REVIEWS OF EDUCATIONAL MATERIAL

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Airway Management: Principles and Practice. By Jonathan L. Benumof. St. Louis, Mosby-Year Book, 1996. Price: $125.00

This is the complete book of airway management. It is 957 pages long and divides airway management into four distinct areas: 1) basic clinical science considerations; 2) the American Society of Anesthesiologists' Difficult Airway Algorithm and its implications in airway management; 3) a discussion of the various approaches to management of the airway; and 4) presentation and discussion of clinical situations and approaches to airway problems and their solutions.

The book features an extensive outline at the beginning of each chapter. This provides easy access to all major topics covered in each chapter. Each chapter is well referenced, with pertinent discussion of the relevant literature. The illustrations include photographs, line drawings, and black and white pictures, but there are no color photographs, pictures, or illustrations of airway anatomy. Many views, particularly fiberoptic views of airway anatomy, may have been served better by color pictures.

The basic science section covers extensively the vast array of basic physiologic, anatomic, and biochemical foundations important in understanding the airway and airway management. A nice section on anatomy of the airway is presented, but the lack of color pictures detracts from the impact of several of the illustrations. A discussion of the radiologic evaluation of the airway is presented for many different lesions; however, a systematic approach to viewing and evaluation of the radiographs, specifically for the anesthesiologist, is not delineated.

The book emphasizes how to approach and manage the airway, particularly from the point of view of the anesthesiologist. To this end, the chapters on airway intervention, approaches, and devices are well organized compilations of a vast array of literature now placed in one hardcover reference book. The discussion of gadgets and special techniques is presented in a straightforward and organized way, permitting easy reference. These sections are also valuable for those not routinely using many of these techniques, but who are interested in developing sound knowledge for incorporation of many newer techniques and practices into their armamentarium to avoid the potential airway disaster.

The case presentations are excellent supplements to the discussion of techniques and approaches. The incorporation of the discussion from other sections into clinical scenarios and the application into real life cases is beneficial for teaching and for greater understanding.

Although there are multiple areas of redundancy throughout the book, in general it is well organized, and all aspects of airway management applicable to the anesthesiologist are covered thoroughly. Despite the lack of color pictures, the book provides an excellent foundation and reference in airway management for anesthesiologists in training or those already in practice.

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Clinical Orthopedic Anesthesia. By John E. Tetzlaff. Stoneham, MA, Butterworth-Heinemann, 1996. Pages: 406. Price: $60

Clinical Orthopedic Anesthesia is a spiral bound, softcover text that could be carried in the pocket of a laboratory coat. The text consists of 22 chapters, with 17 solely authored by Dr. Tetzlaff and 5 co-authored by Tetzlaff and one of 4 contributing authors. The text is illustrated with black-and-white line drawings, and addresses the "subspecialty" of orthopedic anesthesia. It is intended to serve as a convenient reference for use in the operating room, particularly for trainees.

The organization of the book is logical, with the first three chapters addressing preoperative patient preparation, preparation for regional anesthesia, and orthopedic positioning considerations. The next five chapters discuss regional anesthesia and local anesthetics in moderate detail. Chapters 9–12 discuss specific surgical categories such as shoulder surgery and lower extremity joint replacement. The remaining 10 chapters cover miscellaneous topics, including deep venous thrombosis, fat embolism, postoperative pain control, and pneumatic tourniquet use.

Unfortunately, this work contains many dogmatic statements that limit the book's usefulness as a teaching tool or reference manual. For example, in the section addressing pulmonary disease, Tetzlaff argues that "if the patient is a heavy smoker, a carbon monoxide level (carboxyhemoglobin) should be obtained to predict falsely elevated oxygen saturation." In some cases, this might be a useful piece of preoperative information, but in North Carolina, (at least) this approach would significantly increase the cost of preoperative testing, with no documented justification.

In the chapter "Preparation for Regional Anesthesia," Tetzlaff makes the statement that "major body segment amputation is a procedure for which it is unrealistic to have the patient awake in the operating room." This gives the impression that it is inappropriate to administer a regional anesthetic for an above-the-knee or below-the-knee amputation. The trainee would be better served by advice that regional anesthesia for amputation should be accompanied by appropriate levels of sedation and proper operating room decorum, including shielding the patient's line of sight. During his discussion of anesthetic techniques for lower extremity joint replacement, the author states that "the femoral sciatic leg block is a good anesthetic for total knee replacement, but is infrequently used because of its high total local anesthetic dose requirements, the time involved, and the amount of discomfort for the patient." This is only partly true, because an obturator nerve block also must be performed to provide anesthesia for a total knee replacement, which, even in expert hands, can be difficult to perform successfully. In addition, no mention is made of the need for a lateral femoral cutaneous nerve block to provide anesthesia for the lateral aspect of the knee.

Further weaknesses are evident as omissions. No mention is made of the association between hyperbaric 5% lidocaine and cauda equina syndrome or transient radiculopathy. In the chapter on local anesthetics, toxic doses are expressed as milligrams, rather than milligrams per kilogram of body weight. This could lead the new trainee to assume that 500 mg lidocaine (with epinephrine) is a safe and appropriate dose in a 35-kg patient, and that exceeding this dose would be unsafe in a 130-kg patient.