

VASCU**PEDIA**

Retrograde tibial anterior approach for challenging popliteal occlusion in CLI patient

Maxime Elens, MD

Vascular and Endovascular Surgeon

Departement of Cardiovascular and Thoracic Surgery

University Hospital Saint-Luc, Brussels, Belgium

Case presentation

- Woman
- 66 yrs old
- Rest pain for 2 months (RF:4)
- <u>Risk factors:</u>
 - aHT
 - previous smoker
 - dyslipidemia

• Previous intervention

• PTA right popliteal artery



Angiography



- Distal left AFS/P1 occlusion
- Mild Ca²⁺
- 95mm long



Recanalisation

- Subintimal
- wire: 0,035soft Terumo
- Support catheter: 4F MP
- No reentry could be obtain possibly due to:
 - Soft flap
 - Vertical major collateral 1
- No lower dissection was preferred due to high ATA bifurcation



Possible options:

- Try to reentry lower down and sacrifice the peroneal artery or ATA
- Leave it like this
- Reentry device
- Retrograde approach

Selected option

- Retrograde approach via the ATA
- Fluoro-guided puncture
- Micropuncture set
- 0,035 soft angled tip wire (Terumo)
- Sheathless
- 4F MP catheter
- SAFARI technique
- Antegrade recanalisation





Next step

- 0,018 from top to the distal ATA (passing the puncture zone)
- Removing the 0,035 from the retrograde approach
- Ballooning the ATA with a POBA (sterling 2x60mm) for 5min to obtain hemostasis
- POBA (sterling 3x120mm) predilatation followed by DCB Passeo 18 Lux 4x120mm)



Next step

- Spot stenting of the distal SFA (Innova 5x40) due to residual stenosis (>50%) ¹
- Final angio shows:
 - Persistant stenosis at P2 level but not significant [↑]
 - Vasospasm of the ATA for what we injected 1cc of papaverine



Follow up

- 2 months
 - Patent femoropopliteal segment



• Patent anterio tibial artery



Questions

- Would you have chosen another recanalization option?
- Would you have stent the residual P1 stenosis?
- Would you have stent the entire occluded popliteal segment?
- Would you perform an additional treatment on the vasospastic ATA?