

## Book reviews

**NEUROSURGICAL TECHNIQUES** By Alfonso Asenjo. Revised and enlarged English Edition. (Pp. xvii + 339; 301 figs; illustrated. \$19.75.) Springfield, Ill.: Charles C. Thomas. 1963.

So many textbooks in these days are written in such a stilted style and with so much obscurity of language that it is a positive relief to read this book which is clear and simple. Professor Asenjo has developed neurosurgery on the west coast of South America and, in fact, his pupils have spread widely throughout the world. Only a few months ago when visiting Afghanistan I discovered two budding neurosurgeons about to set off to Santiago, Chile. This book sets out in a direct and personal way the practice of operative surgery at his Institute. The descriptions of operative techniques relate strictly to his practice and no attempt is made in general to give alternative methods. This is all to the good and on the few occasions when reference is made to techniques not commonly used in his clinic these appear very dull beside the forthright descriptions of operations in common use there.

In writing such a book it must be extremely difficult to separate operative technique from the indications for such technique and the clinical complications. In most cases he has not solved this difficulty and the scraps of clinical information scattered throughout the text are sometimes too short to be useful and seldom give one a clear idea of the indications for certain operations.

There is considerable unevenness in emphasis; for example, several pages are devoted to various injections of peripheral trigeminal branches, a procedure largely abandoned in Europe, whilst the surgery of brain abscesses is dismissed in a few lines. In general, however, the field is well covered and a special point is made of the basic methods of neurosurgery, techniques for dealing with scalp, skull, meninges, and brain.

It must be very largely a tribute to Harvey Cushing that the descriptions given here of most operative procedures accord so closely with those in general use throughout the world and I could find only very minor points of disagreement, for instance burr holes for ventriculography only 3 cm. above theinion are too low and likely to damage the visual pathways, and no mention is made of rib or iliac crest autografts for skull repair. There are certain glaring errors; few of us will have seen an aneurysm, 10 cm. diameter, which was accessible and easily dissected, and the advice when operating on aneurysms that should bleeding become uncontrollable operation should be deferred to a later date might lead to disaster. These errors are few, however, unlikely to mislead and will, no doubt, be corrected in later editions.

The failures in this book are those subjects where no clear line of operative treatment can be laid down but must depend on appearances and investigations carried out at the time of operation. This applies particularly to surgery for epilepsy and to stereotactic surgery. In neither case are the descriptions clear enough or full enough to

guide the novice. In stereotactic surgery he might have been wiser to give a really full and clear description of his own apparatus rather than a scrappy survey of several machines none of which would be very helpful in practice.

Head trauma, operations for neuralgia, and on the spine are particularly well done and contain many of those practical tips, learnt by long experience and which so seldom appear in books on operative surgery.

Despite minor criticisms this book is a splendid one and one that has been much needed in the past. Every embryo neurosurgeon should have a copy and all of us will learn something from it. The standard of English is so good that one hopes the translator will have a special mention on the title page in future editions.

BRODIE HUGHES

**BIOPOTENTIALS OF CEREBRAL HEMISPHERES IN BRAIN TUMOURS** By N. P. Bekhtereva. Translated from Russian by Basil Haigh. (The International Behavioral Sciences Series.) (Pp. viii + 183; illustrated. \$12.50.) New York: Consultants Bureau. 1962.

This is an English translation of a Russian monograph published in 1960 and describes the author's extensive experience with the E.E.G. investigation of supratentorial tumours at the A. L. Polenov Leningrad Neurosurgical Research Institute. It deals with routine and special diagnostic E.E.G. procedures, including corticography and encephaloscropy, and it refers especially to the use of stimulation techniques with light and sound. The findings and associated general physiological problems and theories are discussed in relation to both the western and Russian literature. For the clinical neurophysiologist this book provides a valuable review of Russian E.E.G. work as well as detailed information about the diagnosis of tumours and the fundamental physiological problems involved, *e.g.*, pacemaker and synchronizing mechanisms. Unfortunately in the translation the wording is at times unusual but the many illustrations are clear. This is a worthwhile contribution to English E.E.G. literature.

E. W. POOLE

**SELECTIVE VULNERABILITY OF THE BRAIN IN HYPOXAEMIA** A symposium organized by the Council for International Organizations of Medical Sciences. (Pp. xii + 395; illustrated. 70s.) Oxford: Blackwell Scientific Publications. 1963.

Hypoxaemia of the brain is increasingly important, for with improved methods of resuscitation increasing numbers of patients are kept alive after hypoxaemia, due either to reduced arterial PO<sub>2</sub> or to interruption of the blood supply to the brain. At the symposium on which this book is based experts in various fields discussed factors involved in such brain injuries, both in experimental animals and in man. Among other topics they discuss the effect of hypoxia on cerebral blood flow, on

ionic balance in the brain, and on the blood-brain barrier. They also discuss the effects of hypercapnia, carbon monoxide, cyanide and other poisons, and (oddly in view of the title) hyperoxia. The selective vulnerability of different parts of the brain may be due to difference in blood supply of the different parts in relation to their different metabolic needs. An illustration of the importance of individual, probably metabolic, factors is the selective death in hypoxia of Purkinje cells scattered throughout wide areas of cerebellum which otherwise survive. The brain may swell after hypoxia and this may itself cause lesions by compressing arteries or veins. The pathological reactions to hypoxia take time to develop, and this fact may be related to the well-established clinical phenomenon that a patient who has been hypoxic may first recover substantially and then a few or many days later relapse. The use or avoidance of various types of treatment such as hypothermia, corticoids, and intravenous urea is largely based on the view taken of the important pathological processes. Anyone concerned in treating patients of this type will be interested to read this authoritative account of current knowledge and outstanding problems.

J. M. K. SPALDING

**SUBSTANCES PRODUCING PAIN AND ITCH** By C. A. Keele and Desiree Armstrong. (Pp. 399; illustrated. 55s.) London: Edward Arnold (Publishers) Ltd.

The literature on substances producing pain is now very large. Dr. Keele and his colleagues have contributed much to the subject. It is therefore appropriate that he should produce this monograph. It is a comprehensive review of the peripheral chemical mechanisms in pain production, with a full and particularly useful bibliography. Some consideration is also given to the part played by peripheral nerves and their endings and the interrelations of these with chemical pain producers. Central pain and its mechanisms is not considered.

Having reviewed the experimental and pharmacological evidence in detail and with thorough critical discussion, the authors mention briefly some clinical conditions associated with pain and discuss the possible role of the factors elucidated by laboratory work. Here the authors are perhaps less critical than they might be of clinical 'facts'. Nevertheless clinicians will find these chapters of special interest. Indeed the whole volume cannot fail to be interesting and important for all those who have to deal with pain and particularly for those who try to investigate it in the clinical setting.

C. W. M. WHITTY

**SEROLOGICAL FRACTIONS IN SCHIZOPHRENIA** Edited by Robert G. Heath. (Pp. xiv + 239; illustrated. 56s.) London: Harper & Row, Ltd. 1963.

Taraxein, isolated in 1955 by Heath and his colleagues at Tulane University, New Orleans, from the serum of schizophrenic patients, has led a precarious life since then. Its existence has been questioned, and its effects denied. Heath injected it intravenously into monkeys and observed profound changes in behaviour as well as electrical changes in the brain similar to those observed in schizophrenic patients; he then administered it to prisoners in the local gaol who volunteered to submit to the experi-

ment, and reported that they developed characteristic symptoms of schizophrenia. Other psychiatrists repeated these investigations and obtained negative results. Heath attributed this to the instability of taraxein. In 1959 Kety wrote a survey of biochemical theories of schizophrenia which included a balanced but damaging statement on the weakness of Heath's claims. Others, however, in Detroit, Stockholm, and elsewhere produced more favourable findings. A symposium was held at New Orleans in 1961 at which the current status of the problem was reviewed, almost entirely from a favourable standpoint. In this book reporting the symposium there are four sections, dealing respectively with fractionation procedures, animal assays, mode of action, and clinical studies. The first of these sections is at this stage the crucial one. It seems clear that a variety of fractionation methods is in use for the separation of a protein which when injected can disturb the behaviour of experimental animals. The chemical nature of the substances thus separated is uncertain. Hoagland and his associates at Worcester put the matter cautiously in one of the contributions to the symposium: 'an abnormality exists in the globulin portion of the plasma proteins of schizophrenics, but it has not been determined whether this is due to the presence of a new protein or to the increased amount of a naturally occurring plasma protein. Nor has it been proved whether the abnormality is causally related to the disease or an incidental by-product of it.' To the subject, thus properly left *sub judice*, the papers in the symposium are a useful background.

**RECENT ADVANCES IN BIOLOGICAL PSYCHIATRY.** Vol. 5. Edited by Joseph Wortis (Pp. xiii + 380; 96 figures. \$13.50.) New York: Plenum Press, Inc. 1963.

It is widely (and correctly) believed that psychiatry in the United States is dominated by psychoanalytical doctrine, somewhat modified by American pragmatism and the current emphasis on the use of drugs. Nevertheless, there is now much research activity which is concerned with the biological characteristic of mental abnormality, just as there is now much investigation of epidemiological and social aspects. There are two societies explicitly devoted to such studies: the Society of Biological Psychiatry and the American Society of Medical Psychiatry. At the seventeenth annual meeting of the former of these societies a number of papers, many of them embodying previously unpublished work, were read and are reproduced here. They indicate a vigorous effort at biochemical and clinical study of mental disorder and the mode of action of reserpine, mono-amine oxidase inhibitors, and psychotomimetic drugs. The majority of these studies are sober and restrained; the Academic Lecture, however, which was delivered by Professor Cazzullo of Milan, was rather sweeping in its claims.

The special subject dealt with at the meeting was anomalies of development. Here, as in the metabolic studies, animal experiments were reported, as well as laboratory and clinical observations on human beings. Many of the papers dealt with the interplay between the foetus or the neonate and its mother: there was a refreshing absence of speculation about the psychological happenings in the baby's mind. Although the findings in a