View metadata, citation and similar papers at core.ac.uk
brought to you by CORE
provided by Elsevier - Publisher Connector

INVITED COMMENTARY

Linda Harris, MD, *Buffalo, NY*

Dr Vartanian and colleagues have retrospectively analyzed the outcomes of patients treated with bare metal stent (BMS) vs those treated with stent graft (SG) in the femoral popliteal segment and have found a higher incidence of acute limb ischemia presentations, requiring urgent intervention with thrombolysis for limb salvage, with SG failures. The groups were not entirely equivalent, as this was a retrospective study. However, the BMS group was more disadvantaged, in general, being older, with more critical limb ischemia (CLI), and a trend toward greater incidence of end-stage renal disease. Also, none of the SGs extended to the popliteal artery, whereas 11% of BMSs involved the popliteal artery.

Clearly, BMSs have limitations, with well-documented recurrence risks, especially with TransAtlantic Inter-Society Consensus D lesions, leading many to search for better endovascular alternatives. Some surgeons have proposed stent grafting as a better alternative to decrease the risk of in stent restenosis and recurrence. Although Dr Vartanian has confirmed that the SG does, indeed, have a lower incidence of recurrent stenosis (25% vs 36%), the key concern identified in this study is not the absolute failure rate, but rather the mode of failure. No patients with BMS failure developed acute limb ischemia, rather they reverted to their prior status, whereas nine patients with SGs (15.5%) presented with acute limb ischemia, with five converting from claudication at initial presentation to CLI. Further, four of these patients required bypass, and four had loss of runoff. The authors did not find a significant difference in overall conversion to CLI from claudication, likely because of type II error with small number of patients in each cohort.

The key concern that this study raises is the mode of failure of the SGs and whether aggressiveness of intervention for claudication with SGs should be tempered. While certainly most vascular surgeons today would opt for an endovascular first approach to claudicants, this is predicated on the perception that the endovascular intervention will not increase the risk of progression or limb loss. The use of the SG in this population should be carefully considered, especially with smaller vessels or those patients not able to tolerate antiplatelet therapy. SGs will have a lower rate of recurrent stenosis, but is the lower rate of reintervention worth the risk of acute limb ischemia with the need for emergent thrombolysis?