

BOOKS AND MULTIMEDIA OF INTEREST



Clinical Anesthesia. 5th edition. Paul G. Barash, MD; Bruce F. Cullen, MD; and Robert K. Stoelting, MD, eds. 1,595 pages, \$179. Philadelphia, Pa: Lippincott Williams & Wilkins, 2006. ISBN: 0-7817-5745-2.

When I first picked this substantial book up, it took me back 17 years—that was when *Clinical Anesthesia* was first published and my initial encounter with what was to become a standard reference text for me. Now in its 5th edition, this venerable text is a testimonial to first rate writing, relevant topic inclusion, and up-to-date, evidenced-based clinical applications.

A cursory scan of the substantial (44-page) index was revealing and satisfying. I challenged the index (in a less than random manner) for inclusions such as acute quadriplegic myopathy, cyanide toxicity, downregulation, genomics, Bullard laryngoscope, leak test, myocardial contusion, vaporizer pumping effect, lighted stylet, and other common and not so common key words, and was never disappointed. The book itself, divided into 6 major sections, is organized intelligently and with great attention to economy of words and reader time and interest. The effort going into preparing a book of this magnitude is daunting. Clearly the editors have amassed a group of contributors (117, not including the editors) that clearly represent a “who’s who” in clinical and academic physiologic anesthesiology.

I often examine the reference sections of particular book chapters as a kind of “biopsy” of its quality. Selecting (at random) Section III, Chapter 15, “Inhalation Anesthesia,” I discovered 234 references, many of which were of post-2000 dating. Looking for selected key references that came to mind (eg,

Mapleson’s classic paper on age and minimum alveolar concentration, Kharasch’s paper on metabolism of inhaled agents, Ebert et al’s paper comparing sevoflurane to desflurane with respect to neurocirculatory responses, etc) I not only found them present, but remarkably the editors have highlighted (in light blue) specific references that they found of sentinel value.

As someone who likes to ask questions (just ask the students that I work with in the OR!) but who does not always have the answers, this book certainly proves invaluable. I especially liked the “key points” raised at the start of each chapter. Here anywhere from a handful to nearly 20 major caveats or essential knowledge statements are listed that highlight absolutely essential information that should be taken away from a particular chapter. Good talking points and “self-checks” to assess your level of comprehension or where some needed “reinforcement” should follow.

Although I am sure there will be some who will disagree, I was very impressed with the overall quality (and quantity) of visual aides in the form of diagrams, tables, illustrations, and photographs. Subject headings, bold section titles, and relevant appendices make the book easy to use, facilitate “surfing” the pages for information, and generally enhance overall readability.

There is a lot of information contained in this one-volume edition and the only (minor) complaint that I had was that the small font is a bit challenging for someone with 25 years experience in this amazing field of anesthesia care. But this was a surmountable obstacle and clearly will not prove daunting to my younger colleagues and future colleagues (current students). To be perfectly honest, I am

thankful for the trees saved as a larger font would certainly mandate a second volume or a cumbersome giant single volume! All in all, I found *Clinical Anesthesia* exceptional as a standard source of relevant clinical and basic science information.

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Perioperative Care in Cardiac Anesthesia and Surgery, by Davy C. H. Cheng, MD, MSc, FRCPC, and Tirone E. David, MD, FRCSC. 376 pages, \$69.95, Philadelphia, Pa: Lippincott Williams & Wilkins, 2006. ISBN: 0-7817-5774-6.

There has been astounding progress in the practice of cardiac surgery over the past 5 decades. Advancement in surgical technique as well as technology has made it possible to proceed with minimally invasive cardiac surgery, off-pump coronary artery bypass, and robotic-assisted cardiac surgery to name a few. Anesthetizing patients for cardiac surgery can be exhilarating, challenging, and rewarding. The anesthesia care provider must possess a thorough understanding of normal and altered cardiac physiology, pharmacology, cardiopulmonary bypass, and surgical techniques in order to competently care for the cardiac surgical patient.

Perioperative Care in Cardiac Anesthesia and Surgery is a practical handbook, edited by Davy C. H. Cheng, MD, MSc, FRCPC, University of Western Ontario, and Tirone E. David, MD, FRCSC, University of Toronto, that describes the perioperative management of adult patients undergoing cardiac surgery. The handbook consists of a compilation of

works by 53 PhDs, physicians, and other allied health professionals from North America and the United Kingdom and was designed for all healthcare professionals who are involved in the management of cardiac surgical patients. The collaborative work effort consists of 50 chapters divided into 5 sections, 15 appendices, and an index.

The book's format contributes to its readability. The first section consists of 1 chapter discussing prognostic risks and complications, risk assessment, preoperative evaluation, and preoperative medical orders. This section contains charts illustrating cardiac anesthesia risk evaluation scores and common complications following heart surgery, as well as multifactorial risk indexes for the prediction of outcomes after cardiac surgery. An overview of medical history and physical examination concludes this section.

In the second section, chapters 2 to 20 focus on anesthesia and cardiopulmonary bypass management. This section begins with anesthetic management for fast-track cardiac anesthesia, valvular heart surgery, robotic cardiac surgery, circulatory arrest and neuroprotection, combined cardiac and thoracic surgery, intrathoracic transplantation, ventricular assist devices, and congenital heart disease, followed by comorbid diseases affecting cardiopulmonary bypass, regional anesthesia techniques and management, perioperative monitoring, and perioperative transesophageal echocardiography. There are chapters that include dynamic discussion of the cardiopulmonary bypass circuit and intra-aortic balloon pump, weaning from cardiopulmonary bypass and low output syndrome, pulmonary hypertension, and right ventricular dysfunction postcardiopulmonary bypass. The section concludes with the latest research in periop-

erative blood conservation, antifibrinolytics and coagulation management, heparin-induced thrombocytopenia and alternatives to heparin, and management of cardiac surgical emergencies.

Section 3, chapters 21 through 39, contains information on the latest surgical techniques and postoperative considerations in cardiac anesthesia. The section begins with a discussion of the basics of myocardial protection during cardiac surgery and on-pump coronary artery bypass surgery, followed by evidence-based assessment of off-pump coronary artery bypass and evolution of robot-assisted coronary bypass surgery. Chapters 25 to 28 provide information and excellent illustrations on valvular heart surgery with each chapter concluding with a discussion of future directions, while chapters 29 to 31 address specifics on aortic surgery concluding with a discussion of outcomes. The proceeding chapters cover such details as combined cardiac and vascular surgery, surgery for mechanical complications of myocardial infarction, surgery for end-stage heart disease and heart transplantation, lung and heart-lung transplantation, ventricular assist devices, adult congenital heart surgery, ventricular reconstruction for ischemic cardiomyopathy, and implantable cardioverter defibrillator and pacemaker insertion.

Sections 4 and 5 focus on issues surrounding cardiac surgical recovery unit and surgical ward management. Topics range from routine cardiac surgery recovery care to postoperative complication involving hematologic, cardiovascular, respiratory, renal, central nervous system, metabolic, infectious, and gastrointestinal problems and the management of such problems.

The text concludes with 15 appen-

dices and the index. The appendices include admission forms and orders; discharge forms and orders; protocols for ventilation weaning, extubation, and glucose control; guidelines for anticoagulation; orders for patient-controlled analgesia, care of spinal drains, preoperative cardiac transplant, and transfer of postheart transplant; and discharge instructions for postcardiac surgery. Appendix J is a user friendly detailed table of pharmacology in cardiovascular anesthesia, and appendix K is an overview of the current modified advanced cardiac life support (ACLS) protocols.

This handbook contains an enormous amount of information condensed into 511 pages including appendices. It is clear and concise in covering the basics of cardiac anesthesia and surgery but is not as comprehensive as other text. It is my impression that the text was intended for the student of anesthesia and perfusion with limited sections applicable to the critical care nurse and other allied health professionals.

An obvious strength of this handbook is the abundant use of tables and illustrations, which serve as an excellent adjunct to the text. The handbook does achieve the goals as stated by the editors in providing a succinct, problem-oriented source of practical information using evidence-based practice for cardiac surgery. This handbook will prove to be a useful tool for anesthesia students during their cardiac rotation.

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