

Superficial Femoral Artery Recanalization by Coronary Equipment: From Concept Towards Daily Practice

*Turgeman, Yoav; Sulieman, Khaled; Feldman, Alexander; Ilan Bushari, Limor; Bloch, Limor
Heart Institute, Emek Medical Center, Heart Institute, Afula, Israel*

Backgrounds:Chronic total occlusion (CTO) of superficial femoral artery (SFA) carries bad clinical outcome. Micro and Macroscopic neo channels are part of this vascular pathology whereas wire crossing and equipment delivery are the main obstacles related to.

Aims: Reporting our experience of SFA recanalization by using coronary equipment after failure with the ordinary peripheral tools.

Material & Methods: Balloon angioplasty and stenting using the contra lateral approach is our standard technique for SFA recanalization. Stiff hydrophilic guide wire (Terumo .035") with an angled tip is our first choice. Seventeen CTO lesions were attempted for recanalization during the last 2 years. Main reasons for initial technical failure were either wire crossing inability or failed peripheral balloon propagation despite wire crossing. After failure of recanalization using the ordinary tools we switched to coronary dedicated wires and balloons. The edit value of this technical approach is described in the following table.

Results:

year	no of pts	missing segments	initial success	after using coronary equipment	total success
2010	10	8 ±4	4/10(40%)	3/10(30%)	70%
2011	7	10±3	3/7(43%)	2/7(28%)	71%

All technically successful procedures terminated with self expandable stent implantation. Using this approach no periprocedural complications were recorded

Conclusions: Coronary balloons and wires may increase the success rate of SFA recanalization by improving penetration and dilatation of the tiny CTO vascular neo channels.