

BOOK REVIEWS

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Automatic Ventilation of the Lungs. Third edition. BY WILLIAM W. MUSHIN, L. RENDELL-BAKER, PETER W. THOMPSON, AND W. W. MAPELSON. London, Blackwell Scientific Publications, 1980. Pages: 887. Price: \$103.00.

This is the third edition of a comprehensive, authoritative, up-to-date book dealing with automatic ventilation of the lungs. The authors have organized the book in such a manner that the physiologic, clinical, and engineering considerations given to ventilators, as well as a historical perspective, are discussed in the early chapters. These chapters give insight into the problems with operation, control, applications, laboratory testing, the current philosophy of design, and the history of modern-day ventilators. This discussion is followed by a number of chapters devoted to the individual operations and applications of a significant number of ventilators. The book also has appendices containing current definitions of terminology, acronyms, and a list of manufacturers.

Many chapters found in the second edition have been revised. An example is the addition to the historical background of a discussion of fluidics technology. This particular chapter contains an excellent description of the history of fluidic technology and its application to ventilator control. This discussion is quite complete, and this is one of the few books that correctly distinguishes between the terminology of fluidics and fluierics. Each chapter that discusses ventilators presents pictures, schematics, brief descriptions, and functional analyses of the devices. The operational features presented for each particular ventilator are typical features many of us have experienced in the application of these devices.

The book is very clearly written, well illustrated, and well referenced. It is necessary reading for all clinicians concerned with artificial ventilation of patients in the operating room, intensive care areas, or emergency rooms. All medical, anesthesiology and intensive care libraries should have this book. It is directly applicable to instruction of residents of various disciplines with a "need to know" about ventilators.

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Self-Assessment of Current Knowledge in Anesthesiology. Second edition. BY DAVID L. TRICKEY AND ASSOCIATE CONTRIBUTOR FARHAN SHEIKH. Garden City, New Jersey, Medical Examination Publishing Company, Inc., 1980. Pages: 200. Price: \$14.00.

This book contains 807 multiple-choice questions with answers referenced to current anesthesiology journals and texts. Seven major areas of anesthesiology (outlined in the table of contents) have been developed as questions. These are expanded to include intravenous and general anesthesia, obstetric, regional and neonatal anesthesia, hepatic and renal physiology, medicine and anesthetic metabolism, neurosurgical and hypertensive anesthesia, neuromuscular blocking agents, pulmonary medicine and anesthesia, shock, general medicine, physiology and pharmacology, cardiology and cardiothoracic anesthesia. In addition to factual information ex-

tracted from various journal articles, case histories dealing with many clinical problems are presented.

As stated by the authors, "The purpose of this text is to stimulate the reader to test his knowledge of recent developments in anesthesia. The reader should not be alarmed at how many of these questions he may answer incorrectly, for the aim is not to achieve a high score, but to learn and keep abreast of the ongoing advances in this field."

The authors do meet this objective. Many of the questions are stimulating and are well written. However, as in all books dealing with questions, some appear to be ambiguous, and it is difficult to understand the exact intention. However, the book is enjoyable and recommended for anesthesiologists interested in evaluating and assessing their understanding of current literature. It is easy to read and does not require a significant amount of time from a busy schedule to complete.

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Anesthetic Considerations for Pediatric Cardiac Surgery (International Anesthesiology Clinics). EDITED BY PAUL A. RADNAY AND HIDEO NAGASHIMA. Boston, Little, Brown, Spring 1980. Pages: 240.

This book of 14 chapters contains both practice and theory concerning preoperative assessment and management, intraoperative management, and postoperative care, as each relates to the pediatric cardiac patient. Included are separate chapters on cardiopulmonary bypass and hypothermia. Of 18 contributing authors, nine are faculty members of the Albert Einstein College of Medicine. While most of the writers are anesthesiologists, several pediatric cardiologists provide valuable chapters.

Following a brief introductory historical review, an early chapter deals extensively with pathophysiologic features of both common and uncommon congenital cardiac lesions. When combined with a chapter on cardiac catheterization, a framework is provided for solid assessment of the preoperative cardiovascular status. Several chapters then address anesthetic management of cardiac catheterization and surgery of the heart or great vessels with and without bypass. These vary in format from detailed presentation of individual approaches supported by their rationales to a less formal approach with practical hints for management. Many will disagree with some of the concepts presented, *e.g.*, the inclusion of ketamine in a discussion of sedatives and a discussion of acceptable arterial oxygen tensions in premature infants. A concise chapter summarizes means of production of, as well as the pathophysiology of, hypothermia. Considerable overlap occurs in two chapters concerning arrhythmias, although their perspectives are quite different. Finally, postoperative complications are discussed by authors from a single institution and are well done.

Do not mistake this for a cookbook of anesthetic techniques in pediatric cardiac surgery. Rather, its intent, as its title suggests, is to

present pathophysiology, pharmacology, the interplay of pharmacology and pathophysiology, and applications of respiratory care and circulatory support. Unfortunately, many of the references cited pertain to adult studies, a reflection on the dearth of hard data dealing with desperately ill neonates and small infants. Most references are recent. A few of the chapters would have benefited greatly from appropriate pictorial illustrations.

This book will probably appeal most to anesthesia residents desiring further insight into pediatric cardiac anesthesia. In addition, chapters on preoperative assessment and postoperative complications will be useful to those in pediatric intensive care.

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Illustrated Handbook in Local Anesthesia. EDITED BY E. ERIKSSON. Philadelphia, W. B. Saunders, 1980. Pages: 153. Price: \$37.50.

The objective of this book, as stated by the editor in the preface, is to "give an easily accessible general view of the field of usefulness of local anesthesia, while laying great stress on visually illustrating each procedure." Additionally, the preface states, "in this second edition of the book we have added *chapters* on local anesthesia in different types of endoscopy since this has proven to be an important indication for the use of local anesthesia." The book in general terms fulfills its stated objective. The only "chapter" regarding endoscopy is a section on "local anesthesia for arthroscopy," and therefore the last statement of the preface is misleading.

The strong point of this book (as a supplement to larger, more definitive texts) is the excellent full-color anatomic drawings and photographs. These drawings and photographs are so superior that they, themselves, could serve as a manual of sorts (accompanied by legends).

The text (copy) of this book is sorely lacking in this reviewer's estimation. The theoretical discussions are superficial and frequently without documentation. The authors seem to be very fond of prilocaine as a local anesthetic. I presume this drug is currently popular in Sweden, but to the best of my knowledge, it is not commonly used in the United States. The depiction of home-made trays for the performance of spinal and epidural anesthesia also represents a strong European influence. Certain ideas are perpetuated by the editor that may not have a great deal of basis in fact, such as applying a tourniquet to the arm to prevent distal spread of local anesthetic solution during an axillary block.

The high cost of this book (\$37.50) is no doubt a result of the many full-color illustrations that appear. It certainly is the illustrations that one is paying for and not the text. Thus, the purchaser must decide whether the illustrations are worth the price. Nevertheless, this book represents a useful addition to the library of practitioners interested in regional anesthesia.

There are very few differences between this second edition and the first edition, and I would not advise exchanging the old edition for the new. All in all, if one wishes to spend \$37.50 for some very nice anatomic drawings, this book will suffice nicely.

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Key Words in Anesthesiology. BY NICHOLAS M. GREENE. Baltimore, Williams and Wilkins, 1980. Pages: 57. Price: \$6.95.

For many an anesthesiologist the rationale for the issuance of this little volume, *Key words in Anesthesiology*, may seem enigmatic. However, it is all nicely explained in a lengthy preface by Nicholas M. Greene, author. As the average reader will probably not take the time for enlightenment, further explanation would seem necessary, and I hope this will serve as an enticement as well.

The need to index medical articles for retrieval purposes is said to have originated with John Shaw Billings, Librarian to the U. S. Surgeon-General's Library, when, in 1878, he instituted a catalog of that collection. This was succeeded by the *Index Medicus*, under A.M.A. auspices. No writer or researcher then or now could hope to prepare a bibliography without such sources. Now, as indices have become computerized, the need for key words to reference articles is ever more necessary. And retrieval systems, as in MEDLARS, require further refinement of terminology in this sphere. Publishers, journals, editors and authors have been requested to lighten the task by providing specific key words in relation to material in print. The epitome of this movement is found in MESH (Medical Subject Headings) an annotated list issued annually by the National Medical Library in Bethesda.

This was where Green came in. Once a discerning Editor-in-Chief of ANESTHESIOLOGY, and currently in charge of *Anesthesia and Analgesia*, he felt the need for systematization. Uniformity in any field of endeavor is essential, so he gives us, on the basis of extensive experience, a list of key words in anesthesiology and a second, cross-reference list as well. The scope of anesthesiology is thus starkly defined. Authors should now know how to proceed with their manuscripts, while indices for anesthesia journals and texts ought to be more cogently prepared. But do not overlook the anesthesiologist—man in the street who is zealous and genuinely concerned in continuing education. He can now, on the basis of this offering, erect his own filing and retrieval system. Publishers, editors, and the larger, research-productive anesthesia departments, as well as the loner, are indebted to Professor Greene for his perspicacity and assiduousness in giving us the result of his labors.

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