Book reviews

ULTRASONIC ENCEPHALOGRAPHY By D. N. White. (Pp. vii + 285; illustrated; £6). Medical Ultrasonic Laboratory, Queen's University, Ontario, Canada. 1970.

Ultrasonic encephalography has a limited place in the diagnostic armamentarium of a neurological department. Its potential role in detection of midline shifts in head injuries and for screening patients who might require to be sent long distances for specialist advice has led to its increasing use in peripheral hospitals. Unfortunately, it is apparent from this careful study that these are the very circumstances which are likely to predispose false results. Professor White has produced an excellent book which should be studied carefully by anyone using the technique. The chapters on elementary acoustics, the interactions of ultrasonic energy at interfaces and their imaging, the artefacts introduced by receiving systems, and the acoustical properties of the skull are essential reading. These are followed by a careful analysis of A-mode encephalography with a valuable study of the bias introduced by the operator. Specialized methods to reduce bias in midline echo detection are then discussed and the special problems of reflection from other surfaces such as cerebral tumours, hydrocephalic ventricles, etc.

The book closes with chapters on B-mode display, indicating why it has been disappointing and is likely to remain so, and on advanced techniques such as acoustical holography, intracranial echo pulsations, Doppler and contrast techniques. It may be hoped that these new methods may make it easier to standardize technique and to recognize the source of an echo, but the acoustical properties of the skull will always remain a major limiting factor.

This is an excellent book which should be required reading for those using echo encephalography.

J. A. SIMPSON


This is not a book for the novice in neurology, but it addresses itself mainly to those in training. Yet, even the experienced specialist may find cause to say 'mea culpa' in perusing this well-balanced book.

It consists of two parts: in the first the author describes the causes for failure of the correct diagnosis having been made. In the second, each cause is illustrated by case histories. The causes listed are, among others, insufficient terminology, insufficient case history, insufficient or mistaken interpretation of symptoms. Modern diagnostic methods such as angiography, detailed radiographic diagnosis, electroencephalography, and electromyography are also discussed and evaluated.

Quite obviously the book is written by a master of his subject (neurology) who has also a wide knowledge of general medical disorders which might at first glance strike one as purely neurological ones.

The case histories are often entertaining detective work until the true nature of the disease becomes apparent. To support the excellent text, there are well-reproduced radiographs as well as other illustrations.

More such books which retrospectively survey a lifetime of experience are needed and not only in neurology. The reviewer found the book a refreshingly new approach to problems and recommends it to neurologists and general physicians alike.

J. SCHORSTEIN


This small volume describes a clinical neurological examination suitable for children aged 3 to 10 years. It is designed to detect the presence, or confirm the absence, of neurological signs in situations where the history gives no clear lead. The examination was developed during the follow-up of babies who received careful neurological testing in the newborn period. It is presented as particularly suitable for the evaluation of children with disorders of behaviour or learning, in whom minor motor dysfunction, unrecognized by society, may prove a major handicap. It may also be employed in overt neurological disorder, as in assessing the 'good' hand of the hemiplegic.

The examination is non-classical and developmentally based (though not a formal developmental assessment). It aims to be comprehensive, but the authors deliberately exclude detailed analysis of vision, hearing, visuo-spatial ability, speech and language, etc., not only because of limitations of time and the availability of specialists in these other fields, but because they believe objectivity is improved by making these other assessments independent. Those familiar with Prechtl's earlier monograph on the examination of the newborn will recognize an old friend grown up. In the present work the same emphasis is laid on the correct conditions for examination, the technique of handling the child, the behavioural state (to which is now added the social responsiveness), and the standardized sequence of tests. The tests themselves are described in detail with the aid of 54 illustrations. They are each in a suitable form to be coded and a proforma for recording the results is reproduced as an appendix. In practice, the examination is time consuming and demands considerable expertise. Before recommending its use on a wider scale, one would like to see statements about reliability and validity statistically demonstrated, and at present it may remain a valuable research tool. This is not a book for the beginner, but it will repay careful study by all who