



CROSSING COMPLEX INFRAPOPLITEAL LESIONS UTILIZING A FRONT-END CUTTING TECHNIQUE: A CASE SERIES WITH THE NOVEL 1.5MM PHOENIX ATHERECTOMY SYSTEM



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BACKGROUND

Patients with **critical limb ischemia** (CLI) often present with **complex, calcified infrapopliteal lesions**. Atherectomy is a common endovascular technique employed to debulk **difficult-to-cross or otherwise uncrossable lesions**.

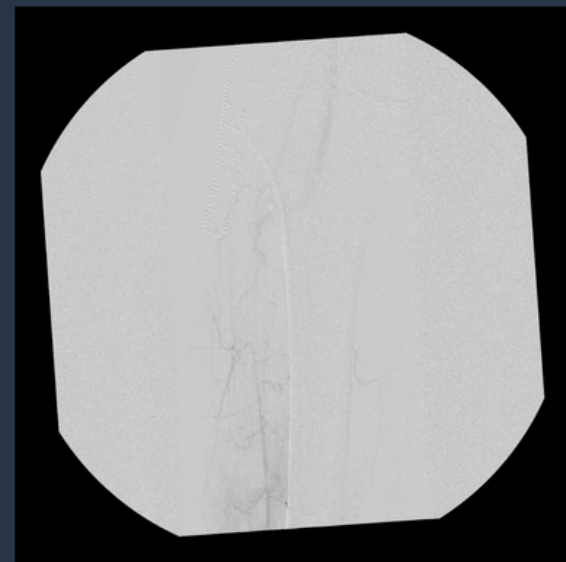
The Phoenix Atherectomy System (Philips, Cambridge, MA, USA) is a **front-end cutting rotational device** that cuts, captures, and clears diseased tissue. The **Phoenix 1.5mm catheter** is a second-generation device with a **low 4F profile** designed to treat smaller lesions in the distal arteries.

METHODS

We performed a **retrospective, single-center case series** of five patients who presented with CLI and whose complex and calcified infrapopliteal lesions were treated with the 1.5mm Phoenix Atherectomy System **after prior failed crossing/angioplasty attempts**.

CASE REPORT

66yo white male w/ type 2 DM, ESRD on hemodialysis, nonhealing ulcer



1. Retrograde angiography shows a calcified occlusion of the R prox. ATA



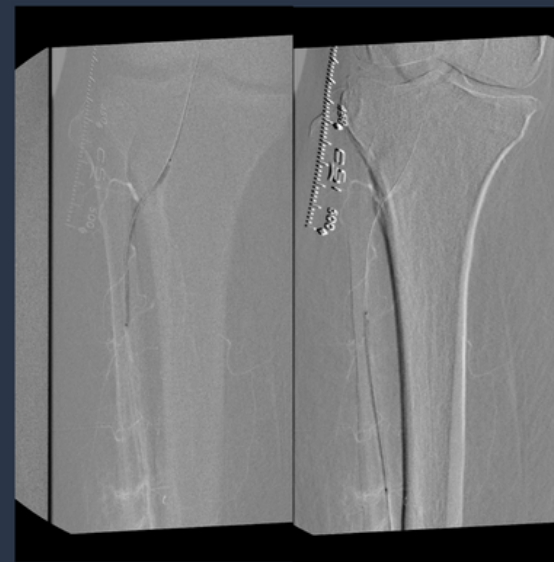
2. Catheters and balloons are unable to cross the lesion



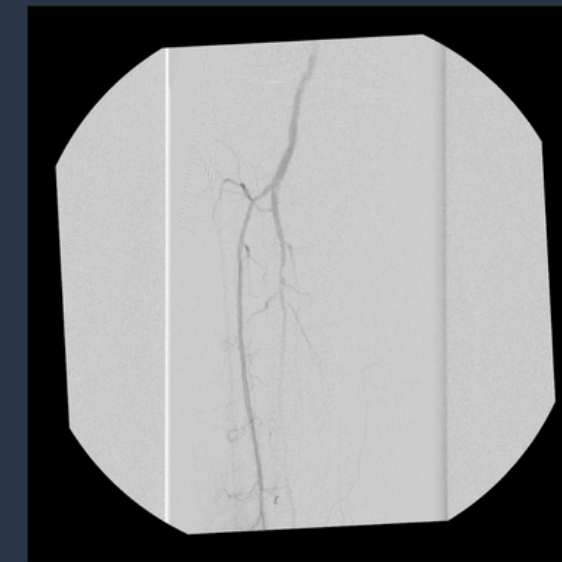
3. The Phoenix 1.5mm catheter debulks and modifies the lesion



4. Post-atherectomy angioplasty demonstrates a pilot channel



5. Balloon angioplasty with 2.0 x 80 and 2.5 x 80 mm balloons



6. Final angiography shows 0% residual stenosis and TIMI 3 flow

RESULTS

The 1.5mm Phoenix catheter successfully crossed and debulked each infrapopliteal lesion **allowing for definitive therapy with balloon angioplasty**. Each patient achieved TIMI 3 flow of the target lesion. There were **no device-related procedural complications** or deaths.

CONCLUSIONS

The 1.5mm Phoenix Atherectomy System showed favorable results in the treatment of complex, calcified infrapopliteal lesions and has the potential to improve outcomes in patients with CLI.



Scan for more information on the Phoenix Atherectomy System