychiatrists. However, an Oxford philosopher, Professor Richard Hare, makes an astringent and thought provoking contribution, and Professor David Mechanic, from Rutgers, gives a sociologist's view. Most psychiatric activities, including diagnosis, research, psychotherapy, ECT and psychosurgery, drug treatment, sex therapy, compulsory care and confidentiality are discussed at length. There is a useful chapter on how psychiatric ethics should be taught. Some of the situations described, particularly the legal pronouncements on psychiatric practice are fortunately confined, at present, to the USA but it is instructive to read about them. Although the situation in the Soviet Union is described in detail, there is no mention of the dreadful abuses of psychiatry in Germany before the war, nor of the ethical issues involved in the care of the mentally handicapped. But these are minor criticisms. This is a valuable book, which could be read with profit by any member of the "greater medical profession".

JLT BIRLEY

Metabolic Probes of Central Nervous System Activity in Experimental Animals and Man. (Magnes Lecture Series Volume 1.) By Louis Sokoloff. (Pp 97; £16.50.) Oxford: Blackwell Scientific Publications, 1984.

My only quarrel with this masterly little monograph is its title. Louis Sokoloff has been in the field of measuring cerebral blood flow and metabolism for three decades and is the originator and principle exponent of the ^{14}C deoxyglucose technique for measuring cerebral regional glucose metabolism. His description of the theory and practicalities is an excellent introduction and exposition of the use of

analog tracers to dissect out metabolic pathways, thus permitting measurement of rates of specified metabolic reactions in vivo. To professionals the only regret will be that the publication date preceded the decisive experimental results obtained in Sokoloff's laboratory in 1984, which lay to rest most of the recent criticisms of the technique.

The extension of these methods to humans only merits a final page or two in the monograph. No doubt this is because that aspect of the work has been taken up by Sokoloff's pupils, so that an account based on first hand experience would not have been possible. However, if the book is to be about metabolic probes in man as well as experimental animals, a review of oxygen based techniques would have been welcome if only to compare and contrast the different approaches to similar metabolic problems. However, this does not detract from the value of the volume as a specific description of a particular technique and also an excellent general introduction to methods which are seeing direct application via positron tomography to metabolic measurement in man. It also serves as a reasonably up-to-date review of the principle scientific advances made as a result of its application to the investigation of physiological and functional questions in the experimental animal brain.

The monograph is a very personal account and thus all the more readable and enjoyable. The text is well presented, the illustrations clear and the book thoroughly good value for its modest price. I can recommend it without reservation.

RSJ FRACKOWIAK

The Pain System. The Neural Basis of Nociceptive Transmission in the Mammalian Nervous System. (Pain & Headache Series Vol 8). By William D Willis. (Pp 346; \$86.25.) Basel: Karger ag, 1985.

One can have nothing but admiration for Dr Willis for having written this excellent book. In about 300 pages he has provided an invaluable summary of what is known about the "circuitry" of the nociceptive system. The emphasis is perhaps on anatomical aspects although physiological and pharmacological aspects are also fully considered. The order of presentation is logical, starting with peripheral nociceptors, then going on to afferent input into the dorsal horn, ascending nociceptive tracts and lastly central transmission to

thalamus and cerebral cortex. It should be added that the book does not deal with descending mechanisms of analgesia or descending pathways.

The subject matter is well arranged and presented, and most importantly, is thoughtfully and critically reviewed, and very up to date. Topics of current interest such as the issue of nociceptive afferent fibres in the ventral root, the effects in animals of capsaicin, the presence in the small dorsal root ganglion cells of neuropeptides relevant for nociceptive transmission, and microneurographic studies on humans, are all considered. Background aspects are not neglected, however, and Dr Willis introduces each chapter with a brief historical overview and concludes each chapter with a useful itemised summary. The book as a whole concludes with around 900 references. An area which unfortunately receives little attention is that of the autonomic nervous system, at least peripherally; there is increasing information on and interest in the role of the sympathetic nervous system on nociceptive mechanisms, and the second edition which will surely be called for could, with advantage, include this aspect.

The sub-title of the book is important. The author is not primarily concerned with clinical aspects of pain, but precisely with "the neural basis of nociceptive transmission"; he succeeds admirably. Unfortunately in times of financial stringency no reviewer can afford to ignore the cost of a book. The price is certainly high but not excessive for a well produced book which is invaluable if not essential for libraries to stock, even if expense deters many individuals from owning even if not consulting a copy.

DG SCHOTT

Basic Human Neurophysiology. By David F Lindsley and J Eric Holmes. (Pp 368; \$32.50.) Amsterdam: Elsevier Science Publishers, 1984.

Over the past 2-3 years at least six new neurophysiology textbooks have appeared. Whoever buys them is a mystery. The medical students at whom they are directed have less money now, owing to the gradual decrease in the student grant, than they have ever had in the past. So, given this lack of money, I made a small open survey of a group of second year medical students. "If you were to buy one neurophysiology textbook this year," I asked, "would you prefer a book containing far more facts

than you need to know—i.e. a reference book; or a book containing an easily understood survey of all the basic facts you need for this course—i.e. a course guide?"

Advantages were, of course, seen in each. A good course guide would make attendance at lectures redundant, and allow science students to lead the more relaxed life of, say, the history undergraduate. A good reference book would probably last longer, being of use throughout subsequent years and would certainly be more suitable for providing background reading. Superb examples of course guides are Open University publications for students who never attend lectures. Indeed, they explain the course far better than most lecturers in my experience. *Basic Human Neurophysiology* is in the tradition of a course guide. It has "evolved from class handouts used in teaching undergraduate and graduate neurophysiology at the University of Southern California School of Medicine over the past fifteen years." It is well-written and entertaining. There is a limerick about Hubel and Wiesel, a quote from Hamlet on sleep and lots more jolly quips, including a description of the hemiplegic posture of Lon Cheney jr. in "The Mummy". Every chapter begins with a list of objectives, which are then treated with a companion list of questions (with answers) at the end. An additional feature which is used very well is the inclusion of examples of clinical case summaries to illustrate specific physiological points. However, the diagrams are not so good as in some other recent neurophysiology books, and, presumably because this is a course guide rather than a reference book, none is taken from original experiments.

There is a good case for leaving out original diagrams and experimental details in an introductory book such as this for the sake of clarity. But this is precisely where this textbook fails. It deals very well with the relevance of physiological facts to medicine. Yet little attention is paid to giving the reader a flavour of physiological experimentation. There are no details of how Hodgkin and Huxley or Hubel and Wiesel performed their experiments, or of the pioneering work of von Bekeasy on the movement of the basilar membrane in the cochlea. *Statements* presented without such details are very easily accepted as *truths*. A textbook at this level should not encourage such blind acceptance of facts. Questioning the basis of knowledge is equally important as the application of facts in the clinic.

JOHN ROTHWELL