

BOOK REVIEWS

Edward Lowenstein, M.D., Editor

Complications in Anesthesiology. EDITED BY FREDERICK K. ORKIN, LEE H. COOPERMAN. Philadelphia, J. B. Lippincott, 1983. Pages: 765. Price: \$95.00.

Much of the clinical practice of anesthesia focuses on the prevention and treatment of the complications that may ensue from the use of potent drugs, the vulnerable state of our patients, and the patient–equipment interface. To date, no text has been oriented specifically to this aspect of our field. Drs. Orkin and Cooperman have attempted to fill this gap by compiling contributions from 60 respected authors, who report on complications touching on almost every aspect of anesthesia care. Each of the contributors was asked to address a given problem and present information on the etiology, management, and prevention of these complications. For the most part, the authors succeeded in this endeavor.

The text is organized into 13 sections. The first section provides an excellent overview of anesthesia-related complications. Included are chapters by Dr. Keats on the role of anesthesia in surgical mortality, followed by a chapter on epidemiologic methods. Discussion of legal considerations is lacking, and this section would have provided a good forum for such a discussion. The second section consists of a chapter on drug interactions and on the effects of prior drug therapy on anesthesia. The bulk of this chapter is presented in a large table of drug interactions, which could have benefited from more elaboration. Section Three deals with regional anesthesia and is highlighted by superb chapters by Drs. Raj and Winnie on local anesthetic toxicity and a chapter by Dr. Vandam on spinal and epidural anesthesia. The middle sections, four through nine, provide a system oriented approach to complications encompassing respiratory, circulatory, neurologic, renal, gastrointestinal, and hematologic problems. In general, these chapters are quite good. However, certain problems receive more coverage than necessary, while other more pertinent problems are underemphasized. There are entire chapters devoted to trichlorethylene-induced cranial nerve injury and salivary gland enlargement, while pulmonary edema, bronchospasm, and anaphylaxis are discussed only briefly. In the renal section, three consecutive chapters open with discussions of renal concentrating mechanisms, which easily could have been covered just once, yet primary renal oliguria is given less than a page of text. Part Ten on obstetric anesthesia and neonatology opens with an excellent chapter by Dr. Smith on teratogenicity. The final sections cover special techniques, equipment problems, and hazards to the anesthesiologist. Particularly good are the chapters on muscle relaxants by Dr. Katz and the chapter on extracorporeal circulation by Dr. Orkin. Although complications of hemodynamic monitoring are discussed briefly, the book would have been improved by an entire chapter on that subject.

Among the strongest points of this textbook are the extensive current reference lists at the end of each chapter and the complete index. The text is well-edited and relatively free of errors. Overall, in spite of the problems posed by the broad scope of the topic and the multiple author format, the editors have provided a welcome addition to the anesthesia literature.

JOSEPH P. COYLE, M.D.
Staff Anesthesiologist
Naval Hospital
Bethesda, Maryland 20014

To Make the Patient Ready for Anesthesia: Medical Care of the Surgical Patient, Second Edition. EDITED BY LEROY D. VANDAM. Menlo Park, California, Addison-Wesley Publishing, 1984. Pages: 302, hardbound. Price: \$32.50.

This second edition, encouraged by the publisher, takes its cue from the automobile manufacturers: it arrived in November of 1983 bearing a 1984 copyright date. And like new automobiles, it is largely a facelift. The first nine chapters, unaltered in outline, are expanded by the equivalent of but nine new pages. The changes are largely short additions (*e.g.*, ASA Physical Status *vs.* Goldman Class comparisons), deletions of references to paleoanesthetic practice (*e.g.*, diethyl ether, cyclopropane, and Innovar), and minor polishing of spelling and clichés. The approximation of the alveolar air equation has been corrected, the legibility of several tables improved in format, and a few marginal notes changed or deleted (*e.g.*, on Halothane Hepatitis). Most chapters have several recent references from 1979–1982 added. The helpful pagination of subheadings in the contents regrettably has been reduced.

The three new chapters are welcome additions, in the style of, and to the high standards of, the earlier nine chapters. The shortest, on the gastrointestinal system, is if anything too terse and succinct. The major thrust has to do with gastrointestinal bleeding and its cardiovascular consequences. This is not duplicative of Chapter I, The Heart and Circulation, although obviously related. The weakest section is labeled "The Stress Response," which in the author's mind is largely erosion gastritis and ulcer, to be treated with antacids. This could have been an opportunity to flesh out the growing concepts of anesthesia and hormonal reaction to surgical stress not covered in the chapter on endocrinology.

The allergic patient is discussed in a chapter very clinically oriented, addressing care of the asthmatic patient. The detailed algorithm for perioperative care of the asthmatic is a valuable study, contrasting with a brief protocol for anaphylaxis. Basic science aspects of immunology must be sought elsewhere.

The chapter entitled nutritional considerations is, in my view, sufficient justification for a second edition in itself. This discipline is based on much that is so old it is nearly unknown, *e.g.*, the protein sparing effect of a limited glucose supplement. There is a renaissance of surgical interest in nutrition and, for many whose medical education and graduate training overlooked it, here is an excellent introduction that will inform without boring. Aside from the full page devoted to exposition of ASA Physical Status, which is contorted to suggest that a consideration of risk is inappropriate, the chapter is jammed with useful concepts, facts, and therapies.

As in the first edition, the content is overwhelmingly textual, with few tables, fewer equations, and downright scarce illustrations (the chapter on dental and oral surgical problems being a remarkable exception). Minor weaknesses in the first edition persist, in my opinion. The marginal notes are of varying quality and value: most are simply lifted from the text, while some direct the reader to important points. The new section on management of the diabetic stresses avoidance of hypoglycemia rather than "tight control." The section on use and misuse of blood products still reads as if the author has never been closer to an operating room than the transfusion committee reviewing single unit transfusions. He quotes, as an advantage of red blood cell concentrates, the reduction in "potassium load," apparently not understanding that this potassium came from the red cells during cold storage. With warming and energy supplies, potassium will be taken