

CASE REPORT



Successful Treatment of Acute Limb Ischemia and Removal of Acute Popliteal and Anterior Tibial Thrombus Using the Pounce™ Thrombectomy System



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PATIENT PRESENTATION

At approximately 2:00 am, a 69-year-old female patient arrived with a sudden onset of pain, paresthesia, numbness, and compartment syndrome in her lower extremities. On arrival at the Emergency Room, she exhibited signs of acute limb ischemia with pain, weakness, and no doppler signals, prompting administration of heparin and a swift transfer to the operating room for further evaluation.

DIAGNOSTIC FINDINGS

CT angiogram assessments revealed a left iliac and femoral occlusion, along with a right popliteal occlusion. There was distal reconstitution noted in the right anterior tibial (AT) and peroneal arteries. A surgical cutdown approach was to be initially taken to resolve the iliac and femoral occlusions where the vessels were outside the indicated vessel range for the Pounce™ Thrombectomy System. Following the surgical cutdown, the Pounce system was to be used to treat the popliteal occlusion (**Figure One**).

Initial Angiogram Showing Right Popliteal Occlusion



Figure One

Clot Removed During Two Passes with the Pounce™ System



Figure Two

TREATMENT

After successful Fogarty embolectomy to treat the left iliac and femoral occlusions, the vascular team shifted to an endovascular approach to avoid further surgical invasive procedures to treat the patients right leg acute ischemia.

This involved retrograde left common femoral access under direct vision through the previous surgical exposure, and exchanging the initial access guidewire and sheath for a .035" Glidewire® Guidewire (Terumo Interventional Systems) and an 8 Fr x 65 cm length Destination® Sheath (Terumo), respectively. Employing the Pounce system, a series of steps followed, including the delivery of the Pounce system basket wire into the right AT and the Pounce funnel catheter into the right superficial femoral artery (SFA).^{*} Successful removal of acute-appearing thrombus was achieved through the Pounce system baskets (**Figure Two**), markedly improving blood flow.

^{*}The Pounce™ Thrombectomy System is indicated for vessels ranging from 3.5mm to 6mm.

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Subsequent angiography revealed restored flow in the right popliteal artery (**Figure Three**), albeit with a persistent occlusion of the right AT. Another pass with the Pounce™ Thrombectomy System baskets and funnel catheter resolved the remaining occlusion, confirmed by a follow-up angiogram displaying patent popliteal and AT arteries with restoration of perfusion the foot (**Figure Four, Five, and Six**). Bilateral fasciotomies were performed to treat the aforementioned initial presentation of compartment syndrome, and the patient was sent to the ICU for recovery.

POST PROCEDURE OUTCOME:

Her post-procedure Ankle-Brachial Index (ABIs) had increased, and her initial symptoms resolved. The patient was discharged five days later. The use of the Pounce system prevented further surgical intervention, successfully resolving the acute occlusion in the popliteal and tibial arteries without necessitating adjunctive therapies or TPA.

Patent Popliteal Arteries
After One Pass with the
Pounce™ System



Figure Three

Patent AT After Second
and Final Pass of the
Pounce™ System



Figure Four

Distal Reconstitution to the
Lower Extremity

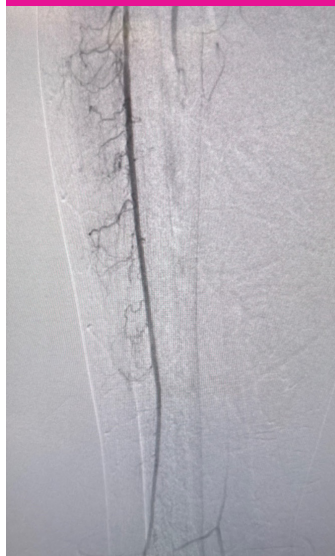


Figure Five

Inline Flow to the Foot
via the Anterior
Tibial Artery



Figure Six



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