

# CASE REPORT



## Successful Removal of 20 cm SFA Thrombus with Pounce™ Thrombectomy System



**J. Michael Bacharach, MD, FACC, FSCAI, MPH**  
North Central Heart  
Sioux Falls, South Dakota

### PATIENT PRESENTED BASELINE

A 52-year-old female presented to the emergency department with a cold and painful lower left leg. The pain started suddenly six days prior to presentation. Her past medical history included chronic lung disease. She was admitted to the hospital, started on intravenous heparin, and deemed to be a candidate for an angiogram.

### DIAGNOSTIC FINDINGS

An initial non-invasive study showed an ABI of 0.5 on the left side. The right common femoral artery (CFA) was accessed using ultrasound guidance and a 6 Fr sheath was placed. An aortogram and left lower extremity angiogram were performed demonstrating patent infrarenal aorta and bilateral iliac arteries, CFA and profunda femoral artery (PFA). However, the superficial femoral artery (SFA) was occluded with thrombus just beyond the origin, with reconstitution of the distal SFA via PFA collaterals (**Figure One**). The lower leg was perfused with two-vessel runoff via the anterior tibial (AT) and peroneal arteries.

### Occluded SFA with Thrombus

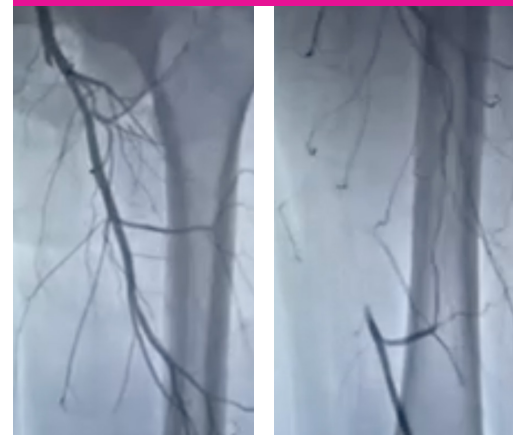


Figure One

### TREATMENT

A 7 Fr sheath was introduced into the right femoral access and advanced to the left CFA. From there, the SFA occlusion was crossed using a 0.018" Terumo Navicross® Support Catheter and a 0.018" Terumo Advantage Glidewire® Peripheral Guidewire. The Navicross® Support Catheter was removed from the vasculature, and the Pounce™ Thrombectomy System, which consists of a delivery catheter, a basket wire, and a funnel catheter, was prepared. The delivery catheter was advanced past the thrombus, and the basket wire was then advanced through the delivery catheter and deployed in the mid popliteal artery. The funnel catheter was advanced to the ostium of the SFA and deployed. The baskets were then pulled back along the length of the SFA (approximately 20 cm) into the funnel, and the funnel and baskets were removed through the 7 Fr sheath.

### SFA Thrombi and Emboli Removed After One Pass



Figure Two

The first pass removed a significant amount of well-organized, firm thrombi and emboli (**Figure Two**). After this initial pass, an angiogram revealed a widely patent proximal SFA with a high-grade lesion in the mid-portion of the SFA. A small section of the thrombus was noted to have embolized into a

# CASE REPORT

large PFA branch due to the funnel being positioned proximal to the ostium of the PFA (**Figure Three**). The thrombus was easily crossed with a 0.018" Advantage Glidewire® Peripheral Guidewire, and the delivery catheter was placed into the mid PFA. The basket wire and funnel catheter were deployed in the mid PFA and ostial PFA respectively.

The baskets were retracted into the funnel, the system was externalized through the sheath, and the clot was successively removed from the body. Angiography demonstrated normal PFA branches with no evidence of distal embolization (**Figure Four**).

One final pass was performed using the Pounce™ Thrombectomy System to further clean out the SFA. A repeat angiography revealed complete thrombus removal in the SFA, with evidence of a mid-SFA atherosclerotic lesion that appeared to have been the etiology of the arterial thrombosis. A 5 mm x 250 mm IN.PACT™ Admiral™ drug-coated balloon was deployed and inflated at the site of the lesion. A final complete angiogram was conducted demonstrating a widely patent left CFA, SFA, and PFA (**Figure Five**).

The left popliteal artery was patent with two-vessel runoff to the foot via the AT and peroneal with no evidence of distal embolization.



Figure Three



Figure Four

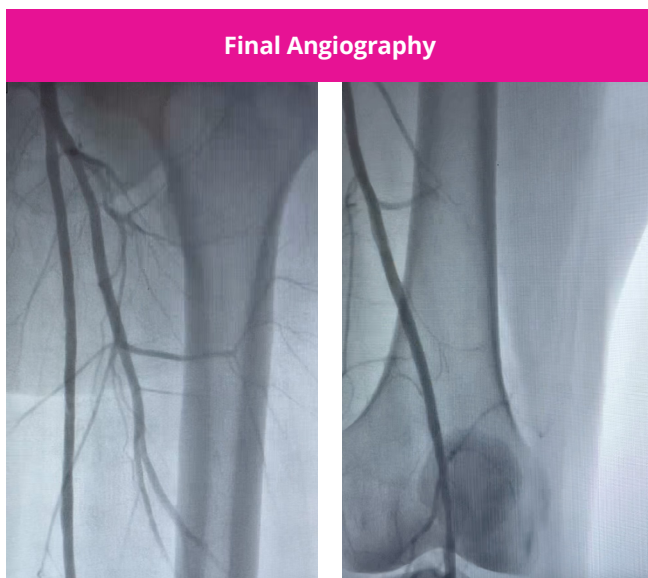


Figure Five

## POST PROCEDURE OUTCOME

The patient was discharged home 12 hours after the procedure with dual antiplatelet therapy and encouraged to quit smoking. The follow up arterial duplex one-month later demonstrated no evidence of stenosis with a normalization of the ABI to 1.0 on the left side.

The Pounce system provided a first-line treatment for the long length thrombotic occlusion in the diseased SFA. The quick restoration of flow both in the SFA and PFA avoided the need for thrombolytic therapy, further surgical revascularization, or any ICU bedtime.



Surmodics, Inc.  
7905 Golden Triangle Drive, Suite 190 Eden Prairie, MN 55344 USA  
Toll Free: 888-626-8501 Phone: 952-500-7400  
www.pouncesystem.com

**Caution:** Federal (US) law restricts this device to sale by or on the order of a physician. Please refer to Instructions for Use for indications, contraindications, warnings, and precautions.

SURMODICS, POUNCE, and SURMODICS and POUNCE logos are trademarks of Surmodics, Inc. and/or its affiliates. Third-party trademarks are the property of their respective owners. All images used with permission of author.

©2023 Surmodics, Inc. All rights reserved. SRDX-PTS-569 B 01/23