

Current Practice in Anesthesiology. Second Edition. BY MARK C. ROGERS. St. Louis, Mosby-Year Book, 1990. Pages: 536. Price: \$79.00.

The second edition of *Current Practice in Anesthesiology* is a worthwhile resource that addresses a variety of topics in clinical anesthesia. Fashioned after other texts in the *Current Practice* series by the same publisher, it has characteristics of both a textbook and a monograph on current therapies. As the preface indicates, this edition is greatly enhanced from the first and further develops a useful, interesting description of how experts in their field conduct their practice. There are more than two hundred additional pages, and sections devoted to trauma care and outpatient anesthesia have been added. Ophthalmologic and otolaryngologic anesthesia, previously addressed in the same section of the text, now are substantially revised, and each is addressed in a separate section. The editor and authors have succeeded in their quest to describe current practice, and they plan with each subsequent edition to expand this text.

Previous texts that are highly clinically oriented have followed a case scenario format. This text, however, is not a compilation of case reports. It is a source for rapid acquisition of information regarding a complicated or specific type of anesthetic. Those who are grateful for texts addressing anesthesia for uncommon diseases will appreciate this text for descriptions of current subspecialty care, as well as useful recommendations for preoperative and postoperative care. Intensivists should note that, for the most part, chapters related to intensive care unit management have been deleted since the first edition.

The text is organized into 19 (unnumbered) sections. The first, "Preoperative Considerations," includes chapters on preoperative risk and medications, pulmonology, hypertension, coronary artery disease, geriatric care, endocrine diseases, liver and kidney dysfunction, and neurologic disorders. The chapter "Preoperative Patient Evaluation," though somewhat dogmatic, is practical. The senior author's views are substantiated by references listed in the suggested readings at the end of the chapter. This approach to referencing makes for easier reading than more heavily referenced texts, but it is a disfavor to those seeking substantiation of controversial issues. Chapters on hematology are concise but could be better presented in a separate section devoted to hematologic issues.

The second section, "Anesthesia in Cardiac Surgery," is written by seasoned clinicians as well as those beginning academic careers. This material is appropriate for the anesthesia trainee preparing for a particular case; experienced practitioners of cardiac anesthesia will not find it a detailed update. The chapter on coronary artery disease reiterates anesthetic risk, focusing on cardiac risk, but does not address details of anesthesia for coronary artery surgery. Chapters addressing anesthesia for congenital heart disease are quite instructive, and passages written in the first person give the reader the feeling that he or she is getting first-hand advice.

The third section is devoted to anesthesia for vascular surgery. Its three chapters, on abdominal and thoracic aneurysms and carotid endarterectomy, are brief and address only selected issues. This section is not a comprehensive or complete discussion of vascular surgery.

The fourth section is "Anesthesia for Neurosurgery and Neurological Disorders." A chapter covering anesthesia for electroconvulsive therapy is placed in this section. These chapters are excellent discussions of current therapy.

The fifth section is a series of topics pertinent to anesthesia for orthopedic surgery. The chapter "Kyphoscoliosis" gives opinions on evoked potential monitoring and appropriate anesthesia; although continuous thiopental infusion is feasible under certain circumstances,

I doubt many use this technique recommended by the author. The chapters on upper and lower extremity nerve blocks are fine but could have been made more effective by the use of figures and diagrams. The chapter on hypotensive anesthesia is a concise review by a well-published clinical researcher.

The sixth section, "Anesthesia in Ophthalmology," is highlighted with effective illustrations and includes a chapter devoted to management of the ruptured globe. The author's preference for succinylcholine with pretreatment by nondepolarizing relaxant will be controversial for some readers. Mention of high-dose vecuronium administration for induction balances the discussion; however, this topic should be further elaborated and more extensively referenced.

The seventh section, devoted to pediatrics, is excellent. Again, the reader must accept the premise of the text. This section is not an all-encompassing thesis on pediatric anesthesia care; rather, it comprises a few selected topics. These include anesthesia for congenital defects, bronchopulmonary dysplasia, necrotizing enterocolitis, upper airway infections, and pediatric regional anesthesia and pain management. The illustrations of necrotizing enterocolitis are effective.

The following section is devoted to anesthesia for otolaryngologic procedures. The chapter "Tonsillectomy, Adenoidectomy, and Pressure-Equalizing Tubes" is well written and could be deemed "required reading" for trainees. Indeed, it is worthwhile reading for all clinical anesthesia personnel. In the ninth section, which addresses topics in thoracic surgical anesthesia, the chapter "Endobronchial Intubation" would be more effective if explanatory figures were used. The chapter "Mediastinoscopy and Thoracoscopy" is timely, given renewed interest in thoracoscopy; however, indications for endobronchial intubation for thoracoscopy are not thoroughly addressed. As more lung resections are now undertaken *via* the thoracoscope, development of this topic would be appropriate for future editions. Dr. Benumof's (only) chapter, on unilateral pulmonary lavage, is excellent.

The section on anesthesia for abdominal surgery explains portal hypertension, hepatic resection, and hepatic transplant. The placement of the chapter on pheochromocytoma in this section is awkward. This chapter could have been grouped more appropriately with endocrine-related chapters.

The eleventh section is a discussion of important issues in anesthesia for urologic surgery. The first chapter in the twelfth section, "Anesthesia in Obstetrics," is a good review of physiologic changes of pregnancy and anesthesia for surgery during pregnancy. Pregnancy-induced hypertension, a good discussion, would more appropriately follow (not precede) chapters on anesthesia for vaginal and cesarean birth. The section on neonatal resuscitation is practical and well organized.

The section "Anesthesia for Trauma" includes authoritative and excellent reviews of head and spinal cord trauma authored or coauthored by recognized experts (Elizabeth M. Frost and Maurice S. Albin, respectively). The chapter on chest and cardiac trauma should be expanded in subsequent editions. The chapter on abdominal trauma by Christopher Grande and John Stene is an excellent review.

The fourteenth section provides a good overview of regional anesthesia but is inconsistent with the general premise of the text—to address current practice. These chapters are more compatible with a textbook format.

The fifteenth section, "Pain Management," and the sixteenth section, "Outpatient Anesthesia," are worthwhile and compatible with the intended current practice format. The seventeenth section, "Monitoring Techniques During Anesthesia," is in need of illustrations; it is impossible to explain transesophageal echocardiography effectively without graphic portrayal of cardiac images. Discussions of electrocardiography are rudimentary. This section should be completely revised in

subsequent editions to stay abreast of current technology. The chapter "Clotting Status" should be consolidated into a new section on hematologic issues and renamed "Coagulation Disorders."

The last section, "Postoperative Considerations and Anesthetic Complications," is clinically pertinent but does not adequately address quality assurance or administrative issues of the recovery room. "Data Management," arranged as a final separate section of the text, comprises one final chapter that should instead be included in the section on monitoring. The absence of a section devoted to critical care is disconcerting.

Overall, the text of this book is concise and easy reading on topics that are among the most complex in clinical practice. This book is meant to be neither a basic science text nor a textbook of anesthesia. Rather, it is an update on current practice, and as such will require frequent revision in subsequent editions. This is both an editorial challenge and a necessary service to clinicians. I believe, for this reason, that the text may become a standard reference in community hospital libraries. I certainly recommend this text to residents who are about to perform a specific anesthetic technique or anesthesia for a surgical procedure addressed in the text. Because the complexity of our practice is progressing in each subspecialty area, future editions of *Current Practice in Anesthesiology* may require section editors to continue to provide (as this edition does) precise, well-referenced discussions of important clinical issues.

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Care of the Critically Ill Patient. Second Edition. EDITED BY JACK TINKER AND WARREN M. ZAPOL. New York, Springer-Verlag, 1992. Pages: 1,467. Price: \$148.00.

This book is a comprehensive text designed to systematically explore issues in critical care medicine against a background of applied physiology. It is divided into 12 sections, primarily addressing disorders by organ system. As is often the case with multiauthored texts, some sections are extremely well done, whereas others are not quite as lucid.

The first section is entitled "Applied Physiology." It is probably the best section in the book. Cardiopulmonary physiology, oxygen transport, fluid and electrolyte balance, hemostasis, and acid-base physiology are dealt with in a concise and useful manner. In addition, disorders of physiology, including mediators of lung injury and defense mechanisms against hypoxia, as well as humoral/cell-mediated immunity and the regulation of body temperature are well covered. This particular section of the book is extremely useful to anyone with an interest in critical care medicine and provides an excellent background upon which to build.

Subsequent sections address abnormalities found in the critically ill patient on the basis of organ system. Thus, the cardiovascular system, pulmonary system, renal system, and so forth are topics for separate sections. Whereas some of these sections—for example, abnormalities of the cardiovascular system and hematologic disorders—are extremely well covered, other sections are less complete or not as clear. As an example, sections on the diagnosis and management of pulmonary embolism as well as nutritional failure tend strongly to represent the biases of the individual authors and do not adequately reflect the controversy to be found in the literature.

Although a design based on sections dealing with individual organ system dysfunctions is organizationally useful, it does something of a disservice to critical care medicine. Critical illness involves the interplay of multiple organ systems resulting in dysfunction that frequently is

organism-wide. To attempt to address these issues in terms of dysfunctions within individual organ systems may well foster the notion that the treatment of the critically ill patient is merely the treatment of a number of individual dysfunctions. This is far from the truth. Although dysfunction of an individual organ system may result in critical illness, the pathophysiologic process itself most often results in global abnormalities. To emphasize disorders of heart, lung, blood, and so on is to lose track of the integrated response. To use an analogy, a flat tire that occurs when a car is going 60 miles per hour is going to result in damage that will require a great deal more than patching the hole in the tire. Nonetheless, as a complete review of basic physiology and mechanisms of pathophysiology, this text is extremely useful and very complete.

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Respiratory Physiology in Anesthetic Practice. BY THOMAS J. GAL. Baltimore, Maryland, Williams & Wilkins, 1991. Pages: 221. Price: \$42.00.

As stated by the author in the Preface, the purpose of this book is to "provide the clinician with a concise base of information in a limited range of topics, all of which are relevant to the everyday practice of anesthesiology." Gal has superbly achieved this goal by leading the anesthesiologist from a thoughtful understanding of the respiratory physiology to its immediate applications in clinical practice. The book is divided into four sections, "the content of which was stimulated by questions posed by residents, colleagues, and practitioners," and reviews successively: respiratory mechanics—the respiratory system as an air pump; control of breathing; blood flow and gas exchange; and the physiology of mechanical ventilation and applied airway pressure. Each section presents a summary of basic physiology and a description of the methods used in pulmonary medicine that are directly relevant to anesthetic practice.

The great strength of this book is in its establishment of numerous links between the physiologic concepts and direct clinical application. The effects of anesthetic drugs and techniques on the respiratory system are described. In addition, practical advice is given for the management of intraoperative bronchospasm, chronic obstructive pulmonary disease, restrictive lung disease, obesity, and ventilation in the lateral position. The final part of the book summarizes the basics of mechanical ventilation, describing "conventional ventilation" and such "new" modes of mechanical ventilation as inverse ratio, pressure support, airway pressure release, and high-frequency ventilation. The physiologic effects of increased airway pressure and positive end-expiratory pressure ventilation also are discussed. Cardiorespiratory interactions are presented only as a venous return/cardiac output impairment, not as a potential benefit in patients with left ventricular failure.

Each chapter is followed by key references to facilitate more focused reading. In summary, this clear, concise, and inexpensive book presents in a pleasant format the respiratory physiology essential to all anesthesia care providers.

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