speaks with sense and sensitivity about the problems they face. Current drug therapy is reviewed, with the conclusion that, despite the many studies undertaken of alternative treatments, dopamine antagonists such as perphenazine or tetrabenazine remain the drugs of choice for controlling chorea. Details of the nursing approach to the problems of the illness are presented and will prove valuable. Psychological defence mechanisms for coping with the illness are discussed, and the stresses of "being at risk" are realistically presented. The author takes the view that the role of the clinician is to present the facts, but does not take a stance on the vexing problem of the role of predictive testing, if and when such a test becomes available. No predictive test exists at present, but much research is being undertaken to produce one. Should it become available before an effective treatment for the disease is discovered, agonising ethical dilemmas will ensue. The author presents these potential problems, but perhaps sensibly refrains from passing any judgement on their solution.

The final chapter is entitled "Current Trends in Research". The location of the abnormal gene for Huntington's disease has not been established and the altered gene product has not been identified. The studies claiming abnormal membrane structure and fibroblast behaviour are reviewed, but the general consensus at present is that definite proof that these changes are specific for Huntington's disease is lacking. The extensive biochemical changes in the brains of those dying of Huntington's disease discovered in recent years are presented in detail, but most if not all must represent the consequence of neuronal loss—the "smoke rather than the fire". But this general ignorance is not peculiar to Huntington's disease. "Of the 2811 described genetic diseases, a total of 1489 disorders are inherited as autosomal dominant traits (McKusick 1978). In contrast to the tremendous advances in the understanding of autosomal recessive diseases, there is a dearth of knowledge concerning the basic defects in autosomal dominant conditions. Elucidation of the primary defect in Huntington's chorea would provide a conceptual framework for the investigation of other similarly inherited disorders." Dr Hayden has done a great service to all those interested in this disease by providing an invaluable monograph to turn to as a source of reference to all aspects of Huntington's disease.

CD MARSDEN

Medical Neurobiology. By William D Willis Jr, and Robert G Grossman. (Pp 593; £26.00.) London: CV Mosby, 1981.

The trouble in writing any textbook is knowing when to stop. As a general rule, the longer the book becomes, the less use it is to medical students and the more use it is to doctors as a source of reference. This book is positively encyclopaedic, and combines all the usual advantages and disadvantages of such standard texts. It is not an attractively produced book: apart from being large and physically very heavy (which makes it difficult to read on the bus), the diagrams are rather poor and in some chapters a little thin on the ground. In fact, in a book which provides as much detail as this, there are far too many diagrams without scales or axes indicating, for example, the duration of action potentials or the size of sense organs in the ear, eye or skin. Much more use could have been made of published diagrams and data from recent papers.

It is not a book to be recommended for teaching purposes, because although there is a wealth of detail in all the chapters, there is little or no attempt to point out fundamental concepts. You would not, therefore be able to understand the working of the inner ear by reading page 316, nor the columnar organisation of the visual cortex by reading page 331. But on the other hand, you would certainly be able to refresh your memory about how cortical orientation columns may be demonstrated by the 2-deoxyglucose method. This is really a book for reference only, and it has a useful index to help in this. There is perhaps a little too much pure anatomy in some places, which readers will find better described in other books, and there is certainly too little emphasis placed on neuropharmacology—which usually is relegated to a few paragraphs at the end of a chapter or section. Nevertheless, despite its faults, I have found this to be a useful book which I am glad to have on my shelves.

J ROTHWELL

Electrotherapy (Clinics in Physical Therapy, Vol 2). Edited by Steven L Wolf. (Pp 204; £11.50.) Edinburgh: Churchill Livingstone, 1981.

This book gives an account of electrical methods of treatment and diagnosis for physical therapists. It introduces the principles governing the application of electric currents in patients and reviews the areas

in which success seems to have been achieved. It also gives an outline of the principles of electromyography and evoked potential recordings for therapists who might be thinking of adding diagnostic procedures to their repertoire. It is written by (and for) a group of people who are not encouraged to exist in the British Health Service, namely therapists who are not medically qualified but have an interest in basic science and a reasonably sophisticated understanding of clinical neurophysiology. On the British scene it therefore falls between two stools, the level of discussion being too simple for clinical neurophysiologists, while most of the techniques are regarded over here as a medical prerogative.

It provides a useful, if somewhat uncritical, source of references to the application of electrical treatment to promote bone growth, control infection and strengthen skeletal muscles. Lucinda Baker's chapter stands out as a thoughtful, intelligent and critical account of the value of neuromuscular electrical stimulation in the restoration of purposeful limb movements. Two chapters on transcutaneous electrical stimulation give a useful summary of its possible mechanisms and practical applications, emphasising the shaky experimental basis of most present clinical practices. Stimulation of the spinal cord and brain is not discussed.

"Electrotherapy" provides an optimistic account of electrical stimulation with enough basic information to whet the appetite of therapists or physicians interested in finding out more. I would not recommend it for students because it is too cavalier in its treatment of basic science and there are some errors (such as the diagram that purports to show a sine wave) in this department. In Britain, I suspect that it will be read mainly by private therapists looking to extend their range of gadgetry but others who, like the authors, are concerned to strengthen the clinical bias of electrical treatments will find this a useful short review.

DL MCLELLAN

Persistent Pain. Modern Methods of Treatment. Vol.3. Edited by Sampson Lipton and John Miles. (Pp 294; £19.80.) London: Academic Press, 1981.

The book under review—the third volume of the series "Persistent Pain: Modern Methods of Treatment"—is edited by Sampson Lipton and John Miles of the

Centre for Pain Relief, Walton Hospital, Liverpool. Such distinguished editors would be expected to produce a good book and your reviewer is not disappointed. It is intended that each volume will deal with certain aspects of intractable pain.

The thirteen chapters here treat of the theory, principles and practice of treating persistent pain. The book begins with the Mechanisms of Nociception and proceeds with a chapter on the Measurement of Pain (a recent meeting on this subject at the Royal Society of Medicine filled the large hall for a day!). Then comes a most useful and instructive section on the principle of managing breast cancer. The management of osteoporotic pain of the spine, the psychological aspects of chronic pain patients, the techniques of biofeedback follow. The problems associated with Headache and Central Analgesia, and the use of the lesion generator in treating chronic neck and back pain are dealt with next and the complex (to the reviewer) use of analysis in clinical trials. The use of non-analgesic drugs in the management of pain, a new technique of percutaneous cordotomy and improvements in spinal injections for cancer pain with a fascinating section on Neural Mechanisms of Acupuncture Analgesia are a fitting close to this interesting and helpful book.

The constant reminder runs throughout that the treatment of persistent pain is a serious, complex and often difficult business. So often the conclusion, "I can't figure it out" would be a better record for the notes or "Minime intellego" as LJ Menges suggests in his contribution "The so-called psychogenic pain complaints are just as real, relevant and legitimate as the organic". The diagnosis of "psychological" should be heard less as clinicians realise their inadequacy in many pain situations. Dr Mehta's views on spinal injection in terminal cancer pain are welcomed. Experience at St Christopher's Hospice over the past three years suggests that possibly 10% of such patients may benefit from neural blockade combined with drug therapy.

The book is nicely produced and the diagrams and illustrations are clear—especially the reproduction of X-ray films. The bibliography is excellent. It is comfortable to hold in the hand and will withstand wear and tear in use—it will be consulted often. It is very good value for its £19.80. There is no doubt that this series will become one of the standard works in the problems and treatment of Persistent Pain for some time to come. To quote the publishers' "blurb"

it will provide a unique service to the practitioner by providing him with a constantly up-dated source of information and background material in the field of pain relief'. Here is distilled the experience of the acknowledged experts—"It will be of immense importance to doctors in all the many pain clinics throughout the world as well as being of great interest to surgeons, anaesthetists, neurologists, and general practitioners". Certainly it should be required reading for FFARCS candidate who in the future will have the problems of intractable pain in their training and examinations.

CDT JAMES

Behavioral Approaches to Neurology. By Joel F Lubar and William M Deering. (Pp. 208; £14.60, US\$ 22.00) London: Academic Press, 1981.

The avowed purpose of this book is to explore the application of biofeedback and other techniques of behavioural medicine in the management of some neurological disorders. The areas chosen are epilepsy, specific learning disabilities and the hyperkinetic syndrome. In that, of the book's total of 188 pages, only approximately 17 assess this task specifically, it fails, in the sense that the authors have devoted most of their space to theories, description, and discussion of other methods of treatment in these areas. However, individually the material presented in all sections is interesting, albeit at the expense of some rather dogmatic comments. The first chapter gives an outline of the development of the theory and practice of techniques in behavioural medicine stemming largely from the work of Pavlov and Thorndike. This is followed by a comprehensive presentation of seizure disorders, up-to-date, but at times misleading. For example, "pseudoseizures" do not occur "almost exclusively in those with genuine epilepsy", and in this condition incontinence can occur. Likewise, gingival hyperplasia secondary to phenytoin is reversible, and dependence on anticonvulsant drugs can occur. The chapters on epilepsy are followed by four on such topics as minimal brain dysfunction, hyperkinesia and specific learning disabilities. Again, adequate reviews especially for the non-specialist, but largely devoid of discussion of behavioural treatments.

Of most interest, with regard to the title, is the section devoted to the behavioural approaches in treatment of seizure disorders.

This is a comprehensive review of the current state of the art, but must leave the uninitiated wondering about the value of such therapies. We are told that after nearly 20 years' experience, only one double-blind trial has been carried out, and that was on eight patients. The results of this were "not as strong as earlier uncontrolled reports". We are also informed that the authors own technique "often takes months and sometimes one year or more" for patients to achieve the required criteria, hardly practical for the everyday management of chronic epilepsy.

It is a puzzle that the editors have restricted their selections of topics in a potentially interesting and important field. There is a substantial literature on the use of behavioural techniques in other conditions of interest to practising neurologists, such as tension headaches, migraine and paraplegia, which receive no mention, but which if included would have made this an important contribution to the literature.

MICHAEL TRIMBLE

Headache: Physiopathological and Clinical Concepts (Advances in Neurology, Vol 33). Edited by Macdonald Critchley, Arnold P Friedman, Sergio Gorini and Federigo Sicuteri. (Pp 438; \$62.56.) New York: Raven Press, 1982.

This lavishly produced book containing communications read at an International Conference held in Florence in 1980, provides an overall view of current ideas and research in headache and migraine. Some articles contain a curious mixture of facts and fancy theorising, particularly striking from some European contributors.

A distinct shift away from the vascular to the neural basis of migraine is apparent, indicated by papers on endorphins and enkephalins, dopamine antagonists and sleep studies. Pharmacologists are still chasing the elusive chemical agent that might be responsible for migraine—biogenic amines and prostaglandins being the current favourites. Platelets also get their fair share of consideration with their aggregability and 5-hydroxy-tryptamine release, plus dipyrindamole and aspirin therapy.

Clinical studies include loss of consciousness in migraine, sexual arousal in 10% of migraineurs during attacks, and the pupillary responses to pain, sympathomimetic drugs and local morphine. There are two contributions on children's