Critical limb ischemia (CLI) patients present a wide variety of challenges to the interventional physician’s ability to treat their disease. Many have lesions in multiple anatomies, up to and including widespread cardiovascular disease. Lifestyle modification directions are often ignored or unable to be carried out due to the very nature of the symptoms, and recurrent disease poses a new set of obstacles upon later presentations.

Although sustaining long-term, durable results is a constant goal, CLI therapy can be difficult to even initiate. Target vessel and lesion access and crossing are some of the most significant obstacles faced when treating this population, with each case featuring unique anatomical and disease-related issues. At least 10% to 15% of patients with complex infrainguinal occlusive PAD cannot be crossed with simple antegrade or retrograde femoral approaches. If the therapy cannot be successfully delivered to the lesion, there is simply no chance of limb salvage.

Fortunately, emerging techniques and anatomy-specific technologies are providing interventionalists with new pathways via alternate access sites. Retrograde tibiopedal access is increasingly being used for patients in whom other access attempts have failed or are simply not possible due to their disease. This supplement looks at the anatomy through which tibiopedal access is gained; offers tips on patient selection, procedural steps, pitfall avoidance, and imaging options; and provides illustrative cases employing this technique.

We hope this supplement will help readers recognize the role of pedal artery access in revascularizing difficult tibioperoneal lesions and improve patient outcomes.

—Yazan Khatib, MD

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