Revascularization of a popliteal artery CTO with occlusion of all below-the-knee vessels by implantation of a helical nitinol stent into a collateral connecting to the dorsal pedal artery

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Disclosure

Speaker name: Planert M

I have the following potential conflicts of interest to report:

- [x] I do not have any potential conflict of interest
Background

- Treatment options for CLI include bypass surgery & endovascular methods
- Main goal of therapy: preservation of affected limb
- Endovascular first approach is favoured in many vascular centers (comorbidities, missing bypass-conduit, lack of bypass target)
- Endovascular methods enable to treat this difficult patient population with less periprocedural morbidity and mortality

Case History

- 86-year-old female patient
- Non-healing wound following minor amputation on the left side, Rutherford 5
- Comorbidities: CVI, abdominal aortic aneurysm, CVRF: art. Htn, DM II, HLP
- Calcified 14cm long CTO of the popliteal artery
- CTO of all native below-the-knee vessels, one strong collateral connecting to the dorsal pedal artery
Baseline Angiography
Lesion crossing + POBA
Stent-Implantation + Result
Results

- Technically successful revascularization
- No complications
- ABI before intervention 0.41
- ABI after intervention 0.82
- FU @ 3 month: patent reconstruction, no stenosis, ABI 1.07
Conclusions

- The main goal in endovascular treatment of CLI is to obtain the maximal possible run-off.

- If no native crural vessel can be recanalized, a run-off via a collateral connecting to a native distal vessel may present a feasible option in selected cases.

- Further long-term FU regarding this technique have to be exerted.

Thank you!
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