

# Non-Guide Wire Crossing of a Flush Superficial Femoral Artery Occlusion with Laser Atherectomy and Extravascular Ultrasound Guidance

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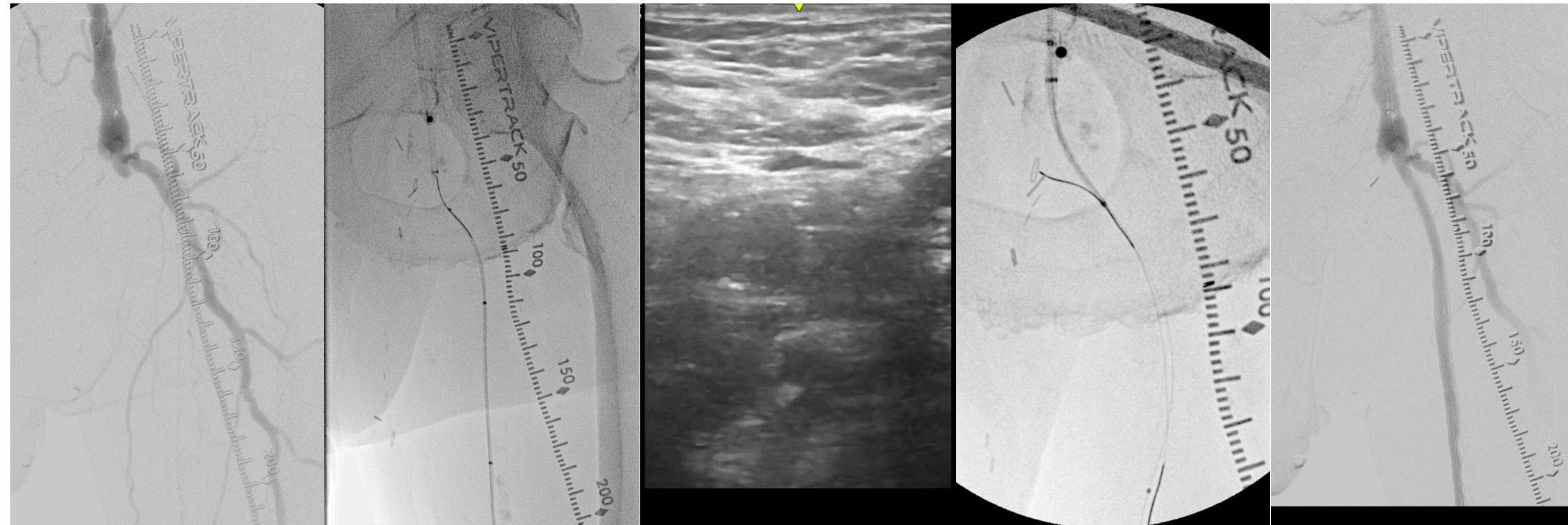
## BACKGROUND

Patients with peripheral artery disease (PAD) often present with difficult-to-cross chronic total occlusions (CTOs) in the superficial femoral artery (SFA).

This study examines the use of extravascular ultrasound (EVUS) to assist in crossing a flush occluded SFA in a patient with multiple cardiovascular risk factors.

## CASE STUDY

75-year-old male with Rutherford Class III disease and life-limiting claudication. The patient was status post multiple revascularizations of the bilateral lower extremities, a failed left fem-pop bypass, and a right SFA stent.



The left SFA was flush occluded 300 mm with extensive postoperative scarring at the ostium.

Traditional retrograde and antegrade crossing attempts to pierce the proximal cap were unsuccessful.

Under EVUS guidance, a 1.5 mm Auryon laser catheter was advanced without a guidewire into the proximal cap.

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A wire/catheter combo was then advanced into the SFA.

This allowed for subsequent therapy with balloon angioplasty and stent placement.

## RESULTS

Final angiography showed less than 30% residual stenosis, restoring normal TIMI-3 flow along the entire treated segment.

This result supports the efficacy of EVUS in the treatment of complex occlusions.

## CONCLUSION

Integrating EVUS with traditional interventional tools offers a viable option for complex PAD cases, particularly when conventional methods are inadequate.

This case highlights the potential of ultrasound-guided techniques to improve outcomes for patients with PAD.