

# Examining EVAR's Role in Rupture Care



In recent years, our ability to treat abdominal aortic aneurysms (AAAs) using endovascular repair (EVAR) has improved. In many centers worldwide, EVAR is the favored

option in suitable patients. Although it is premature to consider EVAR the first option in all-comers, the current trend in technological advancements aims to treat patients with challenging anatomy, providing enduring outcomes and expanding the treatable patient population. The progress in this field since Juan Parodi's first procedure has been remarkable.

One AAA scenario that remains particularly challenging yet presents substantial opportunity for improved patient care is that of rupture. Patients arriving with emergent needs can alter ordinary preferences and decision making, but our facility with EVAR techniques and the increased availability of versatile devices and advanced imaging has seen endovascular repair for rupture (rEVAR) rise in prominence. However, key questions still face this application of EVAR.

For instance, which patients are ideally suited for endovascular versus open repair, and how is candidacy best determined? What training, experience, and facility standards must be met in order to safely offer this option? And, what do we know from the current data, and what must we still learn?

With these and more questions in mind, we have invited a group of experienced aortic specialists to provide their perspectives on current techniques for addressing the spectrum of unique rupture presentations.

Tim Resch, MD, PhD; Nuno Dias, MD, PhD; and Björn Sonesson, MD, PhD, share an overview of rEVAR strategies, including preoperative planning, device selection, prep and access, and technical considerations. Next, Thomas Larzon, MD, PhD, considers the extent to which nearly all ruptured AAAs might successfully be treated using rEVAR and describes advanced techniques for addressing challenging anatomies.

Opinions on how best to select between open and endovascular approaches should not be formed

without first reviewing and considering the data available to us from randomized controlled trials. However, as you will see in the lively debate pitting Robert J. Hinchliffe, MD, FRCS, and Janet T. Powell, MD, PhD, FRCPATH, against rEVAR pioneer Frank J. Veith, MD, and Caron B. Rockman, MD, even carefully gathered data from well-executed trials often do not yield consensus. Before deciding where rEVAR best fits into everyday practices, be sure to read these conflicting takes—and the data that form their opinions.

Among the challenges associated with rEVAR are complications affecting this therapy, including acute compartment syndrome. In their article, Philip S.K. Paty, MD, and Manish Mehta, MD, describe this complication and its incidence, options for treatment, and data from collected experiences to date. To close our feature on rEVAR, Dr. Arko interviews Benjamin W. Starnes, MD, on the practical elements that comprise a successful program, such as intake protocols, staff training, patient selection, equipment needs, and follow-up. In these patients, overall success comes from a team effort that goes beyond what happens on the operating table.

Also included in this edition of *Endovascular Today* is a special feature on superficial venous disease focusing on patient engagement—a moving target in today's web- and social media-driven landscape. We also present part 2 of our series on cerebral arteriovenous malformations and dural arteriovenous fistulas, this time focusing on treatment options.

We close this edition with an interview with Prof. Jean-Pierre Becquemin, who also shares his thoughts on rEVAR, advances in aortic technologies, the role of aortic centers of excellence, and his recommendations for literature that should not be missed.

Whether you currently treat rAAAs, are considering adopting this approach, or just want to keep up to date on the latest options and debates, we hope this collection of perspectives is thought-provoking, and we thank the authors for their contributions. ■

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