are concerned with the objective basis of the neurological examination, whether in children or in adults.

J. B. P. STEPHENSON

DIE CEREBRALEN ENTMARKUNGSKRANKHEITEN IM KINDE-SALTER DIFFUSE HIRNSKLEROTEN The Cerebral Demyelinating Diseases in Childhood. By Jurg Ulrich. Neurology Series Vol. 6. (Pp. 186; illustrated; \$20.40.) Springer: Berlin.

There has been an increasing interest in this group of diseases in the last two decades. They are genetically determined, occur in early childhood or infancy, and are invariably fatal. A link between these diseases and disseminated sclerosis in the adult is perhaps the great incentive which spurs research workers on in the investigation of these diseases whose riddle is slowly giving way to refined methods of biochemistry and electron-microscopy.

We know that metachromatic leucodystrophy is due to the faulty accumulation in the nervous system of sulphatide because an enzyme-sulphatase is lacking. The diagnosis can now be made with accuracy during the child's life-time by biopsy of a peripheral nerve. The defect in sulphatase can also be determined. In Krabbe's disease there appears to be a lack of sulphatide because its construction out of cerebroside and sulphate groups has been rendered impossible. The term 'Schilder's disease' is now to be dropped entirely, for it obscured the multiplicity of diseases which are to be recognized.

The author of this monograph has marshalled all the recent scientific discoveries about the demyelinating diseases in nine chapters dealing with each disease from the clinical, chemical, and pathological points of view. Added to this, there is a Table giving the outstanding features of published, and the author's own, cases in a precise and useful manner.

Since these are rare cases, the monograph is likely to have its main use as a work of reference, and as such, it is to be highly recommended.

The value of the monograph is enhanced by exhaustive literature references, and some instructive illustrations.

J. SCHORSTEIN

MULTIPLE SCLEROSIS: A Disease Acquired in Childhood By J. H. D. Millar. (Pp. xvii + 98; 6 figures; 17 tables; \$7.50.) American Lecture Series No. 800. Thomas: Springfield, Ill. 1971.

This volume, in the usual format of the series, is a concise and up-to-date account of the epidemiological studies carried out by Dr. Millar and colleagues in Northern Ireland, placed in the context of similar studies elsewhere. The time is opportune as the era of static populations is fast disappearing. Dr. Millar reports that there is a significantly greater risk of developing multiple sclerosis in rural areas than in an industrial city. Considering various hypotheses to account for this, the author favours infection in childhood, by an unidentified organism (possible measles virus) with delayed immunological reactions which may be genetically determined. He reviews the biochemical findings and considers that the

reported changes are secondary. Dietary factors may be contributory but a trial (in London and Belfast) of treatment with oral linoleic acid was inconclusive. Treatment with ACTH, immunosuppressive drugs, and symptomatic management are discussed. The bibliography is well selected.

In a short space Dr. Millar has made a bold attempt to combine existing epidemiological, pathological, and experimental data in a unifying hypothesis which carries with it the prospect of ultimate preventative measures. He makes a good case. The book is recommended reading which most will want to have in their bookcase.

J. A. SIMPSON

PRINCIPLES AND PRACTICE OF SPINAL ANESTHESIA By P. C. Lund. (Pp. 874; illustrated; \$37.75.) Thomas: Springfield, Illinois. 1971.

For the past 20 years spinal analgesia in this country has been little practised due to the remote but definite possibility or neurological sequelae and the resulting medico-legal consequences. More recently, however, the technique has been reappraised and more frequently employed. This in part has been due to a more balanced view being taken of the advantages of the technique in some clinical situations when weighed against the risks of alternative procedures. The present position would seem to be that, provided the anaesthetist uses every care and exercises all the skill expected of him, the technique is acceptable if there is an indication in a particular patient.

This textbook provides all the relevant information on drugs and methods on which the anaesthetist can build a faultless technique. It commences with a historical review of the whole subject and goes on to discuss in a most lucid fashion the relevant anatomy, physiology, pharmacology, and available equipment. The indications and, of course, complications are rightly given a considerable prominence in the text but, more importantly, the avoidance of complications is treated at considerable length. Overall, this is an excellent and well-illustrated book which should find a place on many anaesthetists' shelves, whether they are regular or occasional employers of what is deservedly becoming a more popular technique.

ALEX. C. FORRESTER

NECKACHE AND BACKACHE Edited by E. S. Gurdjian and L. M. Thomas. (Pp. xi + 231; illustrated; \$8.00.) Thomas: Springfield, Ill. 1970.

This book records most of the proceedings of a workshop on the subjects of its title held in Detroit. The fact that this is the published record of a 'live' conference is shown by a few typographical errors and by the informality of style of some of the remarks.

The best chapters include an initial general review by Dr. Gurdjian, a description of bone changes with age, the metabolic abnormalities of bone disease, a study of neck injuries in volunteers and in human cadavers (including experiments using a crash simulator). Dr. Wickstrom and his colleagues report on some fascinating data on experimental hyperextension and hyperflexion injuries, and Dr. Earl Walker's excellent clinical review of head and neck injuries with an intriguing emphasis on stresses of the medullo-spinal junction in the genesis of

concussion. There are other chapters of interest on the role of fusion in the management both of cervical and of lumbar pain.

The radiographs in this volume are rather disappointingly reproduced, and there are several occasions when the discussants (whose remarks are quoted at the end of each chapter) refer to data which are not included in the published text.

Although relatively few are likely to want to include it in their personal libraries, this is a volume which many will want to place on the shelves of their departmental library in order to refer to it from time to time.

ANTONY JEFFERSON

PARKINSONISM: Physiology, Pharmacology and Treatment By Donald B. Calne. (Pp. xii + 136; 21 figures; £2.25.) Edward Arnold: London. 1970.

To make the most effective use of L-dopa in the treatment of Parkinsonism it is desirable to have some understanding of the mechanisms of the main symptoms of the syndrome. This book contains a valuable discussion of some aspects of motor control but the space devoted to the basal ganglia is surprisingly meagre and omits much relevant work. The righting reflexes are scarcely mentioned. Hypokinesia is described but its physiological basis not adequately discussed despite the amount of space devoted to motor control.

The pharmacology of L-dopa and dopaminergic transmission is adequately covered and the survey of treatment is good. As indicated in the title, the book does not deal with the different pathological types of Parkinsonism. Surgical treatment is not covered, nor the relative place of surgery and the different forms of drug treatment.

These comments outline some of the defects of the book, but only because it has the makings of a really outstanding one. It is nevertheless an excellent short account of a topical subject, well produced and reasonably priced.

J. A. SIMPSON

PROGRESS IN BRAIN RESEARCH. Volume 32: Pituitary, Adrenal, and the Brain. Edited by D. De Wied and J. A. W. M. Weijnen. (Pp. xv + 357; illustrated; price not stated.) Elsevier: Amsterdam. 1970.

This volume contains a collection of papers from over 60 eminent contributors delivered at an international conference held in the Netherlands in July 1969. There are four sections each dealing with a main theme.

The first section discusses the central nervous mechanisms for the release of ACTH, and the feed-back control of adrenal corticosteroids over the ACTH output. In one contribution it is postulated that the immature central nervous system might be programmed by adrenocortical hormones with regard to the release of ACTH in response to stress. Such an effect would be analogous to the organization of the nervous system under the influence of gonadal hormones.

The second section deals with the effects of ACTH and adrenocortical hormones on the nervous system,

and includes studies of the chemosensitivity of parts of the brain to corticosteroids. Novel techniques are described, such as the use of multibarrelled micropipettes for recording from single neurones while simultaneously delivering minute doses of corticosteroids by micro-electrophoresis or iontophoresis; at the end of the experiment dyes may be ejected from one of the barrels thus permitting accurate histological identification.

The third theme is concerned with the action of ACTH and corticosteroids on conditioned and motivated behaviour in animals. It is postulated that these hormones act by altering the threshold levels of central nervous processes. Most studies report that ACTH facilitates the acquisition of conditioned reflexes whereas corticosteroids have the reverse effect.

The last section consists of a number of clinical studies. Enhanced intelligence quotients are reported in patients with the congenital adrenogenital syndrome and in girls with progestin-induced hermaphroditism. There are also interesting observations on the secretion rates of cortisol in anxious subjects, in depressives showing 'psychotic disorganization', and in patients after admission to hospital.

The research reported in this book is highly specialized in the sense that it is confined to the pituitary-adrenal axis to the exclusion of other functions of the pituitary controlled by the brain. Yet it covers a wide range from studies of single neurones to observations in man. A compilation of the papers read at a conference must inevitably appear unsystematic in its presentation. Conflicting data can easily be discerned but this carries the advantage of conveying to the reader areas of uncertainty in a field of research which is extending rapidly. This volume will be welcomed by specialists, including clinicians, who wish to keep abreast of this area of neuroendocrinology.

G. F. M. RUSSELL

DIE KOMBINATION HYSTERISCHER UND EPILEPTISCHER ANFÄLLE. (THE COMBINATION OF HYSTERICAL AND EPILEPTIC SEIZURES). By Franz Rabe. Neurology Series Vol. 5. (pp. 112; DM. 38.) Springer: Berlin.

This book is a valuable contribution to the existing voluminous literature on epilepsy. Its value is enhanced by the fact that Dr. Rabe redirects the reader's attention to the late 19th and early 20th century when a combination of epileptic and hysterical attacks was not only discussed but accepted by many. Charcot's 'hystero-epilepsie à crises distinctes' would nowadays correspond to the combination of typical hysterical and epileptic seizures in patients with so-called epileptic personality changes, while Charcot's 'hysteroepilepsie à crises combinées' can be traced to the modern terminologies of affective, reactive and 'awakening' epilepsy.

Dr. Rabe denies the identity of hysteroepilepsy with psycho-motor seizures. He accepts the fact that epileptic and hysterical seizures may occur contemporaneously or may follow each other, and the apparent failure of the treatment of epilepsy may be due to the fact that hysterical seizures may have taken the place of true epileptic ones and have been misdiagnosed.

In many, the differential diagnosis may be difficult and