

Spur® Retrievable Scaffold Therapy (RST) Treatment for Gangrenous Wounds and BTK Disease

CASE HISTORY

A woman in her early 70s presented with gangrene of the first toe and heel and an ulcer of the fifth toe, all on the right foot and present for one month (fig. 1). In addition to severe rest pain at night, she had a significant history of long-standing type 2 diabetes. A review of magnetic resonance angiography (MRA) images from an external physician revealed stenosis of the distal superficial femoral artery/popliteal segment and below-the-knee (BTK) disease.







Figure 1. Pre-procedure images of gangrene and ulcer on the right foot

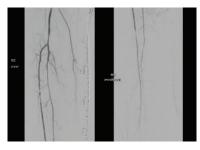


Figure 2. Procedural angiography of baseline BTK arteries

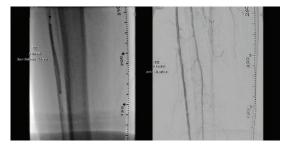


Figure 3. Angiography of the Spur and post-Spur

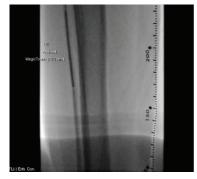


Figure 4. MagicTouch DCB (Concept Medical)

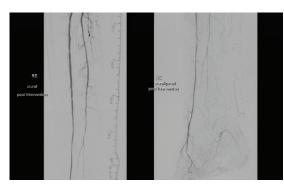


Figure 5. Final angiography

PHYSICIANS





M. Brodmann, MD

L. Schweiger, MD

Marianne Brodmann, мр

Division of Angiology, Medical University Graz, Graz, Austria

Marianne Brodmann, MD is a vascular specialist at the Medical University of Graz, Austria. Trained in Internal Medicine at the University Hospital of Graz, she specializes in Vascular Medicine (Angiology) with a focus on peripheral endovascular procedures. She participates in many trials for new endovascular techniques in both claudicants and CLL

Leyla Schweiger, MD

Medical University Graz, Graz, Austria

Leyla Schweiger, MD, specializes in Internal Medicine and Angiology at the University of Graz, Austria, with a focus on arterial disease. She has authored multiple articles on peripheral arterial disease and arthritis, and served as a sub-investigator in clinical trials for patients with PAD.

"Spur RST offers an advantage with its mode of action: vessel wall expansion that prevents acute recoil."

PRODUCTS USED



PERIPHERAL RETRIEVABLE SCAFFOLD SYSTEM



Spur RST Treatment for Gangrenous Wounds and BTK Disease

PROCEDURAL OVERVIEW

Due to severe pain and progressive worsening of the wounds from initial presentation as ulcers to gangrene, immediate revascularization was scheduled. The patient was included in the DEEPER LIMUS study, based on the appearance of the lesion in the BTK arteries. After inflow treatment, the Spur device was deployed in the anterior tibial artery (the target vessel), followed by treatment with a limus-coated balloon (fig. 2–4). There was no residual stenosis after treatment with Spur or limus (fig. 5).

At 3 months post procedure, the ulcer of the fifth toe had healed (fig. 6). A minor amputation of the first toe was performed. It was healed at 6-month follow-up, as was the heel lesion. Angiography at 6-month follow-up showed no restenosis of the target lesion (fig. 7).







Figure 6. Images at 3 months post procedure

DISCUSSION

The main advantage of Spur RST in vessel preparation is its prevention of acute recoil. This is achieved by the mode of action of the Spur device: vessel wall expansion. Additionally, the utility of Spur for preparation is suitable for any drug uptake.

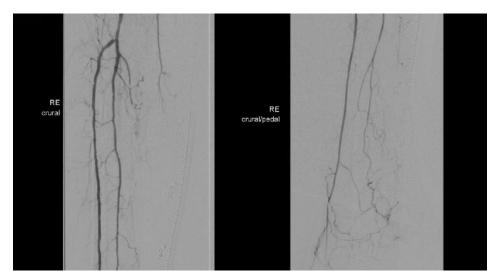


Figure 7. Six-month follow-up angiography