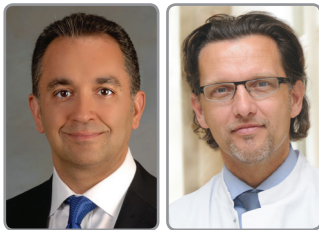


EVAR—What Does the Future Hold?



When approaching a patient with an abdominal aortic aneurysm (AAA), operators must consider the entire pathobiology of the aneurysm, as well as the aorta as a whole. Ideally,

we like to evaluate the etiology, age, progression to date, sizes, dimensions, and relationships to the rest of the aorta and the patient's body. And increasingly, we consider its future. We understand that we are tasked with managing a progressive, morphologic puzzle of biophysics. Our solution must work immediately—that much is nonnegotiable. But it must also take into consideration the near certainty that the patient's aorta will continue to change, as well as the uncertainty as to exactly how, and plan a solution that best accommodates for this range of possibilities.

The maturity of our experience with open surgery, endovascular aneurysm repair (EVAR), and medical management is increasingly rich. Long-term outcomes have brought new light to on-table considerations for ensuring durability. And, this expertise coincides with rapid developments in imaging, biologics, and screening, as well as the grafts themselves.

In this edition of *Endovascular Today*, we explore how the intersection of these forces and the unprecedented ability to at least consider—if not predict—future possibilities can facilitate optimal decision-making and case planning in the present.

To start off, Richte C.L. Schuurmann, PhD; Cornelis G. Vos, MD; and Jean-Paul P.M. de Vries, MD, look at seal failure after EVAR, stressing the need for detailed imaging analysis and dedicated software to identify subtle changes in endograft geometry within the aortic neck. Then, Philipp Erhart, MD; Moritz Lindquist Liljeqvist, MD; Joy Roy, MD; T. Christian Gasser, PhD; and Dittmar Böckler, MD, evaluate the use of finite element analysis as a tool for AAA rupture risk assessment.

We continue our coverage with a series of interviews, starting with Prof. Böckler, who shares about Germany's nationwide AAA screening program. Then, we spoke

with Dianna M. Milewicz, MD, about her work with genetics research related to diagnosing and treating aortic disease. Next, we asked Ian M. Loftus, MD, for his thoughts on the upcoming 2019 National Institute for Health and Care Excellence guidelines on AAA diagnosis and management.

Switching gears, Benjamin W. Starnes, MD, gives insight into the use of the AortaFit software application (Aortica Corporation) to generate three-dimensional (3D)—printed, patient-specific, fenestrated endograft templates for treating juxtarenal AAAs. Then, Daniela Branzan, MD; Andrej Schmidt, MD; Dirk Winkler, MD; Dierk Scheinert, MD; and Ronny Grunert, PhD, share their experience using 3D printing to plan how to treat acute, complex abdominal and thoracoabdominal aortic pathologies at the University Hospital Leipzig.

To close our EVAR articles, Juan Parodi, MD; Edward Y. Woo, MD; Shirling Tsai, MD; and Takao Ohki, MD, contemplate the next big breakthroughs in AAA management.

Also in this issue are two focus areas outside of EVAR. First, *Endovascular Today* is closely monitoring and covering all developments regarding concerns of paclitaxel safety, and the coverage continues this month with an interview with Konstantinos Katsanos, MD, lead author of the meta-analysis that raised the safety signal. Also in this section is a summary of the recent VIVA Vascular Leaders Forum seeking to explore the finding in greater detail, and publications emerging since the meta-analysis are covered.

In a special section dedicated to superficial venous disease, the editors have invited expert panelists to comment on treating perforators, what's needed next in the clinical trial space, and enhancing understanding of the roles of specialists in this field. Finally, an interview with Sabine Steiner, MD, touches on current issues in femoropopliteal disease and ongoing research.

We hope this look toward the future of aortic therapy, as well as current issues in peripheral artery disease and venous care, engages your interests and helps to inform these vital discussions. ■

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