

When, where, and how: an update on support catheters

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Disclosure

Speaker name:

Jos C van den Berg

I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

- I do not have any potential conflict of interest related to this presentation

Microcatheters (PCI origin)

TABLE I. Description of Currently Available Microcatheters and Specialty Catheters

Manufacturer	Catheter	Length	Distal shaft diameter
Abbott/Asahi	Tornus	150 cm	2.1 and 2.6 French
	Corsair	135 cm, 150 cm	2.6 French
Boston Scientific	Renegade	105 cm, 115 cm, 135 cm	2.8 French
	Tracker Excel 14	150 cm	1.9 French
	Excelsior 1018	150 cm	2.0 French
Cordis	Transit	135 cm	2.5 French
	Prowler	150 cm	1.9 French
Spectranetics	Quick Cross	135 cm, 150 cm	2.0 French
St Jude	Venture	145 cm (rapid exchange), 140 cm (over-the-wire)	2.2 French
Terumo	Progreat	110 cm, 130 cm	2.7 French
	Finecross MG	130 cm, 150 cm	1.8 French
Vascular Solutions	Minnie	90 cm, 135 cm, 150 cm	2.2 French
	Gopher	140 cm	3 French
	Twin Pass 5200	140 cm	1.9 French distal tip, 3 French crossing profile

Catheters available

Asahi

Corsair Armet

Caravelle

Teleflex

Turnpike

Biotronik

Carnelian

Microcatheters

Support (recanalization)

Antegrade (stand-alone/co-axial)

Retrograde (sheathless)

Navigation

Requirements

Support

Taper on 0.014" guidewire (entry profile)

Sufficient length

Cross-over

Antegrade-retrograde passage

Co-axial system

Diameter < 0.038" (co-axial)

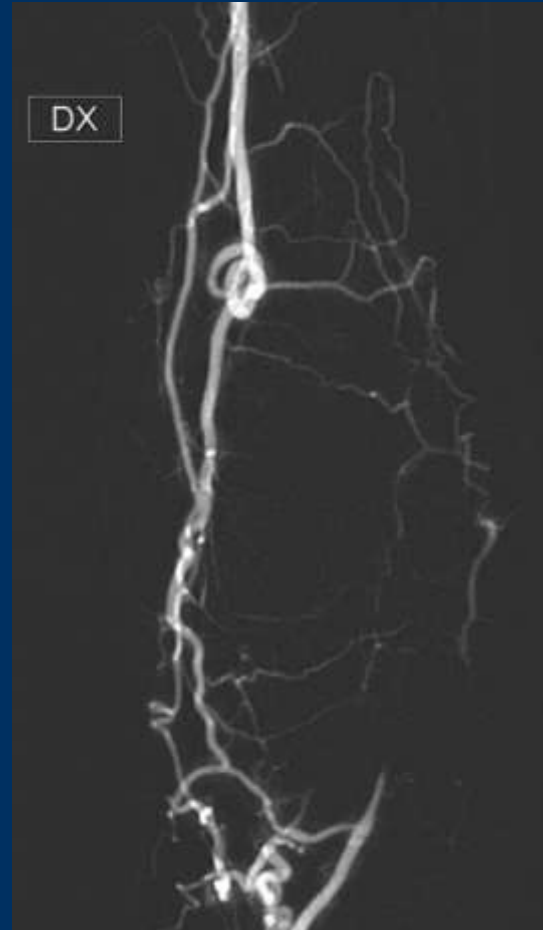
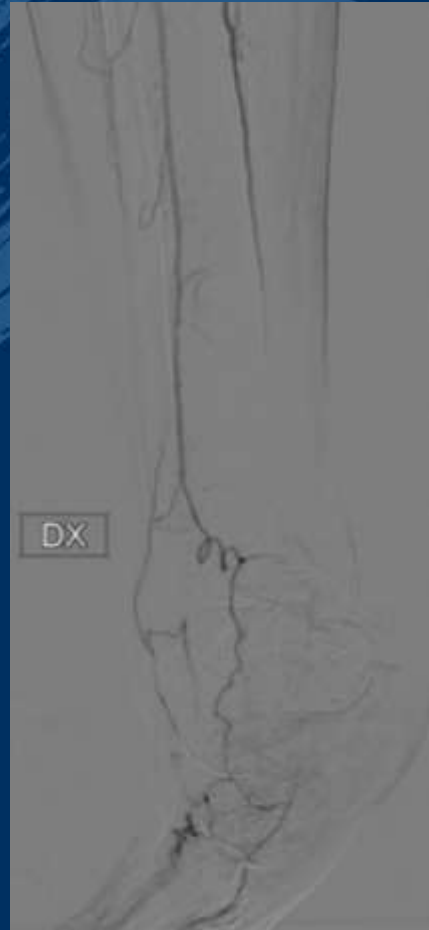
Navigation

Transcollateral

Cf. trans-septal coronary

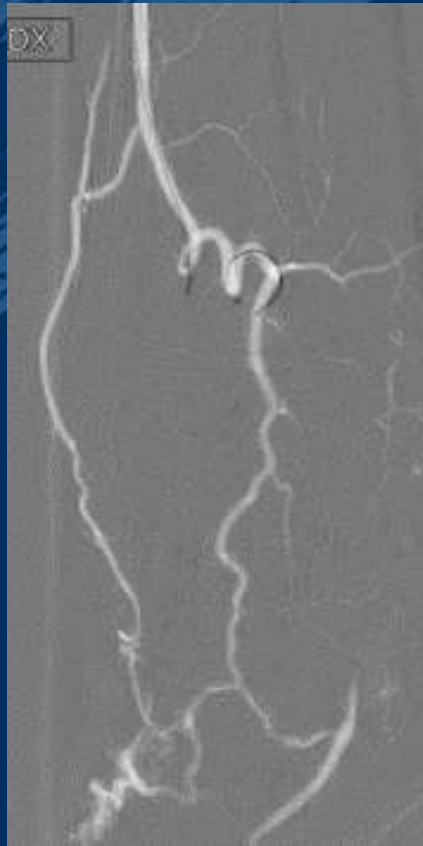
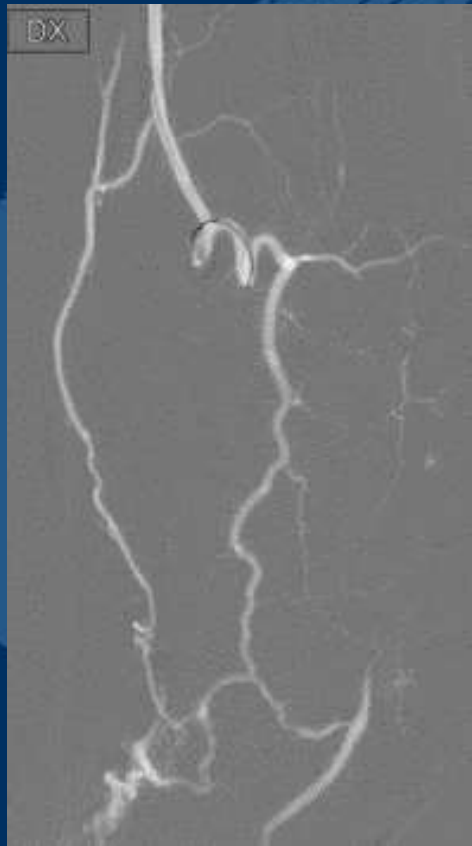
Pedal arch

Transcollateral recanalization



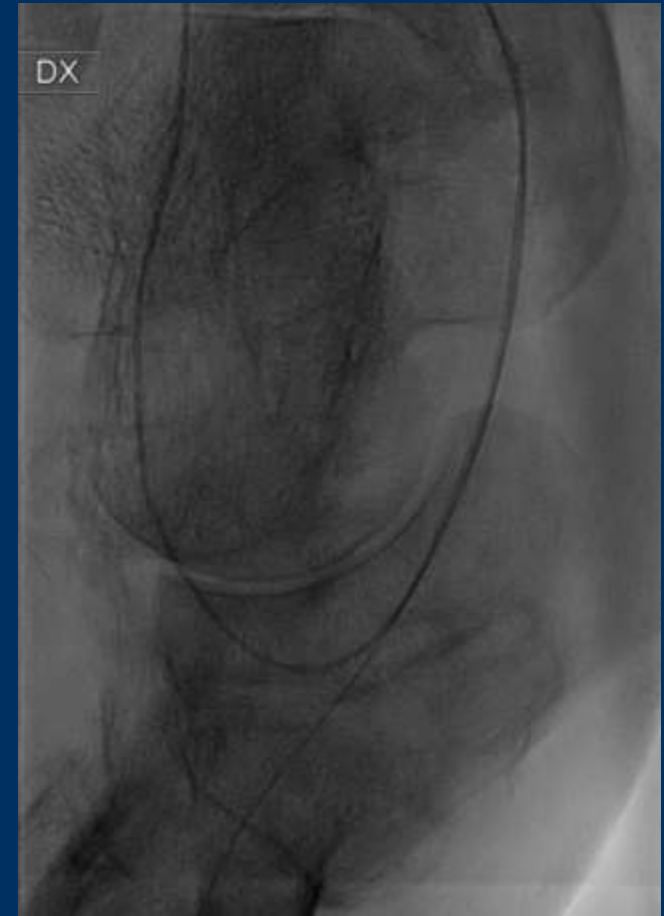
Failed antegrade recanalization posterior and anterior tibial artery

Transcollateral recanalization

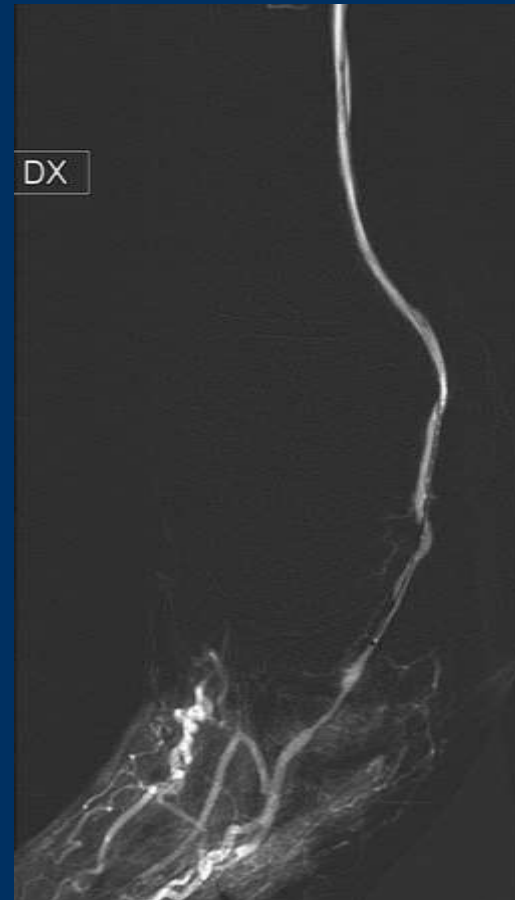
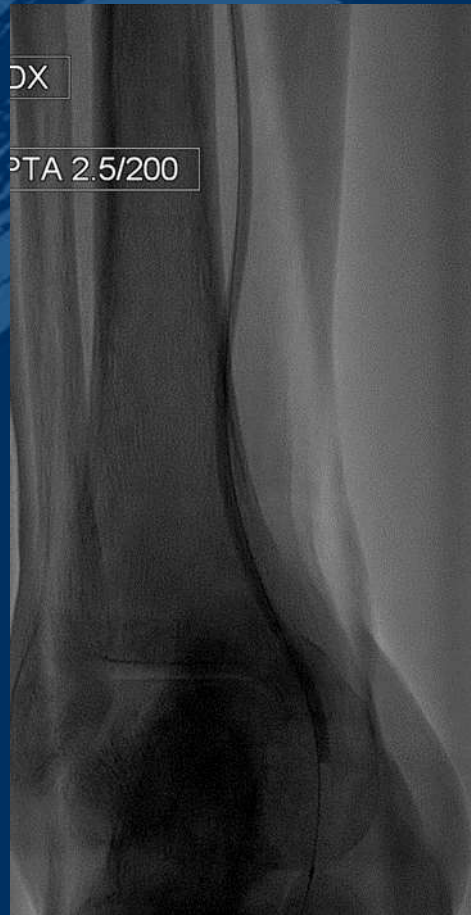


Carnelian 14 BTA with 0.014" GT Gold and 0.014" Command

Transcollateral recanalization



Transcollateral recanalization



Recanalization

Stand-alone

Co-axial system

4F diagnostic catheter (0.038" lumen)

Y-connector

Guidewire of choice

Co-axial system

Catheter with 0.038" lumen

Y-connector

Continuous saline flush

- Reduces friction

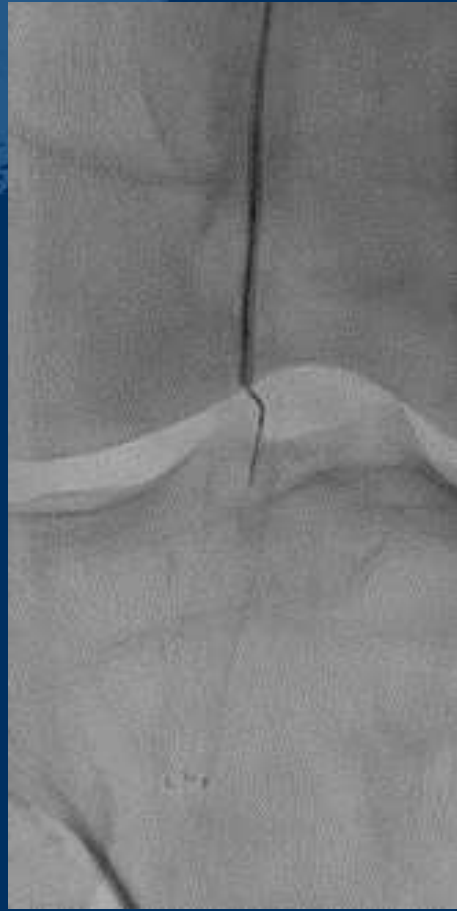
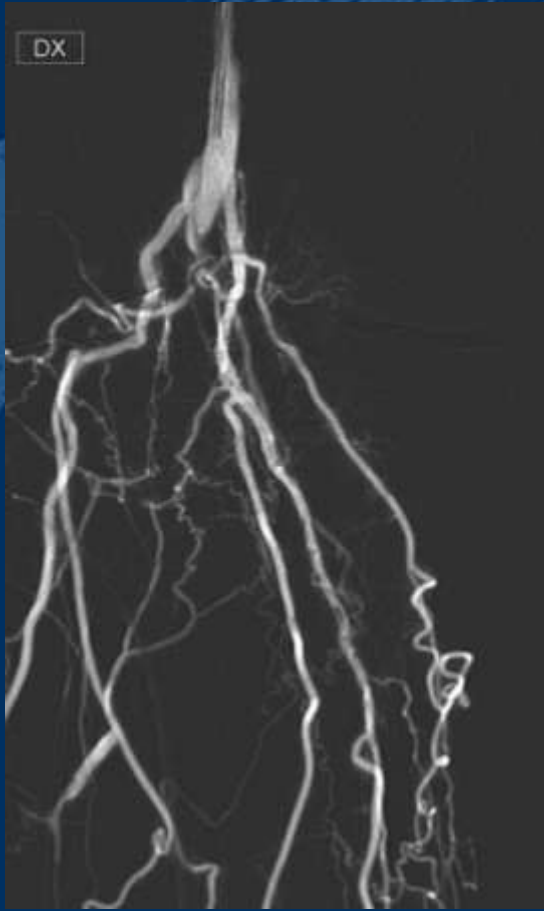
- Prevents thrombotic occlusion

Micro-catheter

Co-axial system

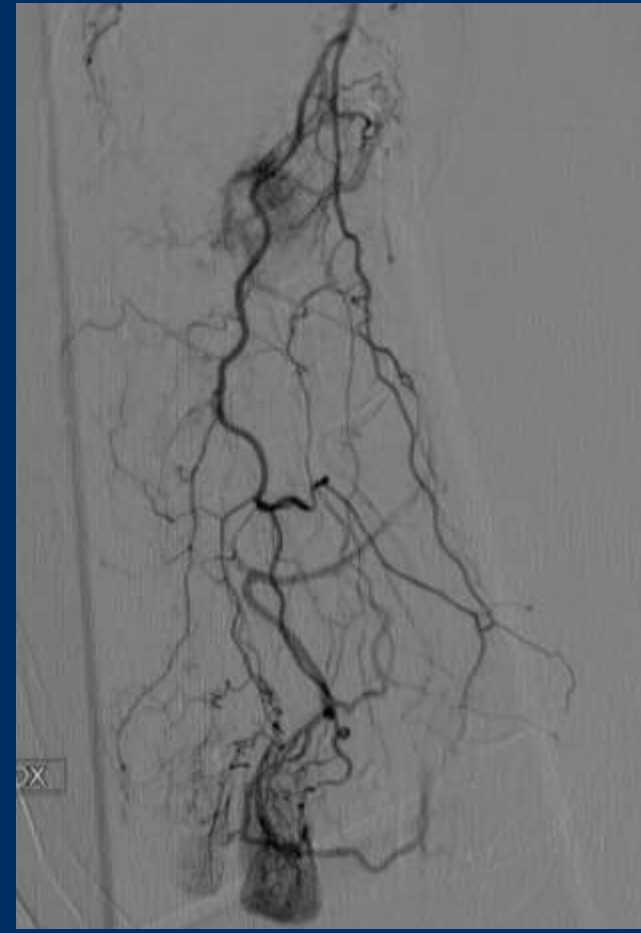
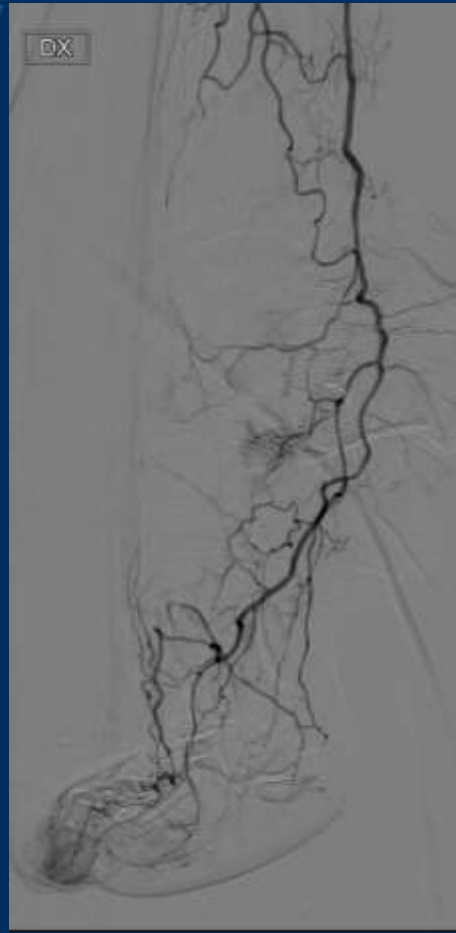


Co-axial system

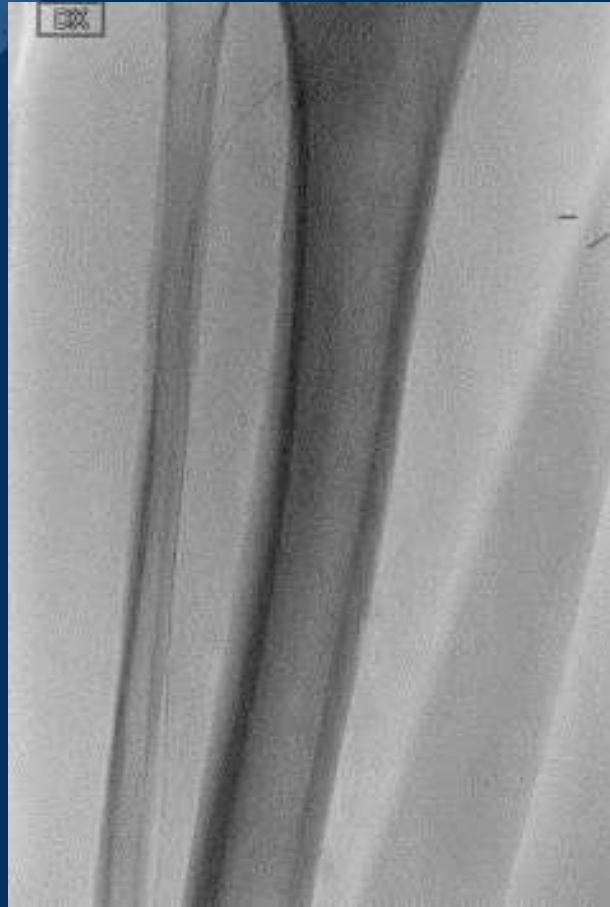
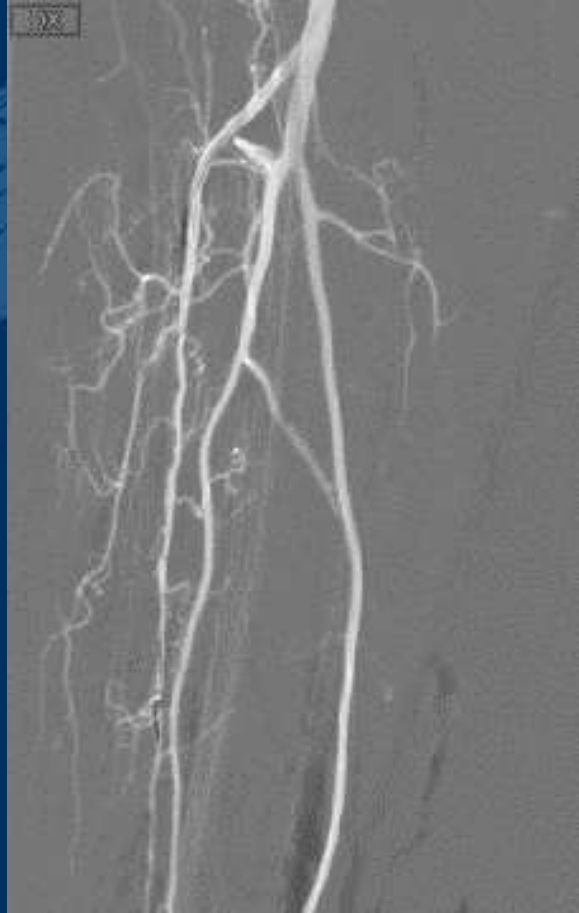


ISR 4F multi-purpose and Carnelian 18

Co-axial system



Co-axial system



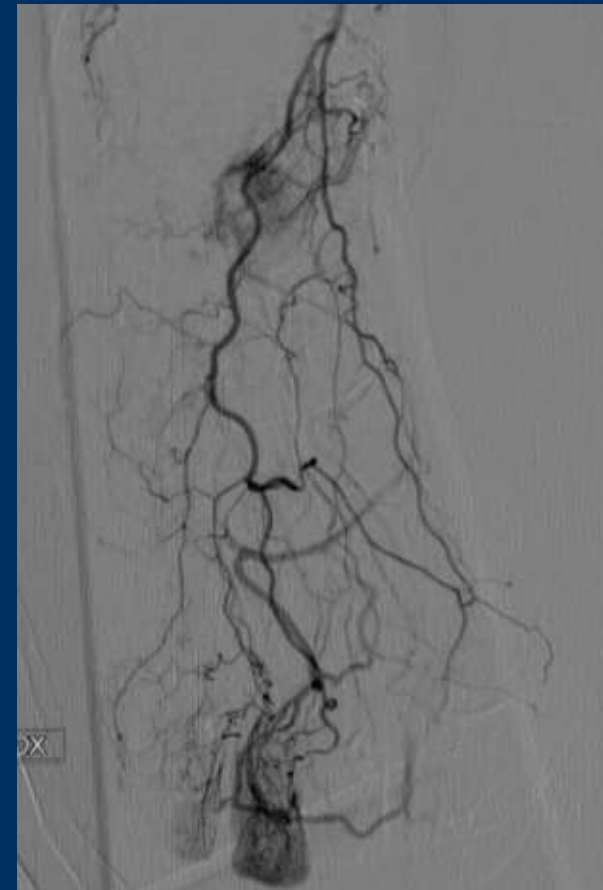
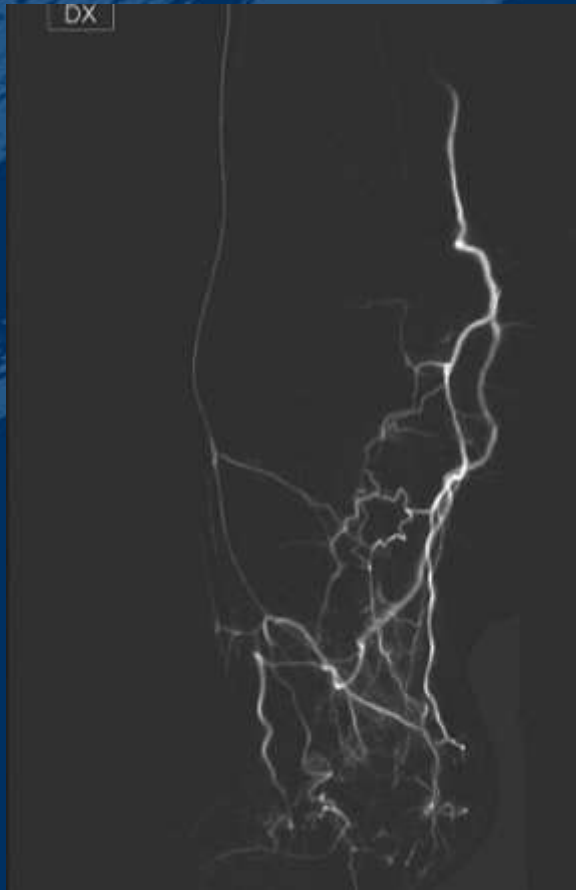
Choice: give up wire position and exchange for long sheath or use co-axial system

Co-axial system



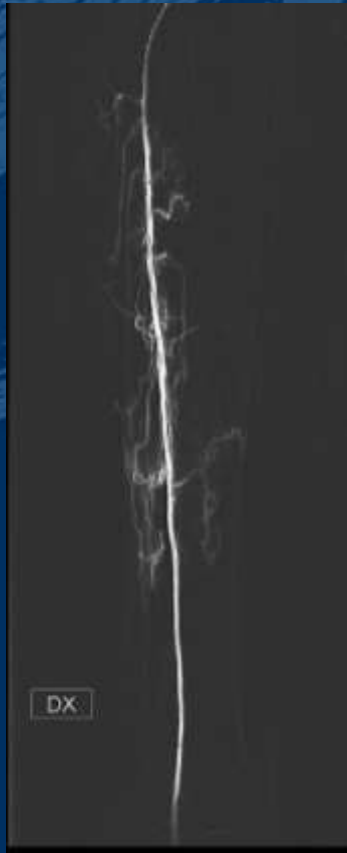
4F multi-purpose catheter with Carnelian 14 BTA

Co-axial system

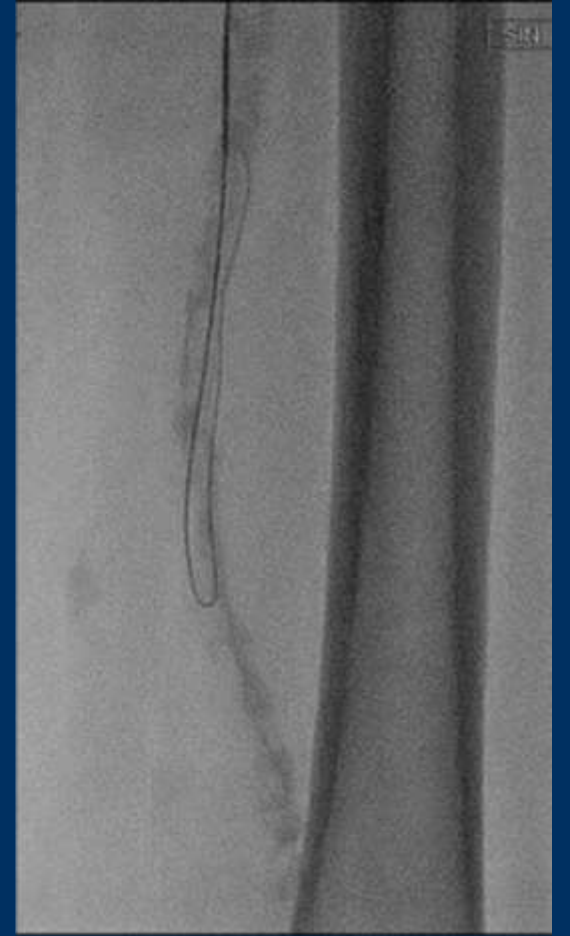
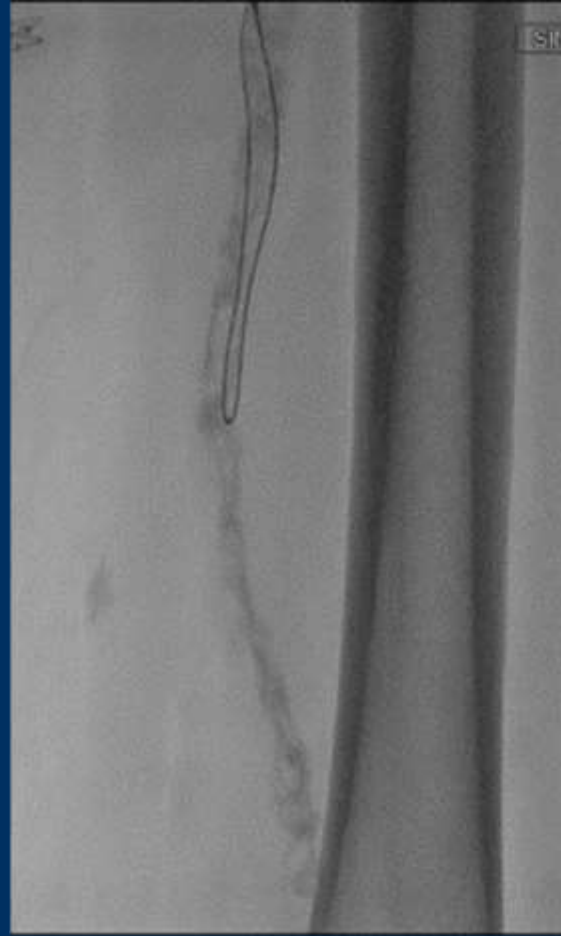
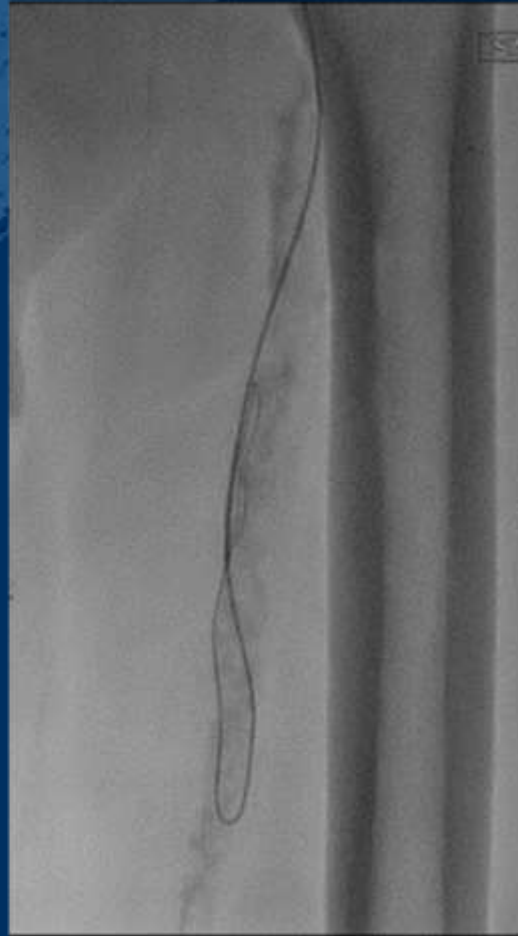


Complementary vascularization

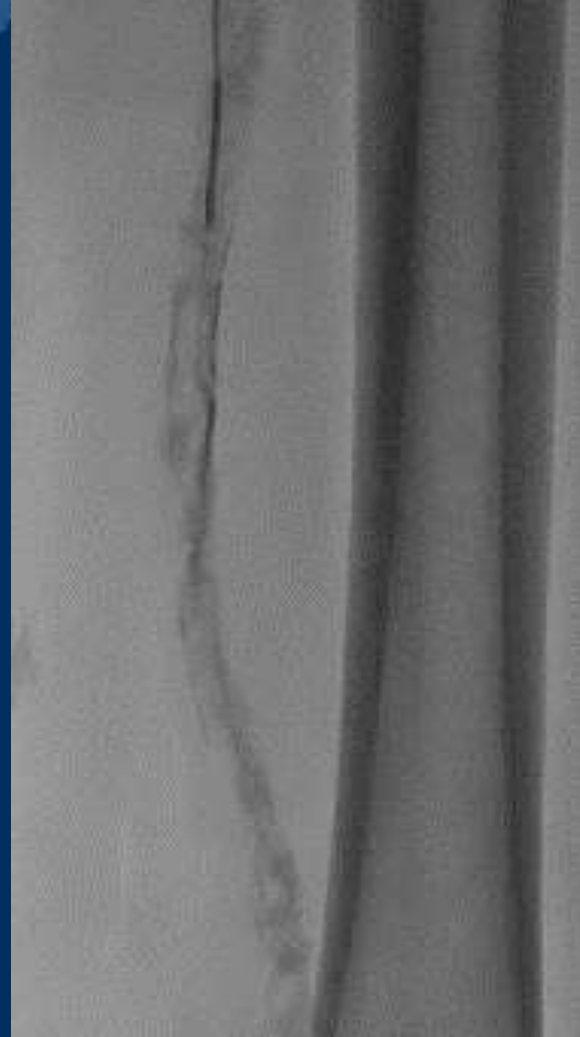
Co-axial system



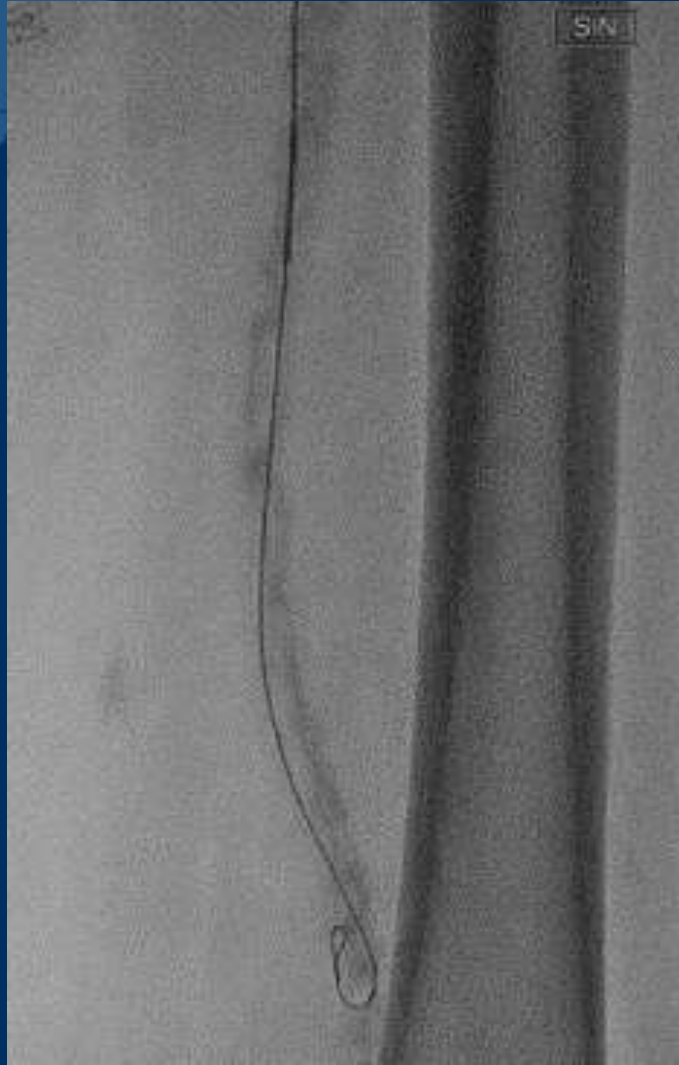
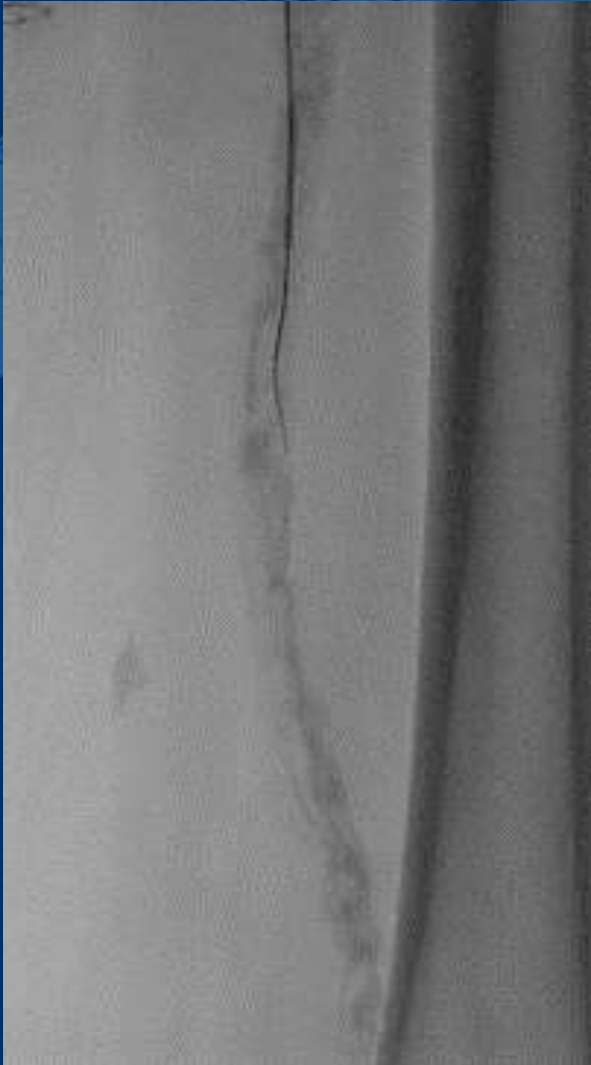
Co-axial system



Co-axial system



Co-axial system

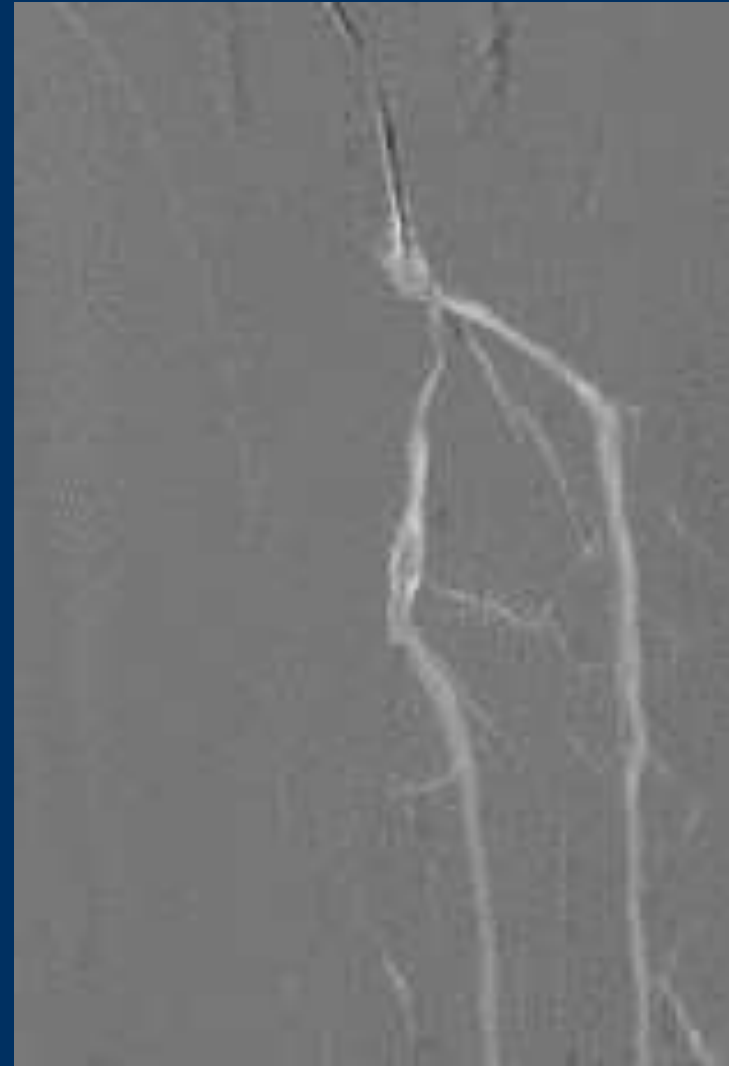
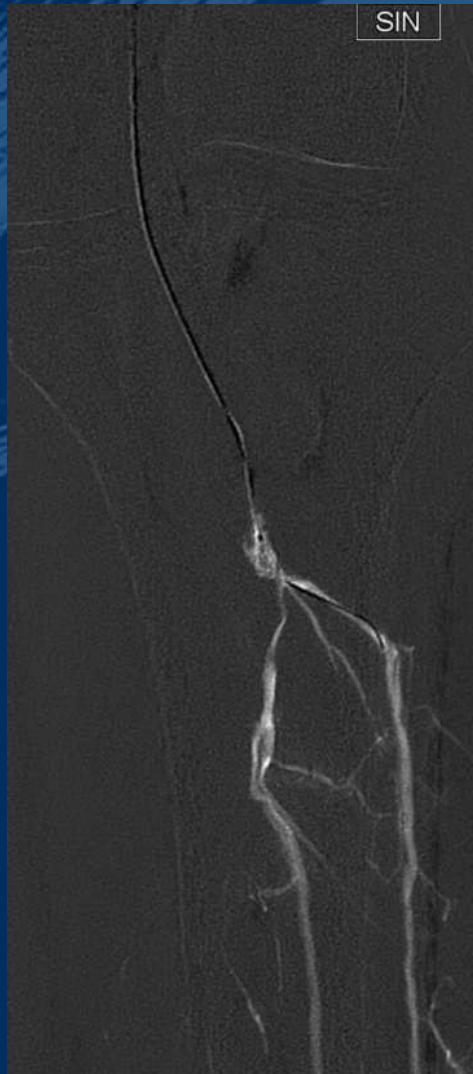


Co-axial system 4 F diagnostic catheter and Carnelian Support 18

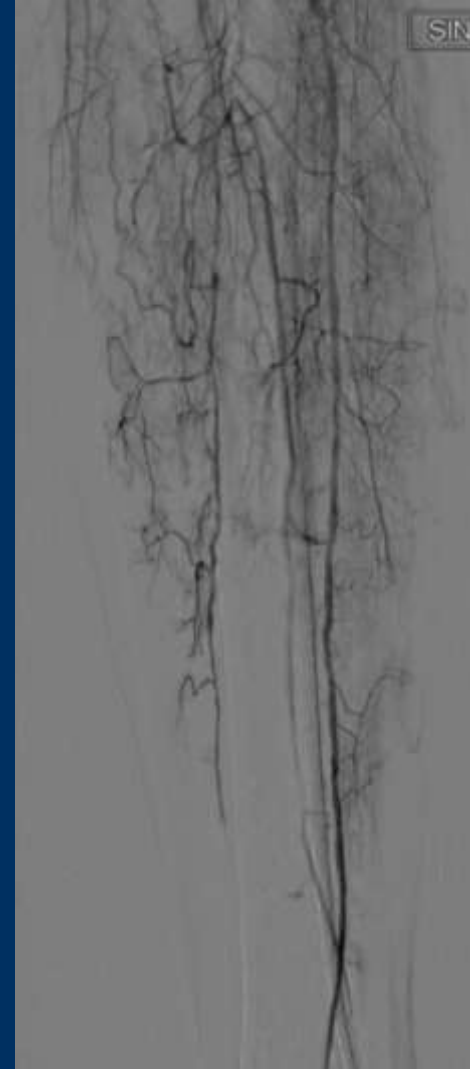
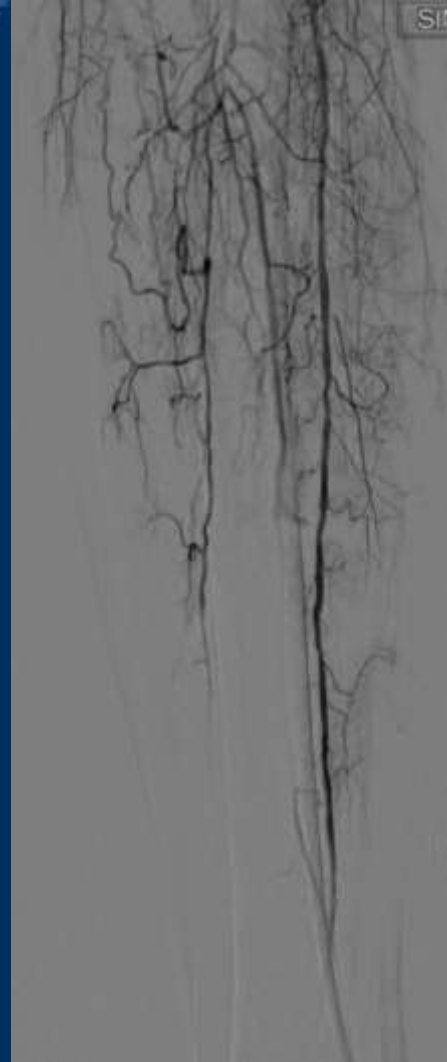
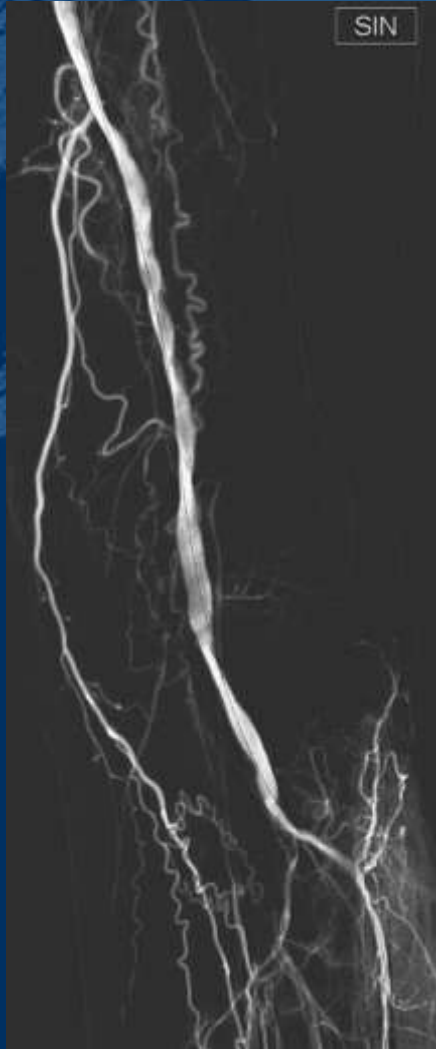
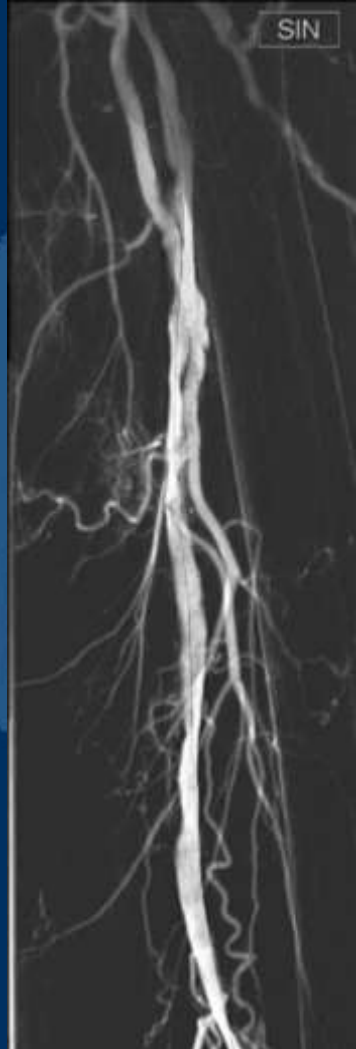
Co-axial system



Co-axial system



Co-axial system



Sheathless access

Ultrasound or fluoroscopic guided access

0.014" guide wire

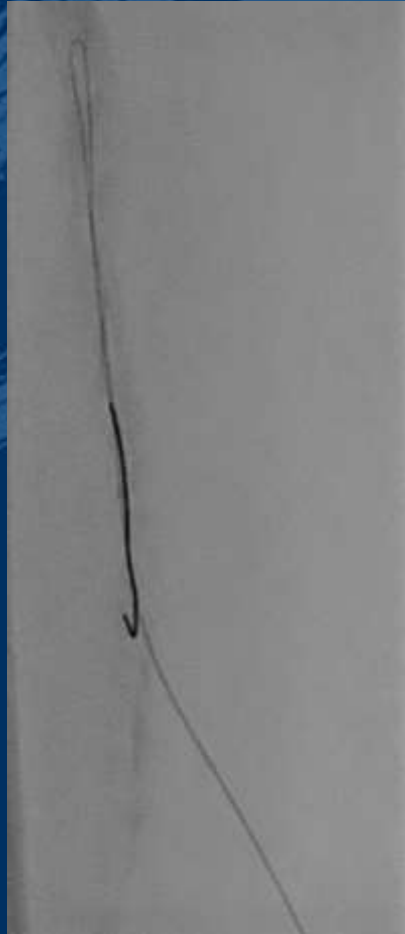
Sheathless access

Distal access

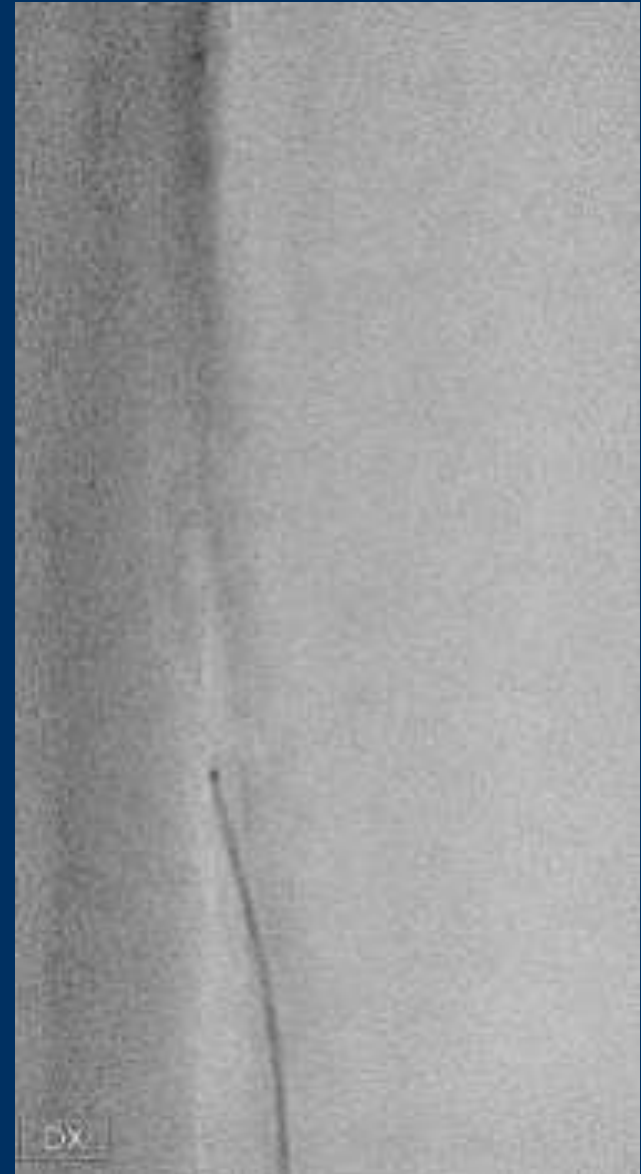


Failed antegrade crossing/re-entry

Distal access



Carnelian 14 DA



What if wire is through and balloon does not follow?



Wire crossing-no balloon crossing: Turnpike

Conclusion

Multiple micro-catheters are available

Check for compatibility with your other 'hardware'

Use of microcatheters will open alternative ways to cross complex lesions and increase your technical success rate

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