



Preface

The Changing Face of Anesthesiology Practice for Vascular Surgery Patients



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Editors

In a long and storied history, vascular surgery dates back to the second century AD. During this time, it is reported that the Greek surgeon, Antyllus, performed surgeries on aortic aneurysms. In more modern times, the legendary surgeons, Drs Michael DeBakey and Denton Cooley, performed the first replacement of a thoracic aneurysm with a homograft in the 1950s. Contributions by Drs Nikolai Korotkov, Charles Theodore Dotter, Edward Dietrich, and many others have continued to advance the field and make up the foundations of this surgical specialty. There have been refinements in surgical technique, imaging, endovascular approaches and targeted drug therapies.

Alongside those surgical advances, anesthetic management and training have continued to evolve. Cardiovascular disease claims more than 17.9 million lives each year, constitute the leading cause of death globally.¹ As the 65 and older population continues to grow, those with vascular disease will increasingly continue to require vascular interventions and treatment.

The last issue of *Anesthesiology Clinics* dedicated to the care of vascular surgery patients was in 2014. In the following articles of this special issue of *Anesthesiology Clinics*, expert anesthesiologists and surgeons have included the latest understanding of pathophysiology, preoperative optimization, surgical technique, intraoperative anesthetic management, potential complications, postoperative management, and outcomes. Planning starts in the preoperative period with a focus on perioperative optimization, such as prehabilitation and optimization of preoperative anemia. Using risk calculators, we can predict morbidity and mortality and limit complications and it is hoped, limit perioperative complications. Intraoperative management has shown improvement with technology, such as the use of transesophageal echocardiography, numerous neuromonitoring options, and advanced perfusion techniques. Other

advancements in anesthetic management, such as enhanced recovery pathways, intraoperative blood salvage, and spinal cord perfusion pressure monitoring, have shown promise in improved patient safety and care. The routine use of intensive post-operative monitoring permits early recognition of potential complications.

We wish to express our utmost appreciation to our anesthesiology and surgical colleagues, who have dedicated their time and dedicated knowledge toward the articles in this unique collection. Also, a special thank you to Dr Lee Fleisher, who has entrusted us with the honor of editing this issue. Last but not least, we are very grateful to Arlene Campos and Joanna Collett, who have given continued guidance and patience.

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REFERENCE

1. World Health Organization. Cardiovascular diseases fact sheet. Available at: [https://www.who.int/en/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/en/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds)). Accessed July 10, 2022.