ASK THE EXPERTS

Repeat Revascularization in Rutherford 5/6 Patients: What Is Your Point of No Return?

Approaches to initial and repeat revascularization while considering patient preference and disease characteristics.

WITH VENITA CHANDRA, MD, AND SABINE STEINER, MD

Venita Chandra, MD
Clinical Associate Professor
Surgery-Vascular Surgery
Stanford Medicine
Stanford, California
vchandra@stanford.edu
Disclosures: None.

When considering revascularization in Rutherford 5 and 6 patients, you must consider two truths: (1) the intervention is likely a matter of limb salvage and, as such, "failure" will dramatically impact your patient's future, and (2) your intervention is likely not durable. Point two can be argued to some degree, but this involves chronic limb-threatening ischemia patients with poor runoff and poor overall protoplasm, and the armamentarium of tools is limited no matter the skill level.

Yet, we keep trying. I am of the mindset to keep trying and continue to look for new tricks, tools, and techniques. So, what is my point of no return? I would argue that I don't actually have one, per se. Although I will keep trying to cross long-segment below-the-knee occlusions and pedal arches to help with wound healing, generally (and particularly for more complex patients who may need repeat revascularizations), I have taken an increasingly holistic, perhaps even palliative approach. I ask the following

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Sabine Steiner, MD
Division of Angiology
Department of Internal Medicine, Neurology and Dermatology
University Hospital Leipzig
Leipzig, Germany
sabine.steiner@yahoo.com
Disclosures: None.

Over the past several years, profound advances in catheter-based revascularization technologies have been achieved, widely replacing surgical bypass as the dominant therapy in the majority of patients presenting with Rutherford class 5 and 6 disease. The significant shift toward endovascular revascularization also means that patients typically undergo multiple interventions, necessitated by high restenosis rates and progression of disease. As a consequence, we have developed a comprehensive concept of medical care in this very sick patient population with multiple comorbidities and a high mortality risk, including aggressive treatment of cardiovascular risk factors, standardized and advanced wound care, and close surveillance of perfusion status.

First, joint decision-making between patients, caregivers, and physicians is crucial. I consider endovascular treatment in Rutherford 5 and 6 patients a process rather than a single event. Thus, in agreement with the patient, repeated interventions are

attempted until revascularization is unsuccessful, typically due to absence of or very poor distal target vessels or impassable severe calcification. Percutaneous deep venous arterialization is a last option that can be offered. In general, a major concern for me is the use of prolonged catheter-directed intra-arterial lysis in patients who are of advanced age and have multiple medical comorbidities. I take all possible measures, including pharmacomechanical thrombectomy to reduce the need, duration, and dose of fibrinolytic therapy, because bleeding events in this patient population are detrimental. Nevertheless, despite all these precautionary measures, some patients do have major bleeding associated with lysis and might even need lysis in the future—these situations represent one of the major drawbacks for repeat revascularization.

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questions: What is the patient's activity level now? Who do they live with, and where do they live? How do they want to live their life? What is important to them? And what family and other resources do they have? I have found that focusing on the quality of life of Rutherford 5 and 6 patients as opposed to just their lesions has dramatically changed my approach to these complex patients. Although I still believe repeat revascularization is necessary for many patients, my point of no return is individually based and different for each patient. ■