

The Restenosis Conundrum

The technology for superficial femoral artery (SFA) interventions has improved remarkably over the last decade, yet the “holy grail” of better long-term patency continues to evade us. Despite all the good work being done by engineers and device manufacturers to improve SFA therapies, including better nitinol stents, improved atherectomy devices, and novel drug-eluting technologies, restenosis continues to limit the effectiveness of our procedures. We continue to search for solutions, and in our August issue, experts in the field share their ideas on how to tackle this troubling clinical problem.

First, my colleagues Satinder Singh, MD, and Ehrin J. Armstrong, MD, and I lay the groundwork by reviewing the mechanisms, incidence, and outcomes of in-stent restenosis (ISR) in both the iliac and femoropopliteal arteries. Mark W. Burket, MD, compares the financial impact of various treatment choices for ISR and sharpens our focus on the economics of target lesion revascularization. We know that in the years to come, there will be more and more emphasis on the short- and long-term costs of the high-tech therapies that we provide.

In our recurring “Ask the Experts” segment, we ask a panel of interventionists, “What is your go-to option for treating in-stent restenosis?” before examining different modalities in detail.

While drug-eluting therapies are showing promise for the primary treatment of femoropopliteal occlusive disease, they are also being evaluated for the treatment of restenosis. Diffuse femoropopliteal ISR is a particularly vexing problem for which better therapies are required. Eugenio Stabile, MD, PhD, and Vittorio Virga, MD, review the currently available data for drug-eluting stents and drug-coated balloons as therapy for this challenging condition.

Over the years, debulking therapies have been commonly used for the treatment of ISR, particularly given the poor results achieved with balloon angioplasty for diffuse ISR or in-stent occlusion. A clinical trial is underway evaluating laser atherectomy for femoropopliteal ISR (the EXCITE trial). Eric J. Dippel, MD (Principal Investigator for the EXCITE trial), and Nicolas W. Shammass, MD, review the data supporting atherectomy's role in treating femoropopliteal restenosis.

There has been continuing evolution of stent design and improvements in covered stent technology. We spoke to

Peter A. Soukas, MD, about the utility of covered stents in longer femoropopliteal lesions.

Lest we forget about noninterventional therapies for restenosis, Osamu Iida, MD, and Yoshimitsu Soga, MD, detail the pharmacologic options for tackling restenosis, including a special focus on the impact of cilostazol after endovascular intervention.

To fill the void of available comparative data on SFA trials, we created a set of charts presenting the major SFA stent trials. Michael Jaff, DO, also breaks down the important considerations to weigh when analyzing and interpreting the data. Even more trials will be included on our website, www.evtoday.com, which we are excited to announce was upgraded and relaunched this month.

In addition to our SFA restenosis coverage, Dr. Nigel Hacking provides his experience in treating prostatic hypertrophy with a team approach. We also have a case report of the first implantation in the United States of a self-expanding nitinol stent using a 4-F system in the SFA from Erik Stilp, MD, Jacqueline Gamberdella, BS, and Carlos Mena-Hurtado, MD.

Kathy Krol, MD, highlights the new bundled cervico-cerebral diagnostic angiography and intervention codes in this month's “Coding Expert” column.

Finally, to conclude the issue, we speak to Eric L. G. Verhoeven, MD, PhD, for this month's featured interview. The esteemed vascular surgeon discusses aortic aneurysm treatment technologies and follow-up methods, focusing on the need for individualized patient care.

These are exciting and challenging times. Tremendous progress is being made with endovascular approaches to femoropopliteal disease, yet as this issue highlights, we still have a ways to go. Hopefully we can continue to learn together how best to deal with this restenosis conundrum. ■



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