Vincent Riambau, MD, PhD

The Spain-based vascular surgeon talks shortcomings in aortic therapies and the role of vascular societies and meetings.

Where are we lagging most when it comes to optimizing endovascular aneurysm repair (EVAR)?

There are two issues to overcome. One is related to proximal and distal attachment, and the second is concerning type II endoleaks. Permanent fixation is key to ensuring long-term durability. Even some "active" fixation tools (eg, hooks, spikes, or barbs) change in the neck anatomy, and configuration can lead to type I endoleaks or migrations. Distally, it is not a surprise when we observe some cranial migration of the limb extension. Sometimes, this is related to the iliac degeneration or the remodeling process over time, and a type Ib endoleak can be the terrible consequence. We need to fix that problem with more secure and effective fixation systems, especially for young patients with long life expectancies.

Type II endoleak remains a concern after more than 20 years of experience with EVAR. Some endoleaks are considered "benign," because even with the leakage, the aneurysm shrinks and disappears. In other circumstances, however, with the presence of a small type II endoleak, the aneurysm grows and even ruptures. A more difficult scenario is a growing aneurysm without any detectable evidence of an endoleak. We can think about the so-called positional or dynamic endoleaks, but in the end, if the aneurysm is not properly fixed and needs an open conversion, that always represents an EVAR failure. We do not know yet if the sac filling approach could be the solution. But, I honestly suspect that other limitations related to this technology will prevent us from optimizing EVAR permanently.

Which areas of study do you think are most crucial to prioritize in thoracic endovascular aneurysm repair (TEVAR)?

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I think that there are many areas of study needed in TEVAR. The first is to find the most appropriate device for acute type B dissections. Redissection, proximally or distally, is the current limitation for widespread use of TEVAR for uncomplicated dissection.

The second is related to blunt trauma procedures in very young patients with life expectancies of more than 40 years. Material fatigue can also be a problem after 5 years.

The third area is spinal cord protection or paraplegia prevention in extensive thoracoabdominal endovascular repair. Total endovascular repair of thoracoabdominal aneurysms has been associated with less related mortality and morbidity. Nevertheless, there is no clear benefit in terms of paraplegia, the most dramatic complication. We should investigate more about the preventive methods for spinal cord damage secondary to TEVAR treatment.

Finally, permanent fixation—proximal, and even more importantly, distal—should be improved. Also, the overlap zones between endograft components are prone to be dislodged in long-term follow-up and need some improvement.

What do you think is the most necessary improvement to optimize therapy for complex aortic procedures?

Centralization is absolutely recommended and mandatory. In my county, centralization represented a reduction from 21 to nine authorized vascular centers for complex vascular repairs. Complex vascular procedures are mostly related to the aorta, supraaortic trunks, and

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visceral arteries. That is the only way to offer the best personalized solution and highest standard of care for any patient (for open or endovascular repair). Obviously, complication management is better in experienced centers than in lower-volume institutions. The health value increases because centers of excellence offer the best outcomes with the lowest cost. Finally, research and teaching opportunities are better developed in big centers with more experience.

In our county, Catalonia, the local government started the centralization process for complex vascular procedures on September 2014. The early experience is quite positive. We are now working in a network of hospitals, taking care of bigger population areas with a well-defined patient flow according to the vascular complexity.Professionals interested in complex procedures are invited to collaborate with their colleagues in big centers.

What is the status of endovascular procedures in Spain? Are there any unique challenges you face in the country's health care atmosphere?

In my country, as in other sites in the world, the original endovascular specialists were interventional radiologists. When the aorta became a potential target for an endovascular approach, vascular surgeons reacted and suddenly demonstrated their interest for EVAR first and other endovascular procedures later on.

In the mid 1990s, three different scenarios summarized the endovascular field in Spain: first, a minority of vascular surgeons declared themselves nonendovascular believers. They lost time and tried to recover it when they became converts. The second scenario was vascular surgeons who created turf battles with interventional radiologists and started their endovascular experience alone, with a considerable collection of iatrogenic injuries in their learning curve. The third scenario was smoother and smarter, in my opinion. Vascular surgeons and interventional radiologists merged together for a team-based philosophy, offering the best care to vascular patients from both specializations.

Nowadays, endovascular techniques are mostly led and actively performed by vascular surgeons with or without interventional radiology cooperation. Interventional cardiology actually plays a very small role in the endovascular field in Spain. The current challenge is facing the economics. As I previously mentioned, centralization is the new frontier for all the Spanish counties. Catalonia started first, and other regions will likely follow that design very soon.

As a past president of the European Society for Vascular Surgery (ESVS), how do you think the role of societies has evolved in recent years?

Scientific societies should be focused on teaching and supporting quality, high-level research. That is the main aim for ESVS. Nevertheless, recent history has demonstrated a huge amount of small, medium, and large vascular and endovascular meetings, some of them very well organized and well designed. Many times, these meetings are more attractive for young vascular surgeons than the annual ESVS congress itself. ESVS should understand the unmet needs for young specialists by offering more interactive and attractive educational events. Otherwise, the role and specific weight of some scientific societies will be marginal. During my presidency, we worked on this direction, but there is still a lot of room for improvement and modern adaptation.

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As Chairman of the SITE symposium, what are your goals for future meetings?

The SITE symposium is a medium-sized endovascular meeting that is held every other year in Barcelona. Since its creation in 2000, SITE has been committed to updating Spanish-speaking endovascular professionals on the most relevant innovations by interacting with top international and multispecialty faculty. Language is no longer a limiting factor for direct interaction and participation because simultaneous translation is provided. Now, SITE has an established place in the international congress agenda.

Recently, we started a new forum called SITE^{update}. This new meeting is taking place in between SITE symposiums. SITE^{update} is committed to performing a 1-day advisory board (limited to 120 participants) with expert faculty, engineers, company managers, health administration managers, and medical technology agencies to discus the unmet needs in one or two major endovascular issues. It is a very dynamic and profitable formula that is very different from most classic meeting formats. With the present time's economic and time restrictions, medical meetings should be practical and useful for every single attendee. ■

Vincent Riambau, MD, PhD, is Professor and Chief, Vascular Surgery Division, Thorax Institute, Hospital Clinic, University of Barcelona in Barcelona, Spain. He has disclosed that he has no financial interests related to this article. Dr. Riambau may be reached at vriambau@clinic.ub.es.