
This is a brilliant account of fundamentals for "the clinician who is not a neurologist." Its outlook is modern, the illustrations really illuminate the text, the style is vigorous and arresting, and the author's didactic approach is simple without being facile. He allows his readers a minimum glossary of neurological terms, begins by relating presenting symptoms to an anatomical site and plots his "diagnostic journey" as much by the temporal profile—he calls it the "cadence"—as by the spatial extent of a disorder. His basic examination of the nervous system is well described, and illustrated, in the final chapter. An abnormal response by the patient to any of his standard tests will interrupt the normal rhythm of the examination and initiate more detailed tests which have been described in earlier chapters. Emphasis is on speed with accuracy and on pruning away all but essentials. He has a practical five-minute rule in history-taking: if his patient goes beyond this time he suspects him or her of dementia, aphasia, hysteria, psychosis or malingering.

Abnormal neurological signs result either from breakdown of a basic function—homonymous field cut, for instance, due to defect of optic radiation—or from disintegration of movement patterns due to failure of one or more of the modifying systems, such as the "dysgraphia" (he does not use the word) of proprioceptive loss or extrapyramidal rigidity. This might be, conceptually, a difficult approach for the tyro in neurology but his five incisive chapters on voluntary movement, the visual system, conjugate gaze mechanisms, the motor unit (anterior horn cell to muscle fibre) and the striatum are models of limited but essential information refreshingly imparted. Short paragraphs, easy to remember and to find, describe useful but not superfluous treatment. A future edition might add tetrabenazine for the relief of hemiballismus.

There are standard chapters on coma, based on the writings of Fred Plum and on the Glasgow Coma Scale, and on epilepsy in which he follows the internationally agreed classification. A definition of epilepsy would not have been out of place as a corrective for his vapid distinction between seizure and syncope. His anticonvulsant therapy is not wholly acceptable. For major epilepsy his first choice is phenobarbitone, long relegated in British clinics, whereas phenytoin, his second choice, and carbamazepine are widely and successfully prescribed. There is less enthusiasm, too, for sodium valproate though it is useful in photomyoclonic disorder and clomethiazole which he does not mention has certainly earned its spurs in status epilepticus. Finally, he provides a succinct summary of the controversial literature on stroke, sound advice on pitfalls in the diagnosis of multiple sclerosis and practical help on management and a readable if somewhat biased review of slow viruses in neurology. The early position of the chapter on investigations is acceptable, but the length of the chapter on migraine is not.

In short, a book for students, a reference for physicians and surgeons, and a pleasant window on their craft for neurologists.

CHARLES WELLS

Phenomenology and Treatment of Anxiety Edited by WE Fann, Ismet Karacan, AD Pokorny, RL Williams (pp 406; £21) New York: SP Medical and Scientific Books, 1979

Anxiety is an ubiquitous human experience and a common symptom. About a third of the adult population admit to symptoms of anxiety, insomnia, and irritability and one in six of the adult population is given treatment, usually drugs, each year. Not surprisingly, a steady interest in the topic has been maintained. This volume contains the proceedings of a symposium on the Phenomenology and Treatment of Anxiety, held in Houston, Texas on 1 and 2 December 1977. It was sponsored by the Baylor College of Medicine in Houston and represents money well-spent quite simply, this is the best current text on anxiety.

It is, of course, multi-authored with a highly varied collection of chapters. The usual topics are all there: assessment of anxiety (Zung), animal models (McKinney and Moran), a psychoanalytical view (Gilliland), psychopharmacological treatment (Rickels), behaviour analysis (Wolpe), and so on. In addition, there are unusual topics which one would be hard put to find elsewhere without a primary literature search. Examples include anxiety in the aged (Eisdorfer), traumatic neurones (Ewald), how much anxiety is "normal" (Mefferd), suicide and anxiety (Pokorny), anxiety in the general hospital (Decker), and many others.

I particularly enjoyed the chapter by Redmond on the involvement of the locus coeruleus projection systems in anxiety. With its 337 references, it provides a coruscating account of the topic. As I subscribe to the view that brain noradrenaline systems are intimately involved in the mediation of emotional arousal in general and of anxiety in particular, my personal prejudices were most gratifyingly reinforced.

Other chapters of especial interest were those by Fink who shows the usefulness of EEG studies of anxiolytic drugs, although the interpretation of such findings still lacks a firm, coherent, theoretical basis. Roessler and Lester review vocal patterns in anxiety, opening up the possibility of some simple quantitation of anxiety in the clinic.

The book is well produced, clearly printed and indexed. It will be a valued possession on my shelf for several years to come, frequently referred to, occasionally plagiarised and lent to others with extreme reluctance!

MALCOLM LADER


Biofeedback is the name which has been applied to the process whereby a subject can learn to modify physiological events in the body when these are displayed on a recording device, either as visual or auditory signals. Although this possibility has been recognised for a long time the develop-
ment and application of the technique has been greatly assisted by the observation that a subject may learn consciously to separate and activate single motor units in a muscle if the motor unit potentials are appropriately displayed. This myoelectric feedback has an immediate application in the development of techniques to produce relaxation but also provides the possibility of retraining muscle activity in disorders of motor control. Other areas where biofeedback have been applied are in the control of temperature and peripheral blood flow and in modifying the background activity of the EEG.

This book is a series of articles by workers using biofeedback in various fields of therapy. Subjects included are the use of biofeedback in muscle re-education and rehabilitation, in general relaxation and psychotherapy, in the treatment of headache, in regulating gastrointestinal motility, and in the management of pregnancy and labour. In a new field of therapy there is a need for critical evaluation of its place and significance in comparison with older established methods and a fuller review of these aspects of the underlying physiology would have been of value. In general the treatment is practical and clinical and there is some overlap of content in the various chapters. Nevertheless, it contains much that will be of interest to neurologists and specialists in rehabilitation, and the reader willing to learn and apply the methods should find the necessary information.

JAR LENMAN


The increasing amount of research on the function of the pineal suggests that clinical interest in the gland may soon be extended beyond its usefulness as a naturally occurring marker of the cerebral midline. Work during the 1960s showed that the pineal, far from being a ‘vestigial’ structure, positively seethes with enzymes. The most interesting of these are concerned with the manufacture of melatonin, a substance derived from serotonin, which, in turn, is found in the pineal in enormous concentrations. The activity of these enzymes is regulated by changes in illumination, transmitted to the gland through its autonomic nerve supply, which comes from the superior cervical ganglia.

This book is a well-written, entertaining, and critical survey of the papers published on the pineal during 1977. The larger part is devoted to the best established function of the pineal, that of regulating animal changes in reproductive activity so that they coincide with the seasons of the year. Most reviews are really catalogues, but this one gives sufficient details of the papers considered to allow the reader to form his own judgment on what the reviewer, himself a notable contributor to the field, has to say. Naturally, the most interesting question for readers of this journal will be how much we know of the gland in man, and indeed a section of the book is devoted to this topic. Apart from well-known and intriguing connection between pineal tumours and the onset of puberty, we have little idea, though human plasma contains melatonin. Animal studies suggest that its function might be concerned with regulating some aspect of human physiology related to the seasons, but although many human activities can vary in this way (for example, birth or mental illness) such variations are usually rather minor to be accorded physiological importance, or need control by a special gland such as the pineal. One thing seems certain: even the heavily calcified pineal of middle age is still metabolically highly active, so its function continues long after puberty. The book also summarises the literature appearing before 1977 and, altogether, provides a splendid opportunity for those wanting to know quickly and painlessly what is going on in this exciting and expanding field.

J HERBERT


This book does live up to the first part of its initially rather mysterious title. Although it is multi-author and symposium-based (November 1978, IBRO Society for Neuroscience) most of its authors do revisit or review their fields as well as presenting recent results. In this one detects the hand of strong editorship, which has also given the book more of an overall shape than most volumes of its type.

The subtitle however must be intended with tongue in cheek. A recurring message of the book is that the reticular formation is no longer to be regarded as a nonspecific system, but as being differentiated anatomically, in physiological functions and in pharmacology, into a multitude of parts interacting with each other and the rest of the nervous system in various different ways.

There is a corresponding multiplicity of technical abbreviations, largely anatomical, in some chapters which the non-specialist reader will find confusing, if not tiresome, but which is probably inevitable.

Each of the five sections (historical, methodological, arousal, motor control and chemical modulation, and behavioural state control) is introduced with a very helpful overview chapter by the section chairman; in one case even including a tabular summary of the principal results to be found in the section!

I was sorry not to see a section on selective attention, a subject described as “most challenging” by the arousal section chairman in reviewing the old work on this topic, but ignored elsewhere. Perhaps there is no recent neurophysiology of selective attention?

The book is well printed, proof read and produced, with a huge number of excellent illustrations. All the chapters are well referenced, and most contain some 1979 references. There is an author index and a short subject index. This is a book of real substance.

DN RUSHTON