

## BOOK REVIEW

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**Anesthesiology and Vascular Surgery.** EDITED BY M. P. YEAGER AND D. D. GLASS. Norwalk, Connecticut, Appleton and Lange, 1990. Pages: 379. Price: \$69.95.

*Anesthesiology and Vascular Surgery* is a multiauthored text that covers the field in a concise manner. It was edited by Dr. Yeager and Dr. Glass from the Department of Anesthesiology at Dartmouth-Hitchcock Medical Center in Hanover, New Hampshire. They assembled an eminent group of anesthesiologists, surgeons, and radiologists to review the field.

The book begins with three excellent chapters, which examine the pathophysiology of vascular disease, vascular surgical techniques, and diagnostic techniques used to detect vascular disease. The following chapter, from the Hospital de la Pitié-Salpêtrière, examines controversies in the preoperative work-up of vascular surgery patients. This chapter concentrates, as it should, on the assessment of coronary anatomy and reserve, as well as on left ventricular function and exercise tolerance. It is written by an expert group that has contributed greatly to the field. However, some of their algorithms seem rather rigid. For example, they believe that the risks of coronary angiography and coronary artery bypass graft are so great as to caution against doing any postoperative testing in the patient without overt coronary artery disease who is over 65 yr of age. Yet, as patients age, the incidence of clinically inapparent coronary disease increases. Despite this minor caveat, this chapter succinctly describes the often difficult decision analysis required in these patients. Decisions as to when, how, and who should have surgery, are often the crux of anesthesia for vascular surgery, and this chapter is a useful synthesis of current information.

The structure of the book is, as stated by the editors, guided by a "practice-oriented approach" and so results in "a degree of redundancy." While a number of topics are discussed by two or more authors, the chapters seem to stand independently. It is unfortunate that authors do not refer to each other's approaches. In addition, I would have preferred that some of the chapters covering clinical material take a firmer stand—i.e., "this is how and why I do it," so that a lively "internal debate" could ensue. Instead, when chapters cover the same area, they tend to be repetitious, citing the laundry list of references and clinical

approaches, rather than portraying the authors' convictions on controversial issues. For example, in the chapter "Emergency Vascular Surgery," I wanted to know more specifically how the authors weighed full-stomach considerations *versus* coronary disease, how often they performed awake intubation, with or without fiberoptic bronchoscopy, and so forth.

The chapters on thoracic and lower extremity vascular surgery are excellent. Abdominal aortic surgery is treated in a rather cursory manner. There is no mention of opioid pharmacokinetics in patients undergoing aortic surgery or of prostaglandin and free radical mechanisms that contribute to the pathophysiology surrounding aortic occlusion and reperfusion. The book would have been well served with a chapter that discussed blood product usage, blood salvage, coagulopathies, heparinization, and the use of protamine. None of the discussion of renal consequences of aortic surgery addresses clinical studies that suggest that preoperative renal function, and not intraoperative urine output, predicts postoperative renal dysfunction.

The chapters "Organ Preservation" (with a discussion of the biochemistry and cell biology of ischemia) and "Prevention of Cerebral Ischemia" are excellent, the latter in particular. Dr. Yeager concludes the book with a discussion of the putative benefits of regional anesthesia in vascular surgery patients; this chapter is expertly written and succinct.

Overall, this book effectively provides the trainee and the practitioner with the scientific background that should be used as a starting point for the care of the patient undergoing vascular surgery. I hope that a future edition examines controversial issues in a more focused manner and provides more clinical "pearls." Still, I highly recommend the book to trainees and practitioners alike. The price makes this book particularly attractive.

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