

BOOK REVIEWS

David E. Longnecker, M.D., Editor

Introduction to Anesthesia: The Principles of Safe Practice 7th edition. EDITED BY DRIPPS, ECKENHOFF, AND VANDAM. Philadelphia, W. B. Saunders Company, 1988. Pages: 499. Price: \$29.00.

While anesthesiology was developing as a medical specialty, Drs. Dripps, Eckenhoff, and Vandam realized that it was necessary to write a textbook as a compilation of the essentials of practice and the "lore of anesthesia" that they had taught to their trainees by word of mouth. What had initially started as a manual for residents and students at the Hospital of the University of Pennsylvania was later published and made available to all. The book and its subsequent revisions became a primer that was used by medical students and residents to learn the basics of anesthesia practice, and by graduating residents during preparation for board exams. Over the 31 years since the publication of the first edition, the quantity of information relevant to the practice of anesthesia has increased exponentially. How have these changes been incorporated into the current version?

The overall organization of the seventh edition is similar to its predecessor. The first section addresses the broad scope of the specialty of anesthesiology. Preanesthetic considerations, pharmacologic principles, patient monitoring, and the anesthesia machine and record are covered in the next section. Chapters on inhalation and intravenous anesthetic agents and techniques, regional anesthesia, and subspecialties such as obstetric and pediatric anesthesia are found in the third section. The final group of chapters is devoted to cardiopulmonary resuscitation, the postoperative period, respiratory care, and pulmonary physiotherapy.

The changing practice of anesthesia has resulted in an alteration in content and a shift in the emphasis given to some subjects. A whole chapter is now devoted to opioids, while the chapter on electrical hazards, fires, and explosions has been eliminated and a condensation of the material has been inserted in the coverage of monitors. It is surprising that, with the current interest in AIDS and nosocomial infections, a one-page summary replaced the former chapter on the anesthetist's role in the control of infection. An appendix has been added that lists subjects, techniques, apparatus, anesthetics, and other drugs that are now of only historical interest and are no longer included in the book.

Over the years, there has been a gradual change in the authorship of the chapters, although some are still prepared by the surviving editors. The overwhelming majority are now contributed by faculty at Northwestern University Medical School. A few are written by non-anesthesiologists. As with many multiauthored texts, there are inconsistencies in the quality and focus of the sections. Some chapters contain excellent presentations. The coverage of pharmacologic principles includes a good review of drug interactions of interest to anesthesiologists. In the chapter on monitoring, each section appropriately begins with a description of the use of the anesthetist's five basic senses for patient assessment. The physiology necessary for understanding the clinical use of neuromuscular blocking agents is well presented. The material on the uptake and distribution of inhalation anesthetics and the techniques for their administration is clear and readable. There are other chapters, such as the one on blood component therapy, that contain more detailed information than is warranted in an introductory text. Finally, the editors demonstrate uncertainties about the audience for the book as evidenced by the consistent use of the term "anesthetist" in the chapters relating to the practice of anesthesia. For example, it is stated that "all patients should be seen by an anesthetist before operation." This may be confusing to residents who are taught that anesthesia is the practice of medicine and that preoperative patient evaluation and care are part of the duty of a physician.

The multiauthored format has resulted in a lack of continuity of information between some chapters. As an example, in the discussion on monitoring, the need for the continual measurement of inspired oxygen concentration is stressed and the use of the pulse oximeter and capnometer are encouraged. No mention is made of these devices or the need to chart measurements from them in the chapter on the anesthetic record.

Throughout the book, tables, graphs, and line drawings are liberally used to aid comprehension. The majority of these are well constructed and enhance the content of the text. Occasionally, graphic representation of data from specific studies are used without a sufficient explanation of the experimental protocol to allow someone unfamiliar with the work to understand its significance.

The editors have chosen to list historical and current references at the conclusion of each chapter, but fail to give citations of the specific works in the text. This format makes it difficult for the reader to consult the original article for additional information.

In the three decades since the original edition of this book was first published, numerous other textbooks have become available to trainees and practitioners. Where does the most recent edition of this classic text fit in the current scene? The manual, originally written to codify the principles of safe practice, has grown into a modestly sized textbook. The price and size make it attractive for use by medical students who are taking rotations on anesthesiology services. Selected chapters could be assigned for shorter courses or for coverage of specific topics. The addition of specific educational goals, stated at the beginning of each chapter, might facilitate students' comprehension of the material.

Anesthesiology residents have traditionally used this as an introductory text for an initial review of the essentials prior to tackling more detailed works. The current edition contains some sections which go beyond the basics and others which fail to provide sufficient descriptions of the rationale and the scientific basis of practice, information needed by beginning residents. Although I would still recommend this book to new trainees, the majority of its content and broad coverage seems more appropriate for use as a reference for practitioners searching for current information.

ARNOLD J. BERRY, M.D.
*Associate Professor of Anesthesiology
Emory University School of Medicine
Atlanta, Georgia 30322*

Principles and Practice of Regional Anaesthesia. EDITED BY J. A. W. WILDSMITH AND E. N. ARMITAGE. Churchill Livingstone, 1987. Pages: 200. Price: \$65.00.

The rapid proliferation of textbooks of regional anesthesia in recent years reflects an increasing interest in this subspecialty. This book, edited by Drs. Wildsmith and Armitage, is an excellent addition to the subspecialty of regional anesthesia. The book was written with an aim to "help the specialist anaesthetist who is unfamiliar with the use of regional anaesthesia." The aim is accomplished by the authors. The text is concise and clear. The editors do not attempt to be exhaustive in their coverage of all nerve blocks, yet an in-depth coverage of most blocks that may be useful in clinical practice is provided. Although every chapter is written by a different author, the text maintains a uniform and cohesive style thanks to the editorial efforts of Drs. Wildsmith and Armitage. The illustrations and the color photographs are extremely well done.

The book is divided into two parts. The first outlines the pain pathways, the pharmacology of local anesthetics, and general principles of regional blockade. The second part describes the anatomy and technique of performing individual blocks. There are some categorical statements that may be questioned. For example, on page 11, it is stated, "Where a block is performed in a patient in pain, cardiac output and arterial pressure decrease, but only to 'normal' values." Similarly, on page 20, a statement is made, "It has become clear that the epidural administration of morphine offers no advantage over the intramuscular route."

In chapter 4 on pharmacology of local anesthetic drugs, it would have been helpful to include the maximum "safe" doses of the local anesthetics. The valid basis for determining "absolutely safe" doses may be questioned. However, in a book intended for the anesthesiologist who is unfamiliar with regional anesthesia, inclusion of toxic limits to be used as guidelines would be valuable.

Chapter 5 is an outstanding chapter on the subject of preoperative, intraoperative, and postoperative management of a regional anesthetic. The author has provided an exhaustive coverage of factors influencing choice of technique, such as pre-existing disease of different organ systems, operative requirements, equipment handling, patient preparation, and management of untoward effects, both intra- and postoperatively. In discussing the management of a failed block, the author makes an extremely fine statement: "The only true failure is a failure to learn something from the experience." This chapter is recommended reading for anyone who wishes to practice regional anesthesia.

Chapter 6 is a concise description of the relevant spinal anatomy. Chapters 7 and 8 provide excellent coverage of spinal and epidural

anesthesia, respectively. Once again, the photographs and illustrations are extremely well done.

Chapters 12 and 13 are two fine chapters covering upper limb and lower limb blocks. However, a more detailed coverage of intravenous regional anesthesia and the ankle block would have been desirable.

Chapter 10 on regional techniques in obstetrics and chapter 16 on pain and autonomic blocks ensure complete coverage of the range of regional anesthesia. The editors have intentionally restricted the descriptions of individual block techniques to the more commonly employed ones, in keeping with the objective of this book.

The material in the book is up-to-date and each chapter is well referenced. The listing of further reading and references separately at the end of chapters 1, 2, and 4 will be greatly appreciated by the reader.

In summary, the easily readable style and very practical approach in the text should make this book especially appealing to the anesthesia trainee and the busy practitioner alike. I would recommend this book highly to those who wish to practice regional anesthesia as a part of their armamentarium of anesthetic management. The editors and the authors of this book are to be congratulated on their superb effort.

VINOD MALHOTRA, M.D.
Associate Professor
Department of Anesthesiology
The New York Hospital / Cornell Medical Center
525 East 68th Street
New York, New York 10021