

CASE REPORT

Removal of Below-the-Knee Thrombus With the Pounce™ LP Thrombectomy System

By Charles DeCarlo, MD

Patient Presentation

A man in his mid 60s presented to the emergency department with severe pain in his right foot. Patient history included an above-knee femoropopliteal bypass on the same side 2 years earlier.

Diagnostic Findings

Duplex ultrasound revealed a patent bypass graft despite an ankle-brachial index close to zero. A follow-up angiogram confirmed a patent bypass graft but the popliteal artery below the graft was found to be totally occluded, with minimal reconstitution of tibial arteries and no flow below the ankle (Figure 1).

Treatment

Left femoral access was obtained and a thrombolysis catheter was introduced up and over into the distal anterior tibial (AT) artery. An amputation was planned if thrombolytic treatment did not improve flow to the foot.

After 24-hour thrombolysis treatment, a follow-up angiogram demonstrated a recanalized popliteal artery (Figure 2) but still no flow detected in the foot (Figure 3A). A 7 Fr Destination® Peripheral Guiding Sheath and a .018 Glidewire Advantage® Peripheral Guidewire (both Terumo Interventional Systems)

were advanced up and over into the AT artery. The Pounce™ LP Thrombectomy System (Surmodics, Inc.) was then introduced, with the baskets deployed distal to the occlusion in the AT artery and the funnel deployed in the popliteal artery. Three passes with the Pounce™ LP System were performed, and a follow-up angiogram showed a fully recanalized AT and restored flow into the dorsalis pedis artery (Figure 3B).

Postprocedure Outcome

The patient was hospitalized for 2 days after the procedure to allow for monitoring of a minor hematoma caused by the thrombolysis treatment. The Pounce™ LP Thrombectomy System provided efficient removal of a distal AT occlusion that was not resolved with 24-hour thrombolytic treatment, thereby helping to prevent a foot amputation. ■



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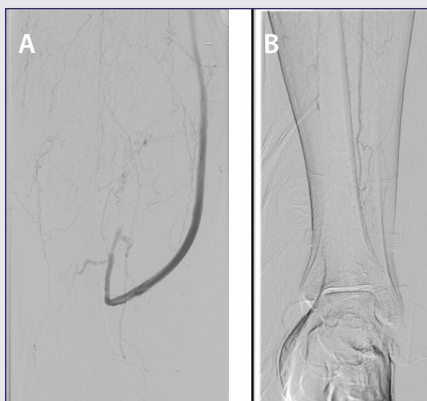


Figure 1. Initial angiogram showing a patent bypass graft with a distal popliteal artery occlusion (A), minimal reconstitution of tibial arteries, and no flow below the ankle (B).

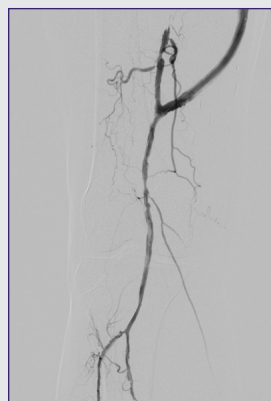


Figure 2. Recanalized popliteal artery after 24-hour thrombolytic treatment.

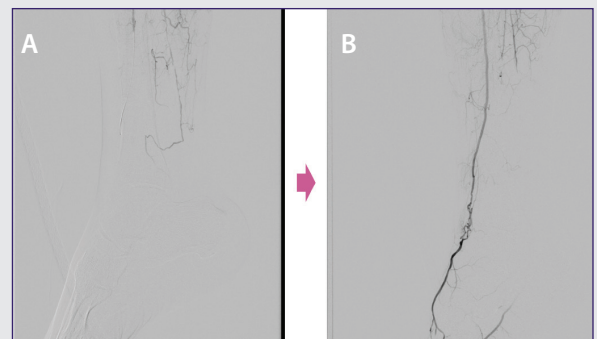


Figure 3. Distal tibial angiogram following 24-hour thrombolytic treatment (A) and repeated angiogram after one pass with the Pounce™ LP Thrombectomy System (B).

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