

BOOK REVIEWS

PHYSICS APPLIED TO ANAESTHESIA. D.W. HILL. Woburn, Mass., Butterworth, 4th Edition, 1980. Price \$52.95 (U.S.)

THIS TEXT has become a standard reference for the physical basis of much of anaesthetic and intensive care practice. Now in its 4th edition, it has continued to provide an up to date account of information for the prospective Fellowship candidate and practicing anaesthetist alike. Dr. Hill has managed throughout the various editions to present clearly the important principles of physics. This latest edition, at 484 pages, is some 73 pages longer than its predecessor. This was necessitated by the more widespread use of computer technology and the development of new anaesthetic equipment. The layout of the text in 12 chapters is the same as in previous editions, although almost all have been revised including citation of new references. The overall standard of this text is very high and deals with topics in a way which might have proved burdensome to the reader who is not versed in mathematics or physics but which, on the contrary, is almost effortless. The SI system of units is used throughout the book although equivalents in earlier units are also provided.

In the Foreword to the 1st edition, originally published in 1967, Professor J.P. Payne stated that "Dr. Hill's book is opportune". It is to the author's credit that his new edition continues to be opportune and to meet the needs of the specialty of anaesthesia for an authoritative text on physics and measurement.

J.B. FORREST

ANAESTHETIC IMPLICATIONS OF CONGENITAL ANOMALIES IN CHILDREN. LINDA C. STEHLING, M.D. AND HOWARD L. ZAUDER, M.D., Ph.D. New York, Appleton-Century-Crofts (1980). Price \$18.50 (U.S.)

ABOUT FOUR PERCENT of infants have congenital abnormalities, many of which are amenable to corrective surgery. Anaesthesia for some of these procedures is notoriously hazardous and indeed Professor Warkany in his Foreword suggests that anaesthesia for the child with congenital malformations is a specialty of its own.

This excellent book by Stehling & Zauder is a multi-author manual designed to help the anaesthesiologist in the management of these cases. The fifteen contributors, all from North America, are well known authorities in the fields of paediatrics and paediatric anaesthesia.

The early chapters discuss the anaesthesiologist's role and review a number of structural malformations of potential significance during anaesthesia. It is emphasized that malformations appear in aggregates – the presence of one anomaly should prompt the search for others. In many instances an increased anaesthetic risk is associated with a co-existing anomaly rather than the one for which surgery is being performed. For example hypoplasia of the odontoid process (with consequent danger of cervical vertebral subluxation during tracheal intubation) is a feature of nine recognisable malformation syndromes.

Neonatal physiology, pharmacology and monitoring are well covered. Management of the patients is discussed in a series of chapters devoted to the organ system involved and the surgical sub-specialty, namely, general surgery, neurosurgery, head and neck anomalies (including the cranio-facial dysostoses), genito-urinary surgery and orthopaedics. The authors have wisely refrained from any detailed discussion of cardiac surgery – a large subject with an extensive literature.

A final chapter discusses ambulatory surgery. It is particularly helpful in guiding the clinician in the important decision of whether or not to accept patients with congenital anomalies for ambulatory care.

The book is well produced and contains abundant references.

J.E.S. RELTON

PRACTICAL POINTS IN ANESTHESIOLOGY. DAVID C.C. STARK, M.D., Garden City, New York, Medical Examination Publishing Co., Inc., 2nd edition, 1980. Price: \$13.50 (U.S.)

THIS VOLUME follows the first edition by 5 years and continues the original format of 10 general chapters on sequential examination of the anaesthesia process, followed by 19 chapters on speci-

fic problems in surgical specialties. The preface opens inauspiciously with a reference to "Principles" of safety, but quickly reassures with the timeless statement, "whatever technological advances come in the future to ease the task of data collection, they will not supplant the need for attention to detail, close observation of the patient and the adequate delivery of oxygen to the tissues".

In the general section on preoperative examination, airway control, monitoring, emergence, and regional anaesthesia, a clear and simple account of what to do is given, unsupported by diagrams or pictures. The statement that spinal anaesthesia is the first choice for transurethral prostatectomy is valid and refreshing in a time of great medicolegal activity. Vomiting or regurgitation with airway contamination is described as the commonest catastrophe in anaesthesia. Disorders of airway and of gas exchange in the lung seem more common in this country. The chapters on anaesthesia for specific procedures outline adequately the precautions, complications, and recommended techniques for common operations. These are the outcome of experience and require no references. This text may be recommended to the anaesthetist in early residency for a survey of modern safe practices in anaesthesia.

A.J. DUNN

EPIDURAL ANALGESIA IN OBSTETRICS. (A Second Symposium.) ANDREW DOUGHTY, M.B., Editor. London, Lloyd-Luke (Medical Books) Ltd., 1980. Price £7.50.

THIS VOLUME is the record of a symposium held by the British Obstetric Anaesthetists' Association in 1979. The symposium was a follow-up to the one held in 1971 when epidural analgesia for obstetrics was in its infancy in Britain. This book, therefore, is based primarily upon practice in Britain and the quality of contributions varies widely. They range from anecdotal descriptions of clinical practice to summaries of some recent research. This book does give some idea of the status of epidural analgesia in obstetrics as practiced today in Britain, but it is difficult to recommend it as a relevant reference book for anaesthetists in Canada.

D.H. MORISON

MOLECULAR MECHANISMS OF ANESTHESIA: Progress in Anesthesiology, Vol. 2. B. RAYMOND FINK, Editor. New York, Raven Press Medical and Scientific Publishers, 1980. Price \$48.50 (U.S.).

THIS MULTIAUTHOR TEXT reports the proceedings of the Second International Research Conference on Molecular Mechanisms of Anesthesia, June 14-16, 1979, held at the University of Washington, Seattle. The general headings include electrophysiology, neurochemistry, physical chemistry, and a summary of poster presentations. The difficulty in this text is a function of the fact that 55 papers have been selected to cover the area of molecular mechanisms and this results in a multitude of rather disconnected chapters. No doubt, for those fortunate enough to have participated in the meeting, the text adequately summarizes what was presented. As a source of information on current progress in elucidation of basic molecular mechanisms of anaesthesia it is fairly comprehensive, although one suspects that the interested reader will prefer original published papers. As is often the case with texts of this type, the reporting of discussions after each presentation is most enlightening and, although edited in the present volume, they still make worthwhile reading.

The biggest single topic which the organisers have neglected to address is that of neuroregulation by endogenous opioids. To have omitted consideration of what is widely perceived as the major breakthrough of the decade on the molecular mechanisms of pain and neuromodulation makes one hesitate to recommend this text. Nevertheless, the papers on the chemistry and thermodynamics of membranes and on the alterations to sodium channels are especially well written and provide a very useful review suitable for a general readership.

J.B. FORREST

AIDS TO ANAESTHESIA. M.J. HARRISON, T.E.J. HEALY, J.A. THORNTON. Toronto, Academic Press Canada, 1980. Price: \$18.75

AN 'AIDE-MEMOIRE', which is what this book claims to be, is "a manual of formulae, etc. to serve as an aide to the memory" (Oxford Dictionary). Unfortunately it fails in this regard. It does not serve as an aide to the memory; rather it presents as a "book of notes" compiled from some unknown source. This lack of reference to

source documentation is perhaps the weakest aspect of the book. As a result it is difficult to assess its true value. This difficulty is further compounded by the factual deficiencies which are present. Some are clearly errors; others perhaps a mere lack of clarity: whatever, they are an irritation which drives one to the "other larger

texts" noted in the preface. That the authors have not "included all the knowledge required for the examination" leaves the reviewer in no doubt. The student should go to the larger texts, the state-of-the-art reviews and papers; he should compile his own notes, his own 'aide-memoire'.

CHARLES E. HOPE