Surgical Bypass Summit

BY RUSSELL H. SAMSON, MD, FACS, RVT

Over 3 days in early December 2014, Gore & Associates sponsored an educational summit of thought leaders focused on the management of infrainguinal vascular disease. The 15 vascular surgeons from around the world represented France, Germany, Mexico, Italy, and many regions of the United States. All had published extensively in the field of infrainguinal bypass, had significant clinical experience with both saphenous vein as well as nonautogenous grafts, and were proficient in endovascular techniques. The participants represented both academic and private practice, bringing "real-world" experience to the discussion.

Because of the increasing utilization of endovascular procedures, the summit was an attempt to reach consensus on the current state of infrainguinal bypass as a form of revascularization for patients with claudication or chronic limb ischemia. A dominant theme of the summit was to define the conditions most appropriately treated by infrainguinal bypass surgery, and if so treated, the most appropriate type of bypass, especially with regard to the type of conduit. It has been a well-accepted paradigm that autogenous vein is the conduit of choice and prosthetic bypasses should only be utilized when adequate vein is not available. However, autogenous saphenous vein may not be available; therefore, other conduits, such as arm vein, Dacron (polyethylene terephthalate), expanded polytetrafluoroethylene (ePTFE), and now heparin-bonded prosthetic grafts, may be utilized. Some surgeons may also use saphenous vein alternatives as a primary conduit under certain circumstances. The role of adjuvant medications and other techniques to maintain graft patency is also controversial.

In order to facilitate the consensus, each participant provided a lecture on a specific aspect of the overall topic. Discussions then focused on clinical scenarios, treatment algorithms, health care economic value of durable solutions, and breakthroughs that could improve performance and patient outcomes. Since Gore & Associates has adopted the CBAS® Heparin Surface technology for some of its ePTFE grafts, participants also discussed the advantages and disadvantages of heparin bonding to prosthetic grafts and what role, if any, heparin-bonded grafts have in the future. On the final day, participants voted on fundamental questions that arose as part of the discussions and presentations. The results of these questions can be found at www.surgicalbypass.com.

The summit did result in consensus—infrainguinal bypass remains a critical portion of current vascular practice and may be the most appropriate treatment in approximately 15% to 30% of patients in a standard practice dealing with limb preservation. Consensus was also reached with regard to quality saphenous vein, either ipsilateral or contralateral, as the ideal conduit for distal bypass. The group also considered heparin-bonded ePTFE to be an improvement over standard ePTFE, with the caveat that various forms of heparin bonding may have different long-term outcomes. A consistent theme was that although treatment algorithms could be determined, they should be applied on an individual basis. Readers are encouraged to review the summaries of the presentations and formulate their own opinions as to whether appropriate consensus was achieved. ■

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