

# Evaluating Thoracic Aortic Therapy

**T**he current advancements in thoracic aortic intervention are some of the most dramatic that we are seeing in any segment of vascular therapy today.

This progress can be observed in techniques developed by physicians from around the world, and technologies that have resulted from the collaborative efforts of physicians, industry, and yes, our regulatory agencies. The morbidity and mortality associated with dissection, aneurysmal disease, and trauma of the thoracic anatomy make surgical and interventional procedures challenging; but the combined efforts of research and innovation are giving us a much deeper understanding of which patients will benefit from each specific therapy, and how our techniques and devices must still be tailored and fine-tuned to meet each unique set of demands.

When introducing our thoracic focus in 2007, I mentioned that there was still much work to be done, and that there was no approved TEVAR device in Japan.

Today, I am happy to say that we now have a thoracic endograft approved, with more anticipated in the near future. But our work is far from done, with numerous studies of varying sizes and goals underway. For this issue of *Endovascular Today*, we have asked some of our colleagues to share their clinical experiences as TEVAR advances, and we have also checked in with investigators from a few of the ongoing trials examining the use of thoracic stent grafts in treating dissection. The importance of these trials cannot be underestimated, as we stand to learn far more than whether or not a particular device is effective; the sum total of the experiences of many physicians treating an increasing number of patients around the world will build our knowledge regarding the nature of the disease states themselves, and perhaps most importantly, how best to select which course of therapy is the safest and most effective for each individual patient.

First, Michael A. Sergi, MS, MD; Felix J. V. Schlösser, MD; Hamid R. Mojibian, MD; and Bart E. Muhs, MD, PhD, discuss why dynamic-gated CT scanning may be the best modality for risk stratification in the treatment of thoracic aortic disease by including the native aortic environment in the evaluation.

Spinal cord ischemia occurs in 3% to 6% of patients undergoing TEVAR. Several strategies for managing cerebrospinal fluid (CSF) are currently used, with no clear consensus as to

which is best. Manish Mehta, MD, MPH, and his coauthors have been studying issues related to CSF drainage, and they explain their current strategy in preventing spinal cord ischemia in selective high-risk patients.

W. Anthony Lee, MD, then provides a description of a variation of the Preclose technique for percutaneous femoral access during TEVAR, noting its high rate of technical success while citing the importance of continued clinical surveillance for long-term outcomes. Peter H. Lin, MD, and Joseph S. Coselli, MD, follow with a discussion of explant analysis following surgical conversion after unsuccessful endovascular thoracic aortic repair.

This month, we also bring you a pair of interviews with principal investigators from major ongoing thoracic dissection trials. The first, with Joseph Lombardi, MD, discusses the STABLE Trial and its development. Next, Matt Thompson, MB, FRCS, reviews the current state of the VIRTUE Registry and what kind of data he expects it to provide.

We are also happy to have two articles with updates from the Society for Cardiac Angiography and Interventions and the Society for Vascular Surgery. Richard E. Stewart, MD, FSCAI, FACC, and Robert M. Bersin, MD, FSCAI, FACC, bring us a review of the SCAI Training Directors Survey, which helped evaluate the effect the changing and growing field of cardiology has on fellowship training, noting its promise as well as its limitations. *Endovascular Today* also interviewed Dr. Ruth Bush about her exciting experience with the SVS's ongoing volunteer program at Landstuhl Regional Medical Center in Germany, treating soldiers who have sustained wartime vascular injuries. We have also included a story by our News Chief, Steven McChesney, about this year's annual Venous Disease Coalition meeting and its recently issued *Call to Action*, which details a plan to reduce US deep vein thrombosis and pulmonary embolism cases.

Our September issue concludes with a discussion with my long-time friend, William A. Gray, MD, taking a close look at carotid artery stenting and CMS, as well as what to look forward to at the upcoming TCT meeting, which will include a live transmission from Jikei University in Tokyo. ■



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