Advanced
Endovascular
Therapy of Aortic
Disease
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We would like to thank all the faculty contributors for their tireless efforts in the preparation of the chapters. We are indebted to Yvette Whittier, our administrative coordinator, for her countless hours of hard work in bringing this project together. Last, but not least, we are grateful to our families, Cathy, Aaron, Amber, Donal, Sarah, Terry, Mark, Pete, and Cynthia, for their patience and support in making this book a reality.
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Since the concept of using an endovascular stent-graft to repair an abdominal aortic aneurysm was initially described by Dr. Parodi and Dr. Palmaz, this treatment strategy has undergone a dramatic technological evolution. This evolution is further fueled by the increased public acceptance of this minimally-invasive therapy, miniaturization of endovascular stent-grafts, and availability of multiple devices approved by the Food and Drug Administration (FDA). Growing evidence clearly supports the early treatment success of this treatment strategy, in terms of morbidity and mortality reduction, when compared to the conventional open repair in well-selected patient cohorts. Advances in this endovascular technology have also broadened the treatment armamentarium of thoracic aortic pathologies. Since the FDA has approved the use of endovascular repair of descending thoracic aneurysms, many researchers have found a beneficial role of using this technology in the treatment of other thoracic aortic pathologies, including dissection and traumatic transection.

Treatment outcome of endovascular repair of aortic diseases is highly dependent on the appropriate patient selection, physician’s experience, and post-procedural device surveillance. Disseminating the clinical experiences from physician experts in this field will undoubtedly educate other endovascular interventionalists and potentially improve treatment outcome for all physicians who perform endovascular aortic procedures. The basis of this book “Advanced Endovascular Therapy of Aortic Disease” represents the collection of clinical experiences from a group of well-known endovascular interventionalists who participated in the 2006 Total Endovascular Aorta Symposium, sponsored by the Division of Vascular Surgery and Endovascular Therapy of the Baylor College of Medicine. A total of 26 chapters are included which cover four sections, including natural history and preoperative planning, thoracic aortic aneurysm, aortic dissection and traumatic aortic injury, and techniques, new devices, and surveillance.

It is our hope that the collection of these chapters provided by faculty experts in the field of endovascular aortic therapy as assembled in this symposium will help to enhance the practice of endovascular interventionalists. It is our sincere privilege to put forth this compendium book as a token of their contributions to the field of endovascular aortic therapy.

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