

ABSTRACT

**Background:** Vascular intervention of superficial femoral artery (SFA) chronic total occlusions (CTO) is sometimes unsuccessful when the CTO cannot be crossed antegradely via ipsilateral femoral approach because the proximal CTO cap is fibrocalcific or a CTO “nubbin” is absent.

**Objective:** The goal of this study is to demonstrate our experience of the efficacy and safety of retrograde popliteal approach in SFA chronic total occlusion

**METHOD:** From July 2017 to May 2018, a total of 8 patients with total occlusion of the SFA and good distal runoff were treated with percutaneous balloon angioplasty. All patients had severe claudication or critical limb ischemia

**CONCLUSION:** The retrograde popliteal artery approach under duplex guidance can be considered as safe, efficient, and the primary SFA recanalization with good immediate and mid-term results.

BACKGROUND

Vascular intervention of superficial femoral artery (SFA) chronic total occlusions (CTO) is sometimes unsuccessful when the CTO cannot be crossed antegradely via ipsilateral femoral approach because the proximal CTO cap is fibrocalcific or a CTO “nubbin” is absent. For these cases, retrograde popliteal access RPA provides an alternative to traditional approaches which first described in 1988.

PURPOSE

The goal of this study is to demonstrate our experience of the efficacy and safety of retrograde popliteal approach in SFA chronic total occlusion.

METHODS

From July 1<sup>st</sup> 2017 to May 31<sup>st</sup> 2018, 8 patients with total flush occlusion of the SFA with good distal runoff were treated with percutaneous balloon angioplasty at Alexandria insurance hospital.

All patients had severe claudication or critical limb ischemia and subjected to:

- History & clinical examination
- CT Angiogram
- Duplex examination
- Post PCI follow up : 3,6 and 12 month



RESULTS

Gender

7 men 87.5% and one lady 12.5%

Age

mean age 60.2 ± 6.5 years  
Age Range : 66 – 84 years

Lesion morphology

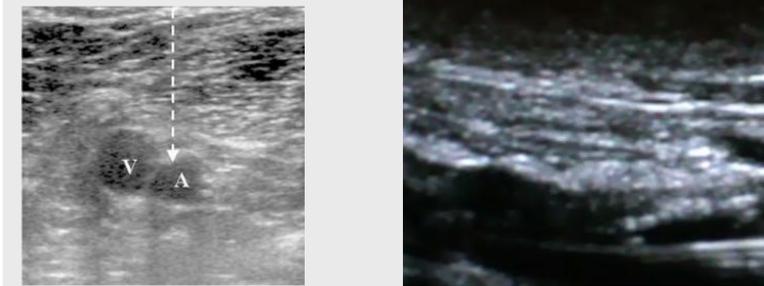
side	right	left	bilateral
	3 patients 37.5%	2 patients 25%	3 patients 37.5%

Length of the lesion	12-22 18.6 ± 0.07	CM CM
----------------------	----------------------	----------

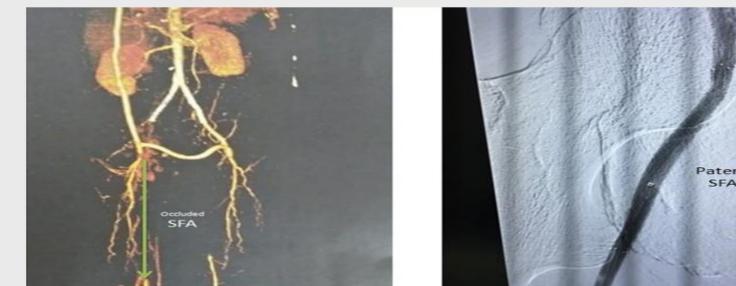
RESULTS



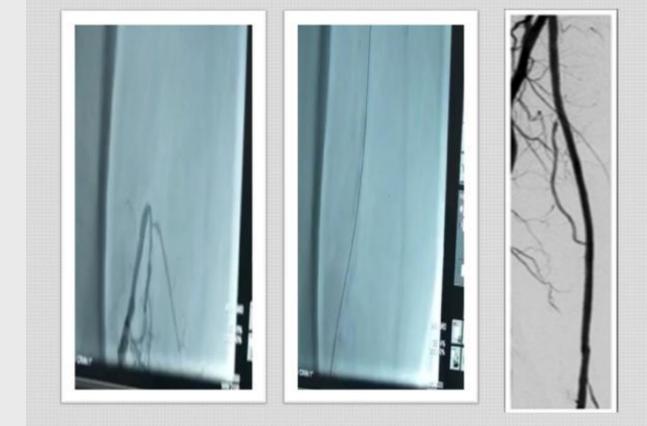
Duplex guided pop. approach



M.I. 66 years male patient  
DM. type II, HTN, IHD.  
Axillary bifemoral 6 month  
Severe rest pain (Rt.L.L)  
ABI. 0.4 (Rt.L.L)



RESULTS



Primary Success rate

Ankle-brachial index

changed from (0.56 ± 0.11) to (0.91 ± 0.2)

Technical success

was achieved in all cases. (8 patients, 100%)

CONCLUSION

- retrograde transpopliteal and transpedal access are innovative techniques that should be a part of every vascular specialist's skill set
- case selection, operator experience and appropriate technique are essential for optimal clinical and procedural success

DISCLOSURES

No