BACKGROUND TO MIGRAINE. 4TH MIGRAINE SYMPOSIUM. 11 SEPTEMBER 1970 Edited by J. N. Cumings. (Pp. 92; £2.25.) Heinemann: London. 1971.

This small and excellently produced book records the papers given at the 4th Migraine Symposium sponsored by the Migraine Trust.

This symposium is aimed at interesting general practitioners and the majority of the papers have a clinical orientation on symptomatology, differential diagnoses, psychiatric aspects, and epidemiology. Most of the contributors reiterate a number of standard clinical facts about the disorder, followed by some ill-defined speculation on aetiology. One message, however, comes across in all the papers—the fact that one should look with scepticism on everything one has been taught about the mechanism of this baffling disease.

In sharp contrast to the clinical papers, and quite out of place, is an experimental paper on the neuropharmacology of ergotamine (already printed elsewhere) in which clinical relevance is barely mentioned.

The best feature of the book is an admirable chapter by Professor J. N. Cumings on the biochemical nature of migraine. This should be required reading by all neurologists and research workers in the field, but is scarcely appropriate for an audience of general practitioners.

Apart from an indication of the laudable activity on the part of the Migraine Trust and of the enormous task which confronts them, there is very little to justify publication of this symposium at the present time.

ZENTRALNERVÖSE SEXUAL STEUERUNG (Central Nervous Regulation of Sexual Behaviour). *Journal of Neuro-Visceral Relations*, Xth Supplement. Edited by H. Orthner. (Pp. 730; illus.; price not stated.) Springer: Vienna. 1971.

In the autumn of 1969 the German Neurovegetative Society held this symposium in Göttingen; it has just been published.

The topics dealt with aspects of hormonal sexual regulation through the hypothalamus (14 papers); influence of illumination and of the pineal gland on sexual regulation (nine papers); central nervous regulation and coordination of the drive to maintain the species and the self (two papers); imprinting of hypothalamic sexual functions by the peri- or pre-natal endocrine situation; aimed lesions in the hypothalamus (three papers); imprinting of sexual behaviour by the infantile milieu (four papers); antiandrogens (three papers); legal, institutional-psychiatric and constitutional-biological problems of perversions (three papers); the therapy of psychologically determined sexual perversions (two papers); aspects of sexual regulation in females (six papers); sexual divergences in temporal lobe lesions (seven

papers); post-traumatic sexual disturbances (five papers); neurological and psychiatric problems (six papers); problems and disturbances of maturation and of the climacteric (five papers); pathological processes in the hypophysis and hypothalamus (seven papers).

The various sections were followed by useful discussions; some, too few, papers contain a summary. The subjects are very adequately covered and the volume will serve admirably as a book of reference. I was far from convinced that either hormonal or anatomical disturbances could account for perversions, although they might clearly lead to hyper- or hyposexuality.

J. SCHORSTEIN

MATHEMATICAL NEUROBIOLOGY By J. S. Griffith. (Pp. 161; illus.; £3.50.) Academic Press: London. 1971.

This is a mathematical text concerned primarily with the behaviour to be expected from assemblages of model neurones, such as the McCulloch-Pitts neurone and certain variants of this. The topics dealt with include the prediction of the form of an interval histogram for the discharge of one neurone in a net, the information-storage capacity of a brain assembled according to certain specified principles, and the criteria for stable oscillation in a non-linear system such as the interacting biochemical reactions involved in protein synthesis. The mathematical manipulations are lucidly handled—at any rate up to the last few pages where one is suddenly plunged into the special notation of quantum mechanics. The bibliography looks very useful.

It is salutary to see, worked out in this way, what are the logical consequences of certain assumptions about the way the nervous system works. Interesting light is shed on the nature of some of the questions one is tempted to ask about the brain. Biologists whose problems lie in this field, and who wish to enlist the collaboration of an appropriate mathematician, will find useful indications here of the kind of help that can be available.

T. D. M. ROBERTS

CERVICAL SPONDYLOSIS: ITS EARLY DIAGNOSIS AND TREATMENT Edited by Marcia Wilkinson. (Pp. 182; illus.; £3.00.) Heinemann Medical Books: London. 1971.

In preparing a new edition of the book on cervical spondylosis, which appeared in 1967 under the joint editorship of the late Lord Brain and the present editor, Marcia Wilkinson and her colleagues have done more than bring the original volume up to date. The emphasis of the book has been altered to make it more useful to the non-specialist and general practitioner and this has been done by expanding the clinical sections and shortening the very full and

detailed anatomical section which the original edition contained. Although addressed primarily to the non-specialist and shorter than its predecessor, it remains a comprehensive and authoritative work which will continue to prove useful to the serious student of neurology. The book is a pleasure to read and will clearly become a standard work in the field. It is illustrated with line drawings and half-tone reproductions of radiographs, which are of good quality. There is a good index but the bibliography at the end of each chapter could be made more useful if titles were included of the references cited.

J. A. R. LENMAN

ASSESSMENT IN CEREBROVASCULAR INSUFFICIENCY An International Symposium in Various Methods of Assessing the Effects of Cyclandelate on Higher Cortical Function, Wurzburg 1970. Edited by G. Stocker, R. A. Kuhn, P. Hall, G. Becker, and E. van der Veen. (Pp. 152; illus.; DM 20.) Georg Thieme: Stuttgart. 1971.

This book comprises the proceedings of the symposium on the effects of cyclandelate on mental impairment. Efficient editing and publishing produced the book within a few months of the symposium and the quality of the text and illustrations is uniformly good.

The early part of the book contains papers on methods of psychological testing, both simple and complex. Some carefully controlled studies showed that cyclandelate produced improvement in some aspects of mental performance, notably orientation, verbal communication, social behaviour, and interest in surroundings in elderly patients thought to have cerebral vascular occlusive disease. These conclusions were reached after a double-blind cross-over trial, but attempts to correlate clinical improvement with various indices of cerebral blood flow were unsuccessful. The mode of action of the drug is unknown.

With the notable exception of the thoughtful and critical paper by M. D. O'Brien on the complex relationship between neuronal degeneration and reduced blood flow, the second half of the book is less satisfactory. It deals with disordered circulatory physiology and various methods of assessment. The demonstration that the cerebral vascular system even in senility is still capable of considerable alteration in resistance is certain to lead to the introduction of many more vasactive agents and to a reappraisal of therapy in arteriosclerotic dementia.

This symposium does a service in focusing attention of physicians and physiologists on the need for a critical and unbiased appraisal of these drugs and their possible action both on neurones and blood vessels. In this way, new light may be shed on more fundamental questions of causation.

R. W. ROSS RUSSELL

DIE KONZENTRATIONSLAGERHAFT UND IHRE FOLGEN By P. Matussek *et al.* (Pp. 272; DM 38.) In 'Monographs from the Total Realm of Psychiatry', Vol. II. Psychiatry Series. Springer: Berlin. 1971.

Over six million human beings were done to death in the German (not Nazi) concentration camps during and before the last war. How many escaped with their lives is unknown.

What psychological consequences occurred in the survivors? This is the question posed by Matussek and intensively investigated in a group of 245; of these 186 were Jews, interviewed not only in Germany, but also in Israel and in the U.S.A., where they are presently domiciled. Since, however, the investigation was predominantly carried out in Germany I believe that the number of persons persecuted for political or religious reasons in this investigation does not give a true picture of the concentration camp inhabitants or their fate, because, in fact, the vast majority had been incarcerated because they were Jews and fared worse than the other concentration camp inhabitants.

The investigation of the psychological effects is thorough. It includes the concentration camp experiences and minutely examines in prolonged interviews the ability or disability of survivors to come to terms with life at present in its various ramifications.

As others have done before him, Matussek finds that the ones who fared best were those who at the time of their persecution had a strong belief, a faith, a feeling of community with other prisoners, and those who before internment had already matured and had had happy childhoods.

The volume is followed by exhaustive references to the literature.

J. SCHORSTEIN

KLINISCHE ELEKTRO-MYOGRAFISCHE ONDERZOEK-METHODEN BIJ ENKELE SUPRA-NUCLEAIRE SYNDROMEN By W. G. Buist. (Pp. 170; illus.; Hfl. 21, —.) Royal Vangorcum: Assen, The Netherlands. 1970.

In the last 10 years the interest of electromyographers has moved from disorders of muscle and peripheral nerve to 'supranuclear' problems of motor control using reflex methods for studying central function. The technical problems have not been entirely solved and interpretation of findings varies with each new contribution from animal physiologists exploring synaptic function in the spinal cord and the afferent bombardment from muscles and skin which have proved to be more elaborate than was previously conceived.

Many workers have attempted to analyse spasticity and Parkinsonism by these indirect methods according to the concepts of their time. This monograph reviews earlier work and the author's personal