

David O. Warner, M.D., Editor

A Practice of Anesthesia for Infants and Children, 3rd Edition. By Charles J. Coté, I. David Todres, Nishan G. Goudsouzian, John F. Ryan. W.B. Saunders, 2001. Pages: 777. ISBN: 0721672868. Price: \$110.

A Practice of Anesthesia for Infants and Children, 3rd edition, is an attractively packaged, highly readable, pediatric anesthesia reference text. Although this is a multi-author effort, the strong influence of the four editors provides continuity and consistency in this concise, practical book. The editors authored or coauthored 20 of the 32 chapters. An additional 45 authors contributed their expertise, offering reasonable representation of various pediatric anesthesia practices from the United States and Canada. The authors have done a good job of cross-referencing between chapters, thereby minimizing redundancy. Where content does overlap, the reader benefits from the differing perspectives presented. More than 300 figures, tables, photographs, and illustrations are included in this 777-page volume. Although the presentation might have been enhanced with a bit of color, the 300+ illustrations are of excellent quality and definitely clarify key textual points. Overall, this text is extremely well referenced, in some chapters exhaustively so, directing the reader to classic landmark papers as well as to very recent research efforts. A fairly complete index is included for quick reference to topics of interest.

The introductory chapter sets the tone for the text, with appropriate emphasis placed on the need to modify one's approach to the unique combination of patient, family, procedure, and clinical setting. Chapter 2 provides a concise systems approach to normal and abnormal growth and development with emphasis on the respiratory system. Clinically important age-related differences, as they pertain to anesthesia, are highlighted throughout. The complex and often conflicting literature on the perioperative behavioral stress response in children is addressed in chapter 3. The authors have done a good job of summarizing this information, and they make constructive suggestions for future research. The discussion of preoperative evaluation in chapter 4 is enhanced by coverage of problems unique to pediatric anesthesia. Useful anecdotes, examples, and practical management strategies are presented. The overlap with chapter 5, pediatric outpatient anesthesia, could have been consolidated. Nevertheless, the considerations specific to pediatric ambulatory anesthesia are dealt with in-depth and are well written.

Pediatric ethical issues are discussed in chapter 6, a highlight of this edition. The chapter provides an excellent discussion of some decidedly complex concepts, including informed permission *versus* informed consent, mature minor doctrine, confidentiality, and end-of-life issues.

Approach and techniques for the management of normal and abnormal pediatric airways are presented in chapter 7, a practical and current review that makes good use of illustrations. Chapters 8 through 10 cover basic pharmacologic principles as they relate to common anesthetic agents. Important age-related differences in pharmacokinetics and pharmacodynamics are highlighted, and concise comparisons of anesthetic agents as well as advantages and disadvantages of each are well presented. Thankfully, the authors made the most of figures and tables to emphasize key points, attempted to minimize information overlap among chapters, and underscored clinical relevance with examples. Occasionally, the authors made sure to keep the reader attentive with cross-references to an incorrect chapter (*e.g.*, endocarditis prophylaxis drug doses found in table 19-7 rather than 17-4) or minor inconsistencies in medication doses. Finally, a particularly interesting section on pediatric "off-label" medication use is well worth reading.

Pediatric fluid management, blood product management, and transfusion reduction strategies are discussed in chapters 11 and 12. The sections on fluid management for the neonate and for common pathophysiologic states, hypotensive anesthesia, and hemodilution are par-

ticularly well done. Clear, practical guidelines for transfusion practices and monitoring considerations are described as well as anticipated complications and management. Topics of cardiopulmonary resuscitation, neonatal emergencies, pediatric emergencies, and pediatric trauma are reviewed in chapters 13 through 16. Again, these concise, organized current reviews overlap minimally in content and include particularly informative discussions on perioperative cardiac arrest, mechanics of cardiopulmonary resuscitation, and approach to pediatric trauma.

Chapters 17 and 18 cover cardiac physiology, cardiac pharmacology, and anesthesia for pediatric cardiac surgery. One of the major strengths of this text is the outstanding review of management for repaired or palliated congenital heart disease in chapter 19. General management principles are discussed, and for each common congenital heart lesion, a description of the surgical repair and anticipated sequelae, residual complications, and outcomes are reviewed. A similar discussion for the nonsurgical interventional cardiac catheterization approach to management of these lesions is given. Finally, a very useful guide to the preoperative evaluation of these unique patients is outlined.

Brief reviews of pertinent pathophysiology and anesthetic management for common pediatric otorhinolaryngology and ophthalmology procedures are presented in chapters 20 and 21. More in-depth discussions of pediatric neurosurgical pathophysiology, management and procedures, anesthetic considerations for the pediatric burn injury patient, and anesthesia for pediatric organ transplantation are found in chapters 22 through 24. The challenges of pediatric anesthesia outside of the operating room and the quagmire of issues surrounding pediatric sedation are succinctly dealt with in chapters 25 and 26.

The final chapters, 27 through 32, address normal and abnormal temperature regulation, pediatric regional anesthesia, postoperative pain management, postanesthesia care unit, and pediatric equipment and procedures. Again, the authors have done an excellent job of supplementing the text with useful photographs, illustrations, and examples. The practical presentations of these topics will be particularly useful to the student of anesthesiology.

In sum, *A Practice of Anesthesia for Infants and Children* offers a wealth of practical, up-to-date information at an affordable price. As stated in the preface, the editors "trust that this textbook will provide a framework for learning for students in pediatric anesthesiology and for seasoned practitioners and will assist in providing for the safe care of pediatric patients everywhere." This text does indeed provide a solid framework for learning pediatric anesthesiology. The authors manage to address controversies and practice variances without being dogmatic, and the text should serve well as a guide and reference for anesthesia residents, pediatric anesthesia fellows, and pediatric anesthesiologists.

Debbie L. McAllister, M.D., Lynn D. Martin, M.D., University of Washington School of Medicine, and Children's Hospital and Regional Medical Center, Seattle, Washington. lmarti@chmc.org

(Accepted for publication March 20, 2003.)

Essence of Anesthesia Practice, 2nd Edition. By Michael F. Roizen, Lee A. Fleisher. W.B. Saunders, 2002. Pages: 642. ISBN: 0721692672. Price: \$59.

The second edition of *Essence of Anesthesia Practice* enlarges and expands the topical coverage in the unique format introduced in the first edition. Divided into five sections, the text covers disease states, operative procedures, traditional drugs, alternative medications (a new section), and more complex perioperative testing. In one-page synop-

ses devoted to a single entity (disease state, procedure, or drug), the contributing authors summarize the incidence, etiology, and anesthetic implications of numerous rare (and common) medical conditions and surgical procedures. For pharmaceuticals, summaries include basic pharmacology, indications, effects, and complications. Although exclusively text-based and thus devoid of figures, the 500+ contributors make this a diverse and interesting reference. As well, a condensed version for the Palm operating system allows access to a subset of the information *via* the popular handheld computers.

Coverage of disease states is broad, ranging from osteoporosis and omphalocele to familial dysautonomia and silicosis, and the summaries are succinct but informative. One key reference from the literature is included as a source for further reading. Another welcome feature is the inclusion of a code from the *International Classification of Diseases, 9th Revision-Clinical Modification* with each disease state. Each page is divided into three sections: an overview of the disease, procedure, drug or test; a table of effects and/or considerations classified by organ or system; and a synopsis of perioperative implications and concerns.

The section on alternative medicine is valuable in that it provides a ready reference to the most common herbal medications. The potential for drug interactions with nontraditional medicines is a growing concern among anesthesiologists, and these potential problems are addressed in this section of the text. Common nonprescription drugs (such as pseudoephedrine) seem to also be included here, although aspirin is in the "traditional" drug section.

The introduction goes to some length to disclaim the "cookbook" approach to anesthesia practice. In this regard, the authors have succeeded in providing comprehensive summaries of topical and useful information suitable for the active practitioner. The assumption that

the audience knows the basics of anesthesia allows for a fuller discussion of fine points of care in the limited space allotted by the format. One unusual feature is the 10-page table of abbreviations included before the first section. Presumably, this allows for extensive use of abbreviations in the text and the condensation of more material into the one-page limit. A disadvantage is that many practitioners will be forever referring back to the index for interpretation of the numerous acronyms, such as RIMA (reversible inhibitor of monoamine), MVD (microvascular decompression), and GRAS (generally recognized as safe). The editing is good, but occasional logistic gaps and overlaps do occur, such as the discussion of prone positioning complications in a section on herniated nucleus pulposus rather than under lumbar laminectomy. Procedures are listed strictly in alphabetical order, with anterior cervical fusion under *A* but femoral-popliteal bypass under *B*. Gas embolism is listed with the other operative procedures (though rarely posted as such on the operating room schedule), whereas amniotic fluid and fat embolism are listed (appropriately) as diseases.

The disease section is appropriate for practitioners faced with unfamiliar or rare comorbidities, but the procedures section includes amputation and bowel resection, with which we should already be very familiar. The drug and testing sections are well written and include cost considerations. Overall, this useful and practical reference is a good value for the clinical anesthesiologist or senior resident. It would be less useful for a new trainee or one without a firm grasp of U.S. medical terminology and customs.

James M. Berry, M.D., Vanderbilt University Medical Center, Nashville, Tennessee. jamesberry@vanderbilt.edu

(Accepted for publication March 20, 2003.)