Book reviews

STROKES DUE TO VERTEBRO-BASILAR DISEASE By Carlo Loeb and J. S. Meyer. (Pp. xix + 307; 51 figures. \$15.75.) Springfield, Illinois: Charles C. Thomas. 1965.

This well-produced book is the result of a happy partnership between two authorities on cerebrovascular disease, Professor Loeb of the University of Genoa and Dr. Meyer of Wayne University, Detroit.

After a description of the embryology, anatomy, and physiology of the hindbrain circulation the authors attack the old eponymous terminology of hindbrain lesions and suggest simpler descriptions of segmental syndromes, based on clinical experience and necropsy studies. They point out which lesions are common and which are rare, which are usually produced by infarction and which by haemorrhage or tumour, and they show how difficult it is to correlate the brain lesion with the underlying vascular abnormality.

The chapter on cerebrovascular insufficiency is less satisfactory owing to confusing terminology. Single episodes occurring at long intervals are defined as transient ischaemic attacks and frequently recurring episodes as intermittent ischaemic attacks. Many would reverse these definitions. On page 137 both of these types are considered an important warning of strokes but are said to have different prognostic implications on page 155. The authors rightly point out that the former are more usual in the carotid distribution and the latter in the vertebrobasilar. The pathogenesis of infarction is well described and the authors sensibly observe that intracerebral arterial disease and thrombosis is the major cause, although extracranial disease is often present and is accepted as aetiological in cerebrovascular insufficiency.

An excellent chapter on hindbrain haemorrhage is followed by an account of arteriographic techniques and two short chapters on treatment. Perhaps the number of indications for surgery in vertebrobasilar disease is a little surprising, but the authors point out that these must await the test of time.

Although a first class reference, the book is not one to read straight through. The style is somewhat repetitive and factual and the habit of quoting all the authors' names in the text of any reference, even to the single anecdotal type of case, becomes irritating when the reader finds 41 names in 12 lines of text (p. 177). The uneven writing is exemplified by the fact that all medical and surgical treatment is dealt with in 16 pages out of 307, whereas the references occupy 38.

These imperfections are small compared with the value of this book which describes fully the vast amount of work which these distinguished authors have done on vascular disorders of the hindbrain, and it will undoubtedly take its place as the most complete account of circulatory disorders of the hindbrain.

A. BARHAM CARTER

CEREBRAL VASCULAR DISEASE Edited by R. G. Siekert and J. P. Whisnant. (Pp. xi + 276; 132 figures. \$6.50.) New York: Grune & Stratton. 1965.

This book contains a verbatim account of the fourth Princeton Conference on Cerebral Vascular Diseases held in January 1964 with Dr. Clark Milliken as chairman. The Princeton conference has been held about every three years since 1954 and has become famous for its clear expositions and stimulating discussions of advances in pathophysiology, investigation, and treatment, collecting as it does most of the American and a few European authorities on this subject. The fourth conference concentrated on occlusive cerebrovascular disease with studies of cerebral blood flow, techniques and complications of angiography, effects of hyperbaric oxygen on cerebral hypoxia, and the pathogenesis of arterial degeneration. In addition there was a special study of the 'subclavian steal' syndrome, a review of current therapeutic agents used for cerebral ischaemia and infarction, and a speculative survey of factors influencing thrombosis.

Each study was introduced by two or three formal papers followed by a commentary and free discussion. This produced many lively, stimulating and constructive exchanges as the reviewer knows from previous conferences, but these tend in print to be repetitive and reminiscent so that more drastic pruning of the discussion would be desirable.

The standard is well up to the earlier conferences, and the technical advances in American research, supported by generous financial grants, must make European colleagues envious. Subtraction techniques in angiography, the use of electrical output flow transducers and of diffusible radioactive indicators such as Krypton⁸⁵ for measuring regional cerebral blood flow suggest that American doctors are wisely bringing in non-medical experts from the fields of engineering, physics, and electromagnetics to help to raise their standards of scientific investigation.

It is interesting to observe some changes of enthusiasms. Fibrinolysin therapy seems to have been dangerous and of little value; anticoagulants were useful in transient cerebral ischaemia and progressing stroke but except in one centre were abandoned after completed stroke. Surgeons seem to be hesitating a little, as the surgical risk for death or worsening was 17.5% and the follow-up has been too short to judge the results, although in one group of 154 patients only one-third were relieved of all symptoms and one fifth improved—not very encouraging.

One of the most interesting studies was of the use of hyperbaric oxygen for cerebral anoxia using 2 atmospheres above normal oxygen tension. It was noted that caution is needed in treating cerebral hypoxia by this method as oxygen at this tension is poison to cells and