

CASE REPORT:

Successful Treatment of Infrapopliteal Arterial Thrombus With the Pounce™ Thrombectomy Platform

By Lucas Ferrer Cardona, MD

PATIENT PRESENTATION

A male patient presented to the emergency department with immediate onset of numbness and pain in his lower left leg and decreased motor and sensory function. The patient was immediately put on heparin and brought to the operating room.

DIAGNOSTIC FINDINGS

Right common femoral artery access was obtained. An initial CT scan revealed an occlusion in the patient's popliteal and tibial arteries that seemed to indicate a thrombotic event. An initial angiogram taken via a 7 Fr Destination® guiding sheath (Terumo Interventional Systems) showed complete thrombosis of the left popliteal, tibioperoneal trunk (TPT), and tibial arteries (Figure 1). The primary intervention strategy was to use the Pounce™ Thrombectomy System (Surmodics, Inc.) to remove the debris.

TREATMENT

The Pounce™ System was prepared and the basket wire was delivered to the TPT via the delivery catheter. The delivery catheter was removed, and the funnel catheter was delivered over the proximal portion of the basket wire and deployed at the popliteal artery. An initial pass of the Pounce™ System removed a moderate amount of organized thrombus. The Pounce™ System components were deployed again in the same locations, and another pass removed more of the organized material (Figure 2). Distal flow continued to be hampered by an occlusion in the proximal anterior tibial (AT) artery.

Because the AT artery was estimated to be < 3.5 mm in diameter (smaller than the indicated vessel range of the Pounce™ Thrombectomy System—indicated for 2 to 4 mm peripheral arteries—was prepared for use. The basket wire was placed in the mid AT artery and the funnel catheter was still placed in the popliteal artery. The basket wire was pulled back into the funnel catheter, collecting the remaining thrombus in the AT. After the pass with the



Figure 1. Initial angiogram showing occluded below-the-knee vessels.

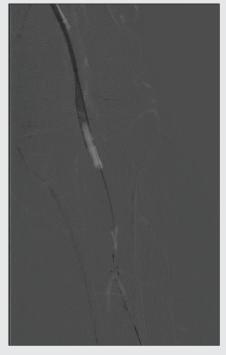


Figure 2. An angiogram after two passes of the Pounce™ Thrombectomy System in the popliteal and TPT arteries.

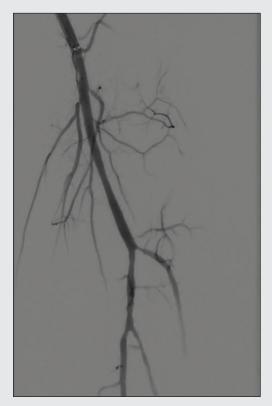


Figure 3. Final angiogram showing patent popliteal and TPT arteries, with three-vessel runoff to the foot.

Pounce™ LP device was completed, a follow-up angiogram showed complete removal and resolution of the thrombus burden with improved flow through the AT to the plantar arch (Figure 3).

POST-PROCEDURE OUTCOME

The patient was discharged 2 days after the intervention and restarted on apixaban medication. The combination of the Pounce™ and Pounce™ LP Thrombectomy Systems allowed for complete removal of organized thrombus from below-the-knee vessels, enabling improved flow to the distal vasculature without the need for thrombolytics or surgical intervention. ■



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