Book Review: Anesthesia and Perioperative Care for Aortic Surgery

Kathirvel Subramaniam, Kyung W. Park, Balachundhar Subramaniam (Editors).
Springer, 2011. ISBN 978-0-387-85921-7

Christine Fedorow, MD · Hilary Grocott, MD

Received: 15 November 2012 / Accepted: 29 November 2012 / Published online: 7 December 2012
© Canadian Anesthesiologists' Society 2012

Caring for patients undergoing aortic surgery requires a comprehensive knowledge of both the pathophysiology of aortic disease as well as its major comorbidities. Coupled with the major trauma and physiologic insults experienced in the perioperative period, these high-risk patients often experience significant morbidity and, regrettably, tangible mortality. Accordingly, optimizing perioperative outcomes requires expert knowledge of the complexities of aortic surgical and anesthetic management. Prior to the publication of this present textbook offering from Subramanian *et al.*, it was necessary to consult a wide array of reference texts to amalgamate the detailed knowledge required for such comprehensive care.

With this textbook, Subramanian *et al.* fill a gap in the compendium of anesthesia literature, as it is the only currently available textbook to focus specifically on perioperative care of the aortic surgery patient. It provides a comprehensive review of aortic anatomy, pathophysiology of aortic disease, perioperative care, and details of the various surgical procedures (ascending aorta, arch, descending thoracic aorta, abdominal aorta, congenital, trauma, and endovascular procedures). Important aspects of echocardiography, cerebral monitoring, spinal cord protection, and renal protection are also highlighted.

The topics covered within the text are both comprehensive and, for the most part, well written. The range of subjects chosen by the editors attests to their experience in the field, hence, they are able to approach the intricacies of aortic surgery in an organized fashion. The wonderful images within the book, comprising diagrams, photographs, and

radiographic images, easily facilitate the explanation of complex aortic anatomy and surgical techniques. The colour diagrams are a valuable adjunct to the text, enabling the reader to understand visually what is often hard to conceptualize and subsequently teach.

Despite its many unique and valuable qualities, the text is not without some limitations. The static echocardiographic images presented, although adequate, could benefit from some digital content, either online or in DVD format. This might allow readers to appreciate the dynamic aspects of imaging by including more detailed echo loops with enhanced resolution.

As is common with multi-author texts, the writing style varies considerably amongst chapters. This in itself is not a limitation, but the repetition of some material is somewhat troublesome, if not inconsistent. For example, several topics (e.g., spinal cord monitoring) are reviewed by multiple authors in scattered chapters throughout the text. Unfortunately, the depth and detail are sufficiently different that they may serve to confuse the novice reader rather than enhance their knowledge. This issue likely could have been solved with additional editorial input. Although there are many strong chapters uniquely covering all aspects of this complex topic, a notable weakness is the chapter on the postoperative care of the patient. The point-form nature of its narrative is at odds with the style in the remainder of the book and is a somewhat superficial dissertation on this important aspect of the care of the aortic surgery patient. Perhaps a future second edition might be targeted to address this relative weakness.

A final limitation is highlighted in the end of text indexing. Specifically, it appears that the indexing of material is inaccurate beyond chapter 8, which makes it difficult, if not impossible, to use the index as a guide to finding required material within the body of the textbook.

C. Fedorow, MD (✉) · H. Grocott, MD
St. Boniface Hospital, Winnipeg, MB, Canada
e-mail: cfedorow@me.com

On balance, the innumerable strengths of this unique textbook far outweigh its above-noted shortcomings. The depth and breadth of knowledge covered in this text make it a valuable asset as a reference source for all clinicians involved in aortic surgery, from the trainee to the experienced practitioner. In view of the textbook's organized and comprehensive approach regarding the patient undergoing

aortic surgery, it would also easily lend itself as a reference for surgeons, intensivists, nurses, and every member of the perioperative aortic surgery care team. It deservedly should find a home on a wide array of professional and personal library shelves as a result.

Competing interests None declared.