Book reviews

CEREBRAL BLOOD FLOW Edited by M. Brock, C. Fieschi, D. H. Ingvar, N. A. Lassen, and K. Schurmamm. (Pp. xx + 291; 113 figures; DM 58). Springer: Berlin. 1970. Measurement of the cerebral blood flow using isotope techniques is a field in which European centres have held the lead since their introduction by Lassen and Ingvar and by Harper exactly 10 years ago. Conferences at which the initiated argue out methodological controversies have been held with increasing frequency in recent years and are attended by steadily increasing numbers of participants. It must be admitted that the clinical yield from all this activity has remained somewhat meagre and the techniques are still confined to the relatively few clinics which have built up the necessary teams to carry out these studies. However, at the Mainz symposium in April 1969, of which this is the report, a real attempt was made to emphasize the clinical application and 60 of the 100 papers in this volume are based on data obtained from man.

The papers are grouped into seven chapters at the end of each of which there is a useful summary and comment by the chairman of that section of the meeting; and at the end Dr. Seymour Kety and Dr. Niels Lassen each present a rather longer comment, on methodology and on clinical application respectively. The chapters include ones on cerebrovascular disease, on carotid surgery, on tumours and intracranial pressure, on trauma, coma and dementia and on anaesthesia and hyperventilation therapy. The book is well produced, just the right amount of illustration, and not too many references. Many of the papers are very short, presenting summarized data and conclusions without the tedium of methods or reviews of the literature. Although the conference was primarily for an exchange of information between experts, the book provides a good introduction to the field, directing the newcomer’s attention to the many possible fields of application of these techniques. If clinical management is not yet greatly influenced by the cerebral blood flow findings, it seems likely from the information presented here that that situation will not obtain for long. It is clear that brain damage of many kinds causes focal circulatory changes, both in flow at rest and in the reactivity of the blood vessels to changing circumstances—such as intracranial pressure, PaO₂, PaCO₂, blood pressure, and the like. Knowledge of the state of the cerebral circulation in various clinical situations may well lead the clinician to seek for means of improving situations about which hitherto he has only had retrospective information from the pathologist.

BRYAN JENNETT


In the preface to the first edition, Dr. Manter presented the aims of his book. . . . 'This book has been written with the object of providing a short but comprehensive survey of the human nervous system. . . . To suit the needs of the medical student, or the physician who wishes to review the nervous system efficiently, basic information is presented in concise form . . . .' Dr. Gatz also states his intention to preserve the objectives of the late Dr. Manter, and it was, therefore, with some anticipation that the reviewer opened this rare example of North American economy of words. Nor was he disappointed.

Description of the nervous system and the CSF has been divided into 24 chapters, most of which take a particular disorder of nervous system function or structure on which to hinge a discussion of the relevant anatomy and physiology. By and large, this works remarkably well. The text is illustrated by black and white drawings, which are very descriptive and as clear as this technique allows, and there is a useful index.

The discussion of clinical signs and symptoms is quite good, and the main features of the neuroanatomy of the nervous system, though over-simplified, are well presented. The physiology of the nervous system suffers most from the concise presentation, and is, at best, a primitive commentary.

Dr. Gatz mostly writes a precise account of his topics, no doubt reflecting his profession as an anatomist. However, his use of the term 'suppression' as synonymous with 'inhibition' is a serious slip from the straight and narrow.

Within the limitation of size, this small paperback will serve a useful function to medical students and others in the way Dr. Manter originally visualized. Considering its presentation, however, it is rather expensive.

GEOFFREY RUSHWORTH


This book, which is basically an atlas, is a fundamental and painstaking study which will almost certainly become a standard reference. It contains much more information that its title might suggest as 'the newborn' includes immature infants as well as the term infant; the former are divided into four groups with a range of birth weight from 740 g to 2,460 g. The various patterns of myelination encountered in the different groups are concisely and clearly described and correlated with the weight and the degree of development of the infant. The full page low power illustrations of myelin preparations are of excellent quality and, as nuclei can be as clearly identified as myelinated tracts, are a useful adjunct to anatomy in any age group. It is rather surprising that the illustrations at higher magnification in the introductory chapters do not attain nearly the same high quality of reproduction. A final short section dealing with the development of the convolutional pattern is not only beautifully illustrated, but is ample confirmation that the technique described by the authors for fixation of the infant brain should become a standard practice in paediatric pathology.

As Orville Bailey states in the foreword, it is sad that