Book reviews

HYPOPHYSIOTROPIC HORMONES OF THE HYPOTHALAMUS: ASSAY AND CHEMISTRY. Editor-in-Chief, J. Meites. (Pp. ix + 338; illustrated; £10.) Livingstone: Edinburgh. 1970.

Despite a dull, though provocative, title, this book tells a fascinating story in an absorbing fashion. The hypophysiotropic hormones referred to are, in fact, the more familiar releasing factors and it is regrettable that they have been labelled as hormones so prematurely. While the case for including them among the other internal secretions was set out by A. V. Schally in 1967, the term has not been widely adopted. In view of the disclaimer by the Editor-in-Chief that 'this does not constitute formal adoption of this expression by us or by any other participant in the conference', and that 'only further clarification of the nature and actions of these hypothalamic materials will determine their ultimate terminology', it is surprising that the newer nomenclature has been given such prominence. Perhaps the use of 'releasing factor' labels on a decorative diagram on the cover, in close proximity to the title, is a mark of editorial neutrality.

The book stems from a conference in which the extraction and purification of the releasing factors was described and commented upon by 57 of the North American investigators most active in the field, as well as an Englishman, an Italian, and a Dutchman. After a general portrayal of the function of the hypophysial portal vessels by G. W. Harris, the *in vivo* and *in vitro* bioassay and chemistry of each of the releasing factors is surveyed in detail. Because the group was relatively small and the participants well known to each other, the discussions of each paper are particularly rewarding in providing an insight into the problems and pre-occupations that arise. In this connection, and in the light of the repeated emphasis on the need for reference standards, it is remarkable that when R. Guillemin made a preparation of thyrotrophin releasing factor available for this purpose, and offered it to investigators through a paper in *Nature*, not a single request for the material was received.

Although corticotrophin releasing factor was the first neurohumoral agent to be studied in detail, it emerges that the structure of the material from the hypothalamus has not been determined, although it appears to be a small polypeptide. Most work has been done with a corticotrophin releasing preparation extracted from the posterior lobe, but this is not necessarily the same as that present in the median eminence. The nature of the substances influencing the secretion of follicle-stimulating hormone, luteinizing hormone, prolactin, and growth hormone remains uncertain, although they also appear to be polypeptides. By contrast, great progress has been made in the identification and synthesis of the thyrotrophin releasing factor, for while the amino-acid content and tripeptide character of this factor was discussed at the meeting, since then its structure has been determined and it has been synthesized in several laboratories. As

the culmination of years of effort by groups led by R. Guillemin and A. V. Schally, this achievement merits wide acclaim. With the greater availability of releasing factor for investigative purposes that will follow synthesis, the thoughtful paper by I. Geschwind on the possible mechanisms of action of these agents on the pituitary cell is particularly welcome as a basis for future work.

As the methods for the detection of releasing factors in plasma have been improved it has become practicable to look for them in hypophysial portal vessel blood, and some results of such studies are described by J. C. Porter, B. D. Goldman, and J. F. Wilber. So far, there is evidence for the presence of both luteinizing hormone and thyrotrophic hormone releasing factor, with more extensive investigations being under way.

Quite recently, Sir Solly Zuckerman has discoursed upon the relationship of the hypophysial portal vessels to pituitary function in illustrating scientific attitudes in *Beyond the Ivory Tower*. Harking back to past controversy he writes, 'I would assert now that the hypothesis that the pituitary portal vessels are the controlling mechanism is probably beyond direct experimental proof; and I would go further and say that the speculation has no scientific value. This, of course, is an isolated view, and not, as I have admitted, the conventional wisdom'. While convention merits continuous reappraisal, readers of *Hypophysiotropic Hormones* will find it extremely difficult to go along with Sir Solly and bet that the pituitary-portal theory will find a place in the graveyard of abandoned hypotheses.

B. T. DONOVAN

CONTROL OF COMMUNICABLE DISEASES IN MAN Edited by A. S. Benenson. 11th edn. (Pp. xx + 316; 80p). American Public Health Ass.: New York.

Though not primarily on a neurological topic, few neurologists will fail to find this handbook on communicable diseases quite fascinating to read, being so clearly written and economical in words, and yet abounding in information of value to clinician and laboratory worker alike. Each disease, common and rare, is given a brief clinical presentation followed by paragraphs on its distribution, the agent responsible and its reservoirs, the mode of transmission, incubation period and period of infectivity, what is known about individual susceptibility, and recommended methods of control, preventatively, with patients and contacts, in epidemics, and internationally. It is sufficiently up-to-date to mention the use of idoxuridine in herpetic encephalitis, the role of the Australian antigen in serum hepatitis, the various neuromuscular syndromes associated with coxsackie and ECHO viruses (among many others), and a good summary of the present situation in respect of poliomyelitis control. Being so complete, it is a little surprising to find no mention of the encephalitic syndromes in filariasis, the importance in some areas of *coenurus cerebralis* rather than cysticercosis, nor to find reference to the possible relationship between measles and subacute

sclerosing panencephalitis. But these are minor criticisms, and the book deserves to be on the shelves of any practising clinician whatever his specialty. It has been warmly welcomed by our own Department of Health, and is remarkably good value for money.

EDWIN R. BICKERSTAFF

LE SYNDROME DE GUILLAIN ET BARRÉ By Jean Cambier and Pascal Brunet. (Pp. 115; illustrated; price not stated). Ballière: Paris. 1970.

Les Cahiers Ballière comprise paperback monographs on a variety of medical topics. This volume on the Guillain-Barré syndrome provides an up-to-date and authoritative statement of present views on the disorder and gives a comprehensive review of past and recent literature.

One of the difficulties that has repeatedly arisen in discussions of this disorder is the precise delineation of the syndrome. Until more is known about the pathogenesis, a certain amount of arbitrariness must be involved. Thus, not all authorities would agree to the inclusion of cases in which there is an associated encephalitis with behavioural changes or cerebellar deficit, or an accompanying myelitis. The status of subacute or chronic cases that otherwise resemble the acute form is also uncertain. But recent years have witnessed significant advances in knowledge, particularly with regard to the pathological changes, by demonstrating the close morphological similarity between the Guillain-Barré syndrome and experimental allergic neuritis. The present review is, therefore, timely.

P. K. THOMAS

THE ORTHOPAEDIC MANAGEMENT OF SPINA BIFIDA CYSTICA By Malcom B. Menelaus (Pp. 116; 116 figures; 33 tables; £3.00) Livingstone: Edinburgh.

Malcom Menelaus, a Melbourne surgeon with experience of treating over 400 children with spina bifida, has produced a timely monograph of a very high standard offering much information on this difficult subject and showing a fine balance of judgment in the many conflicting problems these children present.

Spina bifida has certain similarities to poliomyelitis but the muscle paralyses are in more regular patterns, the level of segmental involvement can be diagnosed from the posture of the children's limbs. Perhaps more should have been made of this very important understanding that we now have of the patterns of muscle paralysis and the resulting limb deformities arising from muscle imbalance in spina bifida. The orthopaedic management of deformity in these children is likely to be most effective in the early transfer of muscles to overcome deforming muscle imbalance—for example, transfer of the psoas, the cause of hip flexion deformity and dislocation when its opposing muscle, gluteus maximus (with sacral innervation), is totally paralysed. In poliomyelitis the orthopaedic surgeon had reached the stage of preventive surgery by his understanding of the causation of deformity and thus often avoided the more destructive surgery of cure of established deformities. Prophylactic surgical intervention has been earlier achieved in the

care of spina bifida children because of our previous knowledge.

Much of the difficulties of spina bifida and many of the perplexities of deformity have now been elucidated by the concept of 'the isolated cord segment' causing upper motor neurone paralysis distal to the spina bifida lesion, so well worked out by Ingram and Stark. It would have been also valuable to have developed further the discussion of this.

The best of a very good book is an appendix on advice to parents of children with spina bifida. This is an outstanding contribution and might be emulated by those who care for children with cerebral palsy and many other crippling diseases.

This monograph, which gives an up-to-date and balanced view of the problems of children with spina bifida, is essential reading for anyone concerned in their care.

J. I. P. JAMES

PSYCHIATRIC EPIDEMIOLOGY: an international symposium. Edited by E. H. Hare and J. K. Wing. (Pp. xvi + 379; illustrated; £4). Oxford University—for Nuffield. 1970.

The epidemiological approach has provided one of the most fruitful ways of testing hypotheses concerning mental illness. Latterly it has also been put to good practical use in the evaluation and planning of psychiatric services. Unfortunately, much of the invaluable information collected has been scattered in publications not readily available to the non-specialist reader. This book, a well-edited version of a symposium held under the joint auspices of the World Psychiatric Association and the Royal Medico-Psychological Association in 1969, provides a useful service by bringing together much important data and pointing to some of the main lines of development in the past 10 years. It starts with a very thoughtful and challenging contribution by Mechanic and includes important sections on the standardization of clinical assessment and diagnosis, the use of case-registers and on psychiatric epidemiology in relation to general practice. Of particular interest is a much condensed version of Hagnell's work on the incidence and duration of episodes of mental illness in a total population. This study, which is based on the now legendary Lund survey started by Essen-Möller in 1947, demonstrates, among other things, the episodic nature of manifestations of neurotic illness.

The large contribution by British workers bears witness to the wisdom of the policy which in the 1950s led the Medical Research Council to concentrate a good deal of its resources in this area.

Altogether an excellent volume produced with exemplary speed. It deserves to have the widest circulation among psychiatrists of every kind.

REYMOND LÉVY

INTERNATIONAL CONGRESSES OF TRAFFIC MEDICINE, CLINICAL TOXICOLOGY, AND DRUG ABUSE AND ADDICTION (including some neurological aspects) 11-16 September 1972, Paris. Details from Dr. de Kearney, Institut de Médecine du Trafic, Faculté de Médecine, 15, rue de l'Ecole-de-Médecine, 75-Paris 6e, France.