AN INTERVIEW WITH...

Fabrizio Fanelli, MD, EBIR

The Rome-based interventional radiologist talks lower extremity data, innovation, and his interventional mentor.

With little current head-to-head data within and across platforms, on what information do you base your treatment algorithms for lower extremity disease?

Nowadays, the treatment for superficial femoral artery (SFA) steno-obstructive pathology is mostly based on the use of drug-eluting devices in compliance with the many studies that have highlighted patency rate improvement when compared to noncoated devices. Obviously, the lack of comparative head-to-head studies makes the choice between drug-eluting stents and drug-coated balloons (DCBs) more difficult, but there are enough data in the literature to support a specific treatment algorithm.

Referring in particular to DCBs, we have level 1 evidence derived from 2-year randomized controlled trial follow-up data (LEVANT 2 and IN.PACT SFA), as well as the 2-year data of the ILLUMENATE first-in-human trial. In addition, these devices have been carefully analyzed in subgroups regarding gender, diabetic patients, long lesions, chronic total occlusions, calcified lesions, and in-stent restenosis. It is also important to consider the excellent results ZILVER PTX (Cook Medical) has achieved through 5-year follow-up.

From my personal experience and daily activity, I can say that the final choice depends on the characteristics of the lesion to be treated.

What do you predict for the future of carotid artery stenting?

It is difficult to predict what will happen in the future. In my opinion, we have been witnessing an incorrect evaluation. The initial enthusiasm for endovascular treatment, in fact, has been damped down by ill-conducted studies that had results that were uncertain and affected by operator-related factors. EVA-3S is an example.

The primary consequences have been diminished interest from several companies and a subsequent decrease in technological evolution. Fortunately, the recent introduction of new devices has revived general attention, and this technique will surely regain trust and confidence. Hopefully, patients will soon be offered a technique that can resolve their issues more safely and efficiently.

What are some unique elements of practicing at Sapienza University in Rome?

It was in our department at Sapienza, which boasts a great scientific background, that Prof. Plinio Rossi, a pioneer in interventional radiology, founded his school where a large number of distinguished radiologists were trained. One name among the group? Barry T. Katzen, MD.

With the passing of time, my predecessors, and myself at present, have been striving to follow Prof. Rossi's teachings and to always keep high scientific and clinical standards.

I can say that in the wide field of interventional radiology, we have been the first to employ intravascular ultrasound (IVUS) in vascular procedures (endovascular thoracic and abdominal aortic repair and peripherals), and today we are able to perform the largest number of endovascular abdominal aortic aneurysm procedures only under IVUS guidance with no contrast media for the benefit of our patients. SFA treatment represents another area of great expertise, especially using DCBs.

Sapienza Vascular Unit is a center of reference not only for abdominal and thoracic aortic pathology but also for the use of embolization liquids (Onyx, Medtronic). Consequently, regular training courses are held to educate less experienced colleagues.

A review of your published literature shows a wide variety of research, including lower extremity revascularization, aortic repair, optimal imaging, and much more. Which types of cases give you the most personal and professional satisfaction, and why?

The clinical relationship with a patient is a matter of utmost importance, and any time we interventional radiologists succeed in resolving health problems, we are extremely pleased.

The treatment for peripheral limb arterial pathology is a clear example because when a patient who

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is unable to walk and has a limited quality of life regains walking autonomy and regular daily activities after a successful treatment, the interventional radiologist's satisfaction is great and complete.

I also have great professional satisfaction when I'm able to adjust a technique to improve its outcome, resulting in applicability by other colleagues. I feel the same satisfaction when I succeed in passing enthusiasm and passion for my specialty on to my young residents.

What do you see as the biggest unmet clinical need in your daily practice? Whether imaging, device, or information system based, is there a potential game-changer that would dramatically enhance your capabilities?

Nowadays, it is hard to believe in an innovation radically changing our working activity or giving us the ability to face a certain pathology in a completely different fashion. But, I believe in any improvement that can reduce patients' and operators' overall exposure to radiation considering how much time they spend in angiographic suites.

Employing nanotechnologies with the possibility of drug delivery directly into the target will surely change some interventional techniques and allow us to approach pathologies in a different way.

What is one of the most important lessons you have learned from a vascular intervention mentor?

I surely owe what I have learned in the vascular field to Prof. Rossi, my mentor, who taught me how to maintain good relationships with my patients and how important it is for an interventional radiologist to have a clinical vision of any pathology, avoiding behaving as "a plumber."

Such basic elements are often forgotten because interventional radiology tends to focus primarily on the pathology resolution and on the technical aspects.

What is your favorite way to spend time outside of the cath lab?

Needless to say, I devote the little spare time I have to my family, my wife, and beloved son.

I do my best to practice my hobbies, such as skiing, snowboarding, horseback riding, and—being a true-born Italian guy—I have a passion for fast sports cars and high-speed boats. ■

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