Sliding, piercing and other techniques for below-the-ankle lesion crossing
Disclosure

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In the last 2 years I have the following potential conflicts of interest to report:

**Consultant:** Medtronic, Abbott, Boston Scientific, Contract Medical International, Cook, Asahi, Ivascular, Biotronik, Limflow, Spectranetics, Shire, Kardia, Astra Zeneca, Orbus, Bard, Philips, Volcano, Novena, Angiodroid, M&L Healthcare

**Virtual shareholder:** Limflow
1. Sliding
2. Piercing
3. Dissecting
4. Retro
2. Piercing
- Everywhere (aorta, iliac etc) some lesions can be crossed only using a 0.014” wire

- Maintain a clear separation between the crossing strategy (0.014”-0.018”-0.035”) and the final treatment strategy (0.018”-0.035”)
1. Sliding
2. Piercing
3. Dissecting
4. Retro
Retrograde Tibioperoneal Access for Complex Infrainguinal Occlusions: Short- and Long-Term Outcomes of 554 Endovascular Interventions.
JACC Cardiovasc Interv. 2019 Sep 9;12(17):1714-1726

Below-the-Knee Retrograde Access for Peripheral Interventions: A Systematic Review.
Welling RHA, Bakker OJ, Scheinert D, Moll FL, Hazenberg CE, Mustapha JA, de Borst GJ, Schmidt A.
J Endovasc Ther. 2018 Jun;25(3):345-352

The tibiopedal retrograde vascular access for challenging popliteal and below-the-knee chronic total occlusions: literature review and description of the technique.
Schmidt A, Bakker OJ, Bausback Y, Scheinert D.

Surgical management of delayed retrograde type A aortic dissection following complete supra-aortic de-branching and stent-grafting of the transverse arch.
Luehr M, Etz CD, Lehmkuhl L, Schmidt A, Misfeld M, Borger MA, Mohr FW.

Techniques and outcome of retrograde crural artery revascularization.
Werner M, Piorkowski M, Schmidt A.

Retrograde recanalization technique for use after failed antegrade angioplasty in chronic femoral artery occlusions.

Retrograde approach for complex popliteal and tibioperoneal occlusions.
Baseline study
Baseline study
Failure of antegrade crossing
Retrograde puncture
- Oblique contralateral view
- DPA out of the bones: in the majority of the cases calcifications are sufficient to identify the artery
- Radial needle
- Workhorse 0.014” or 0.018” wires
Retrograde approach

workhorse 0.14” wire
Failure to cross the lesion
0.014” support catheter
Shift to a CTO dedicated wire and wire externalization

Asahi Halbert 0.014”
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