

“Straight from my practice –
which wire for which BTK lesion”

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Disclosure

Speaker name:

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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)
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- I do not have any potential conflict of interest

Wire choice



- 0.035"
- 0.018"
- 0.014"

Wire choice in BTK

- Most commonly used 0.014" platforms
 - Arteries of "coronary size"
 - Compatibility with specific therapeutic devices (balloons, stents etc.)
 - Choice based on
 - Type of lesion (stenosis vs. occlusion)
 - Type of crossing technique used
 - Personal experience
 - Availability









But still then, how to choose?

- Knowledge of wire characteristics
- Knowledge of recanalization techniques
- Type of lesion to treat

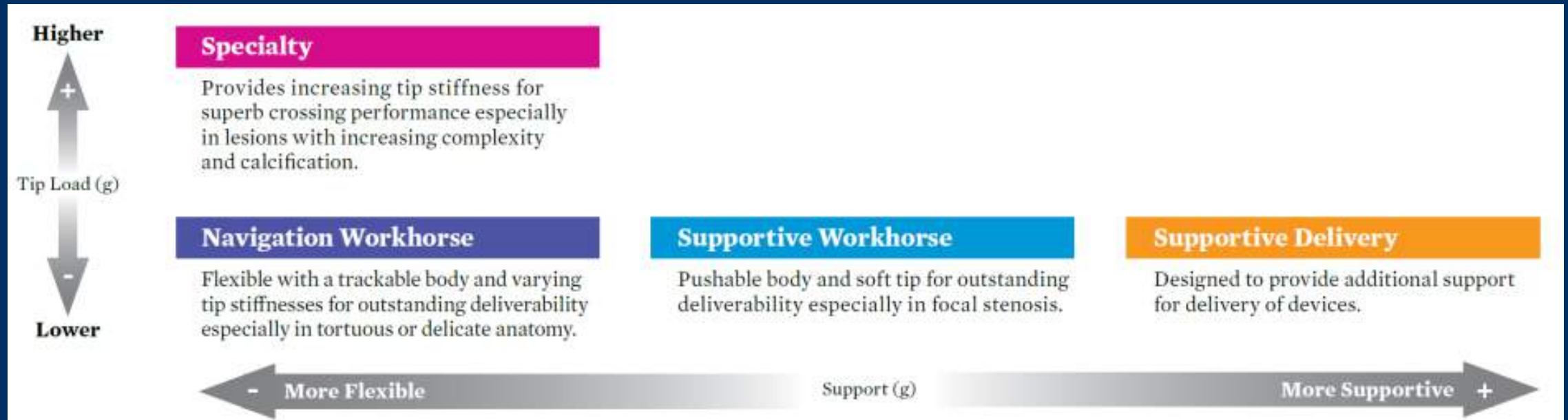
Wire choice-knowledge of wire characteristics



Wire choice-knowledge of wire characteristics

.014 GUIDE WIRES			CORE MATERIAL	COVER TYPE OR COILS	TIP STYLE	COATINGS	TIP LOAD (g)
Navigation Workhorse	Hi-Torque Command™ • For navigation and lesion access		Nitinol/Durasteel	Full Polymer	Core-To-Tip	Hydrophilic	2.8
Supportive Workhorse	Hi-Torque Command™ ES • For navigation and lesion access and 40% more supportive than Hi-Torque Command		Nitinol/Durasteel	Full Polymer	Core-To-Tip	Hydrophilic	3.5
Specialty	Hi-Torque Proceed™ 170T • Unique microtextured tip, 0.009" tapered, pre-shaped tip, 11 g tip load		Durasteel	Coils and Uncoated Tip	Core-To-Tip	Hydrophilic	11
	Hi-Torque Proceed™ 220T • Unique microtextured tip, 0.009" tapered, pre-shaped tip, 14 g tip load		Durasteel	Coils and Uncoated Tip	Core-To-Tip	Hydrophilic	14
	Hi-Torque Winn™ 40 • 0.012" tip and 5.1 g tip load		Durasteel	Intermediate Polymer Sleeve	Core-To-Tip	Hydrophilic	5.1
	Hi-Torque Winn™ 80 • 0.012" tip and 11.3 g tip load		Durasteel	Intermediate Polymer Sleeve	Core-To-Tip	Hydrophilic	11.3
Supportive Delivery	Hi-Torque Winn™ 200T • 0.009" tapered tip and 14.3 g tip load		Durasteel	Intermediate Polymer Sleeve	Core-To-Tip	Hydrophilic	14.3
	Hi-Torque Spartacore™ • 0.014" supportive wire with soft tip ideal for device delivery		Stainless Steel	Bare Coils	Core-To-Tip	MICROGLIDE™ Hydrophobic	n/a

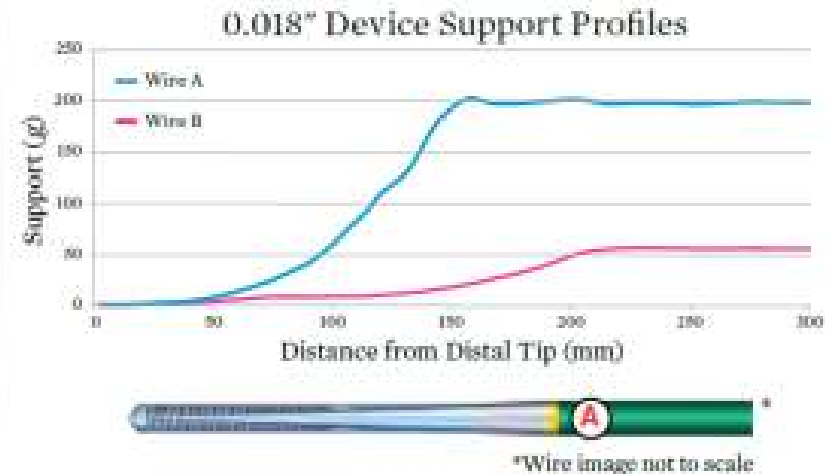
Wire choice-knowledge of wire characteristics



Wire choice-knowledge of wire characteristics

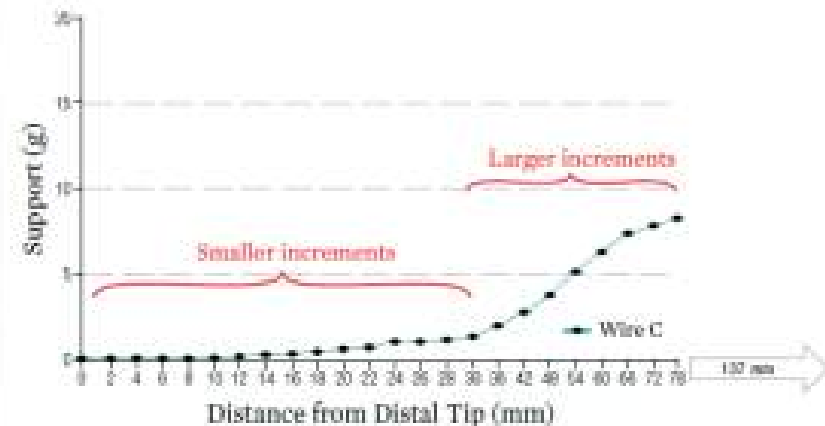
How to Read Device Support Profile Graphs

1. Visualize a guide wire on the X-axis of the graph (A).
2. Each point measures the stiffness of the wire.
3. The Support Profile graph is best utilized when comparing two or more guide wires.

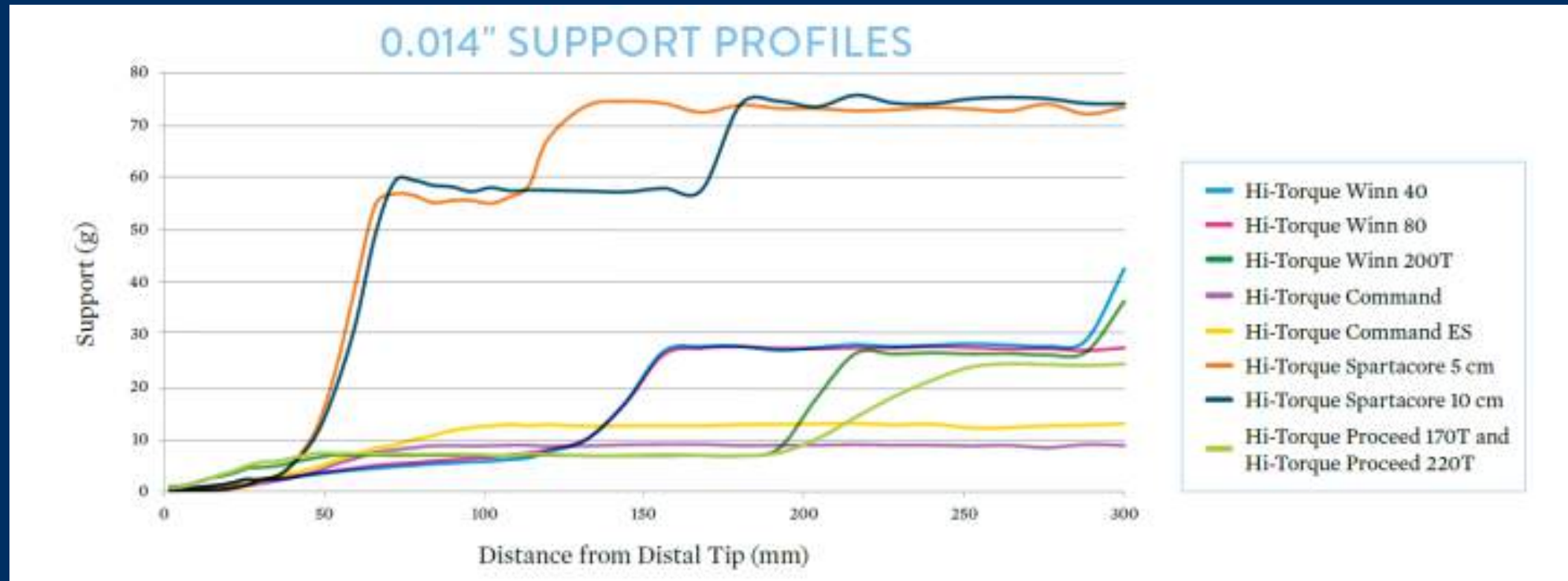


Device Support Level Test Output

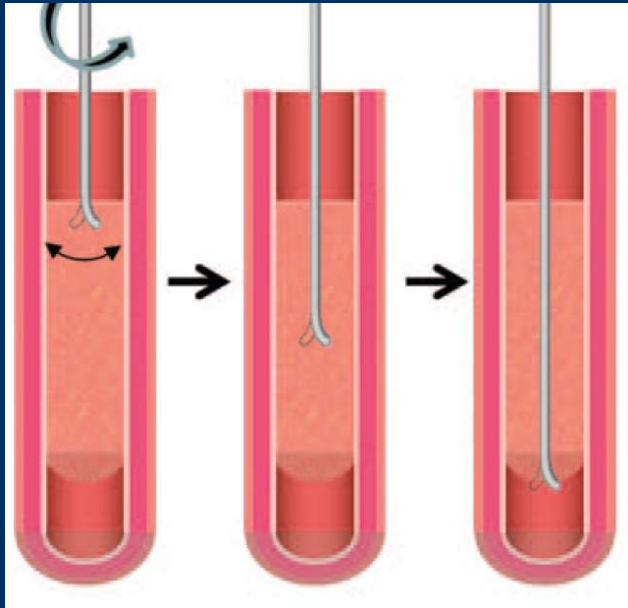
- The test cycle begins near the tip and is repeated at several intervals across the wire. The intervals are smaller near the tip, then become larger as the test progresses down the wires.
- The final data is recorded and a chart is produced showing the support along the length of the guide wire.



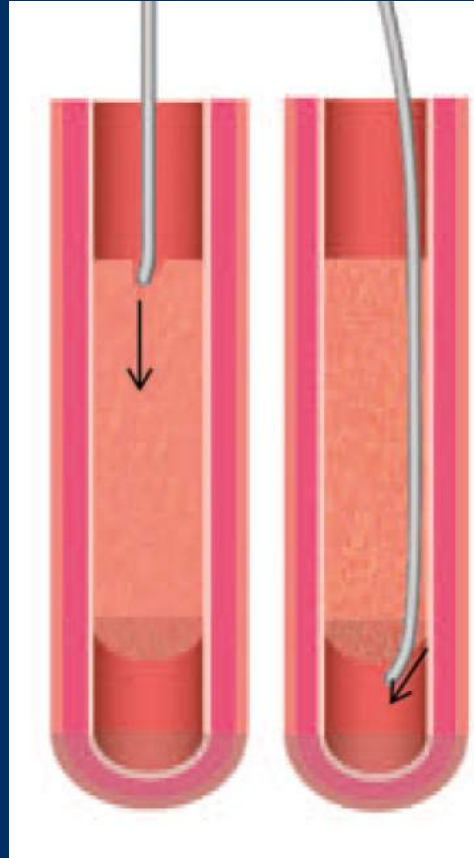
Wire choice-knowledge of wire characteristics



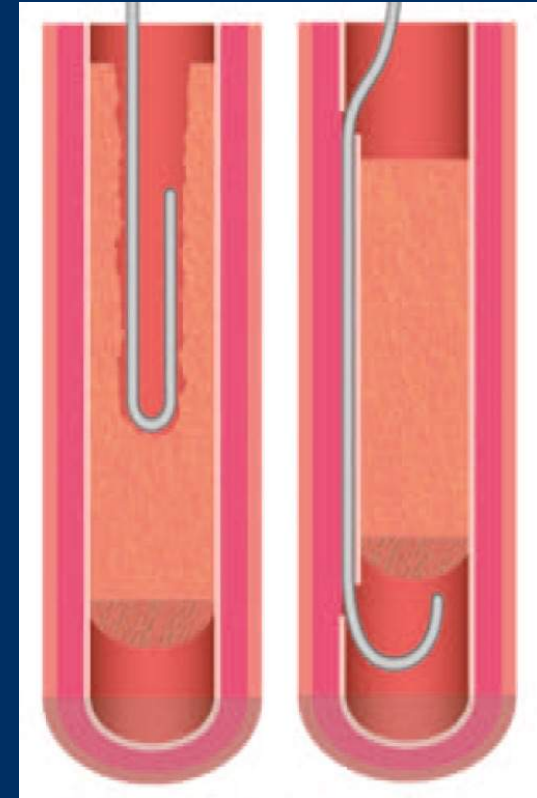
Knowledge of recanalization techniques



'drilling'

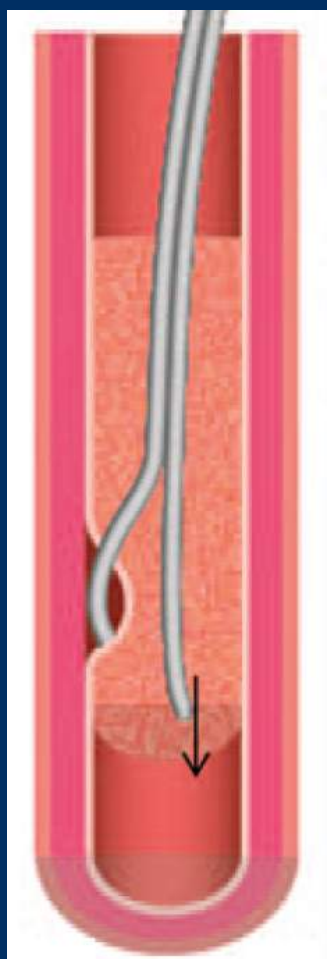


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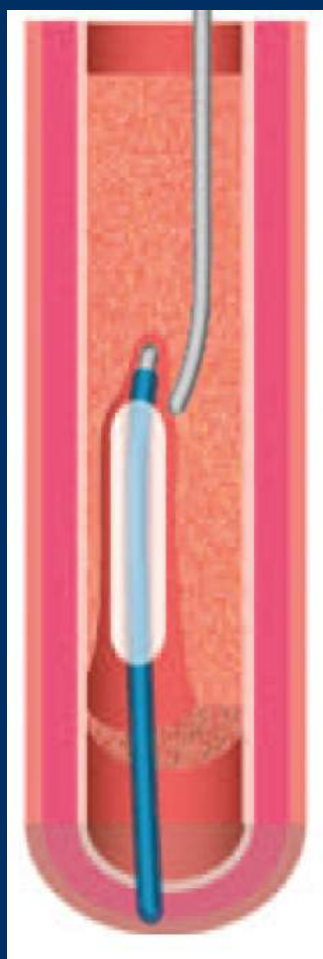


'loop-based'

Knowledge of recanalization techniques



'dual wire'



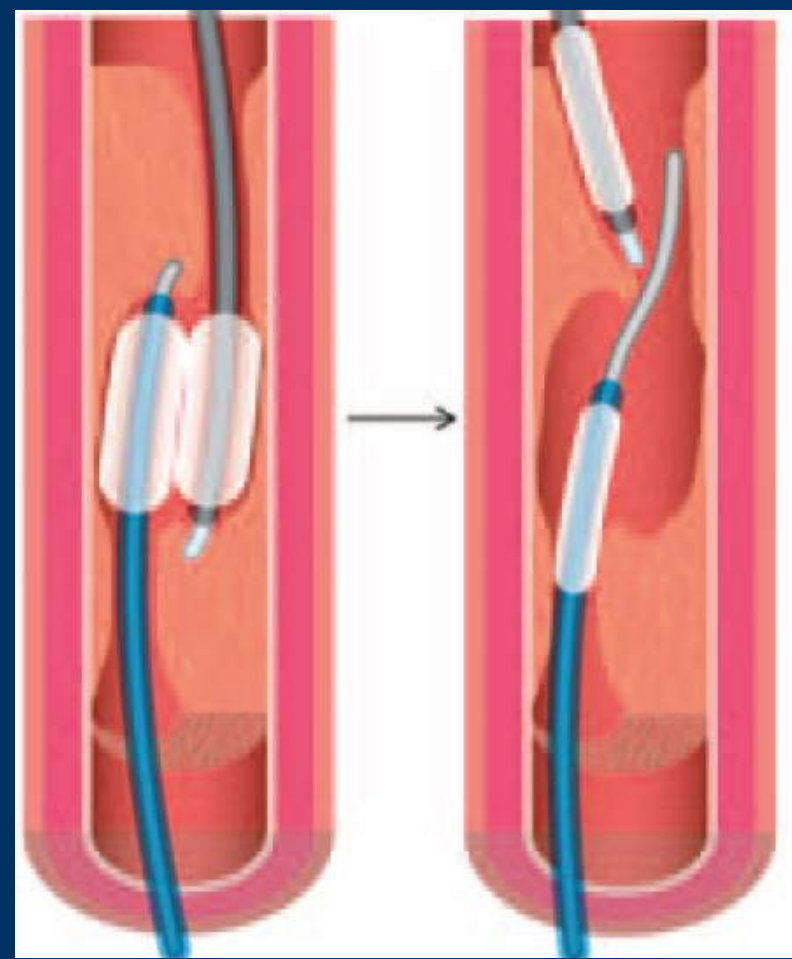
CART



Reverse CART



'rendez-vous'



Dual CART

Wire choice-type of lesion to treat

- Stenosis
 - Navigation
 - Support
- Occlusion
 - Penetration
 - Support

Navigational wire

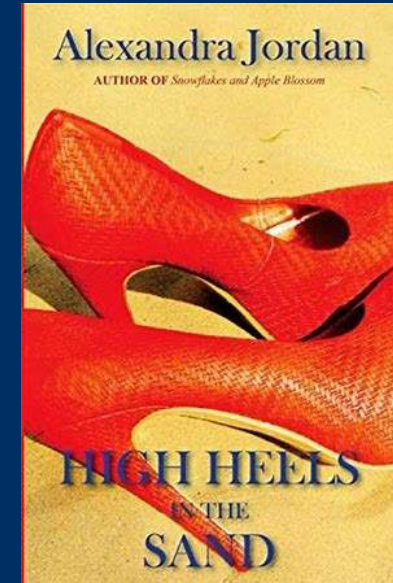
- Shapeable and durable tip
- Supportive



Command 0.014"

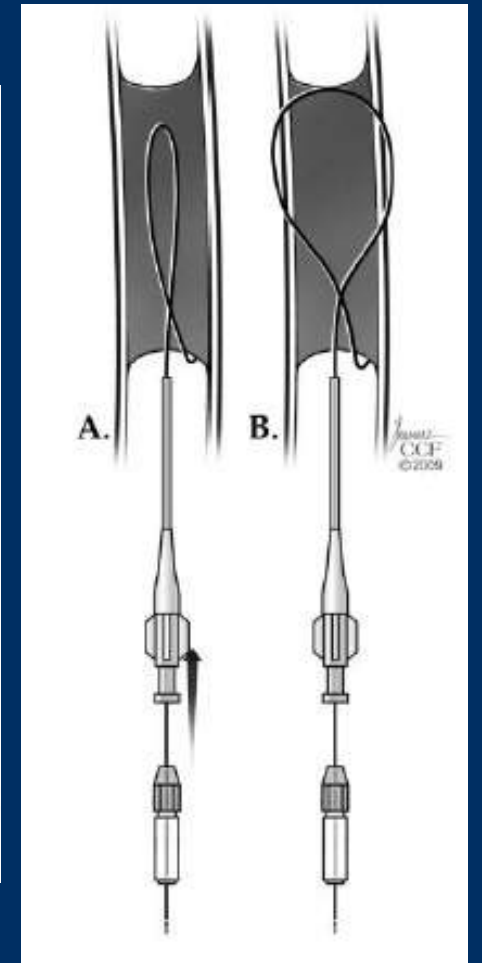
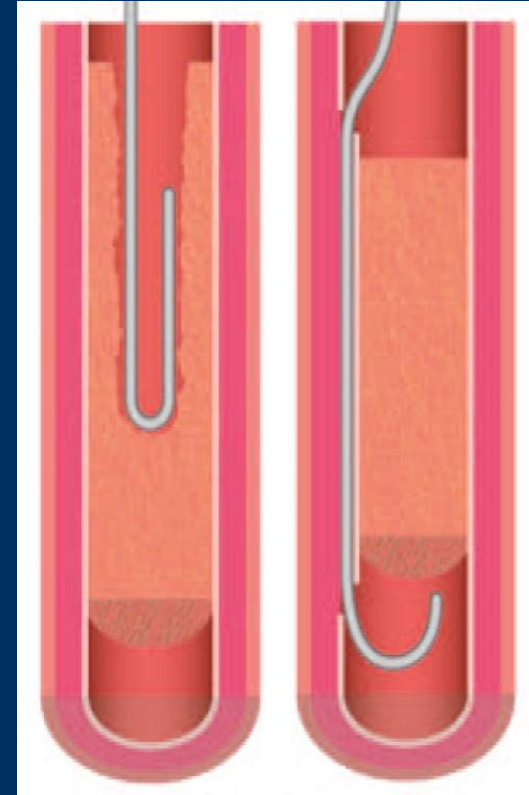
Application in clinical practice

- Recanalization of CTO
 - Penetrating wire technique
 - Aggressive and higher risk of perforation
 - Loop based techniques
 - Blunt dissection and lower risk of perforation



Loop based recanalization

- Intra-luminal
 - No problem of re-entry
- Subintimal
 - Potential re-entry issue (BTK)
- Requires durable tip (nitinol)



Clinical scenarios

- Stenosis
- Occlusion with stump
- Occlusion without stump

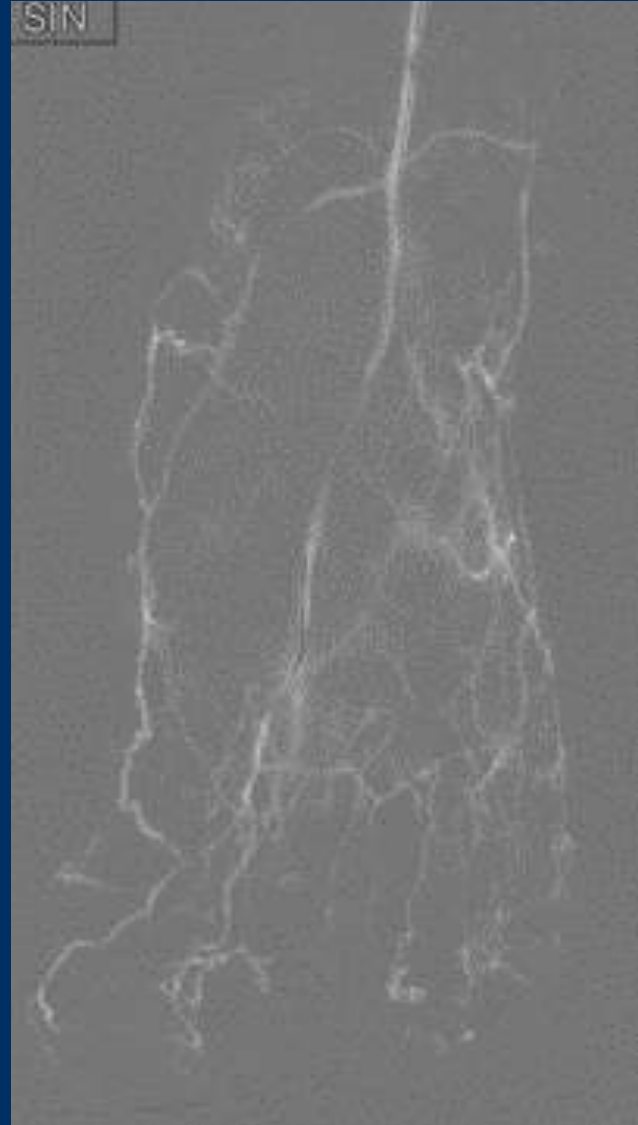
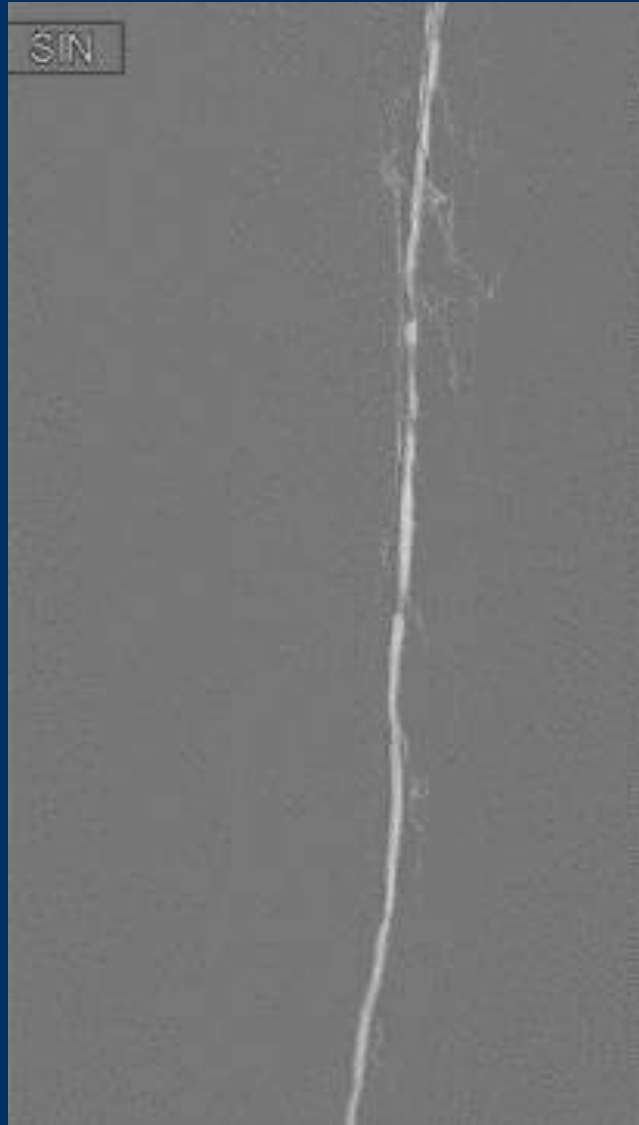
Navigational wire

- Stenosis
- Occlusion with stump

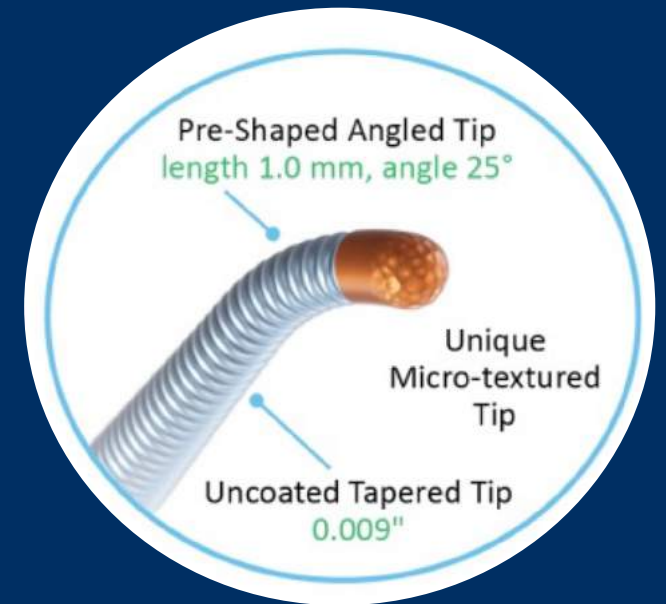
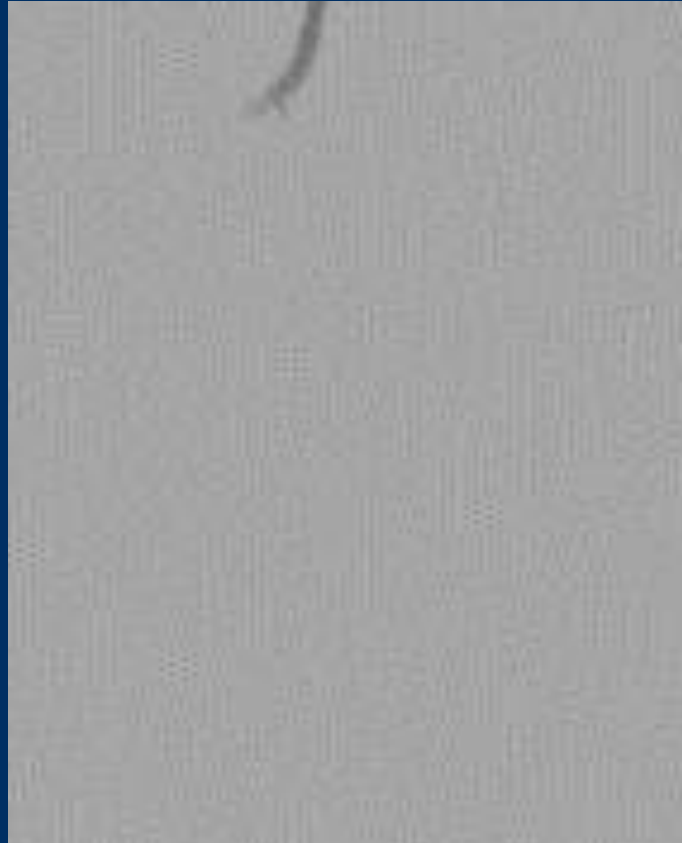
Penetration wires

- Occlusion with stump
- Occlusion without stump

Stenosis

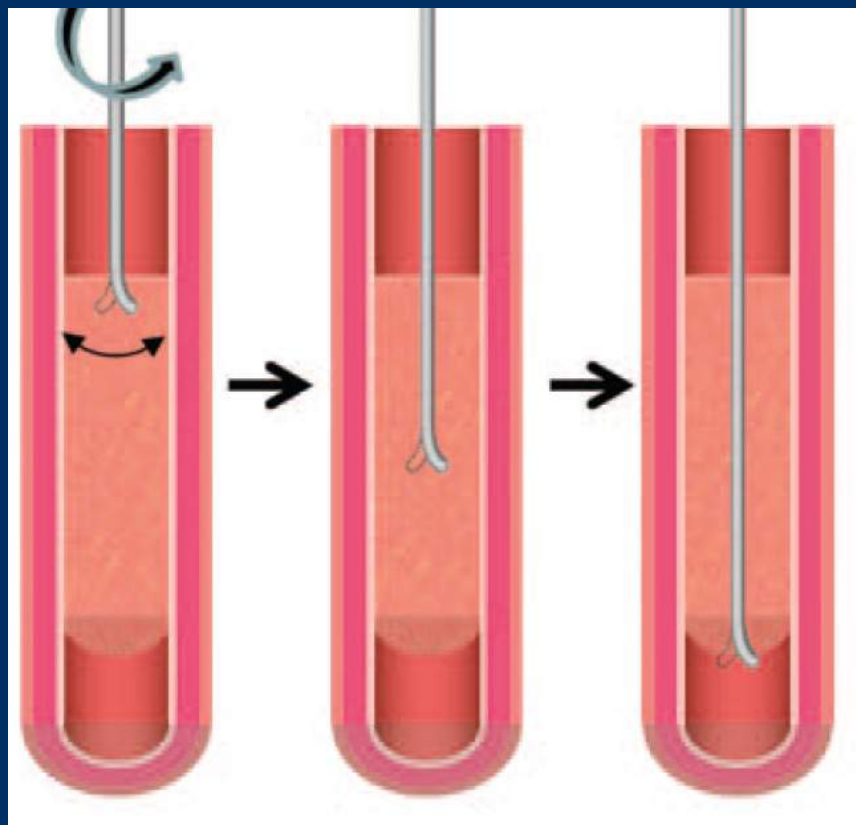


Occlusion with stump



0.014" High-Torque Proceed

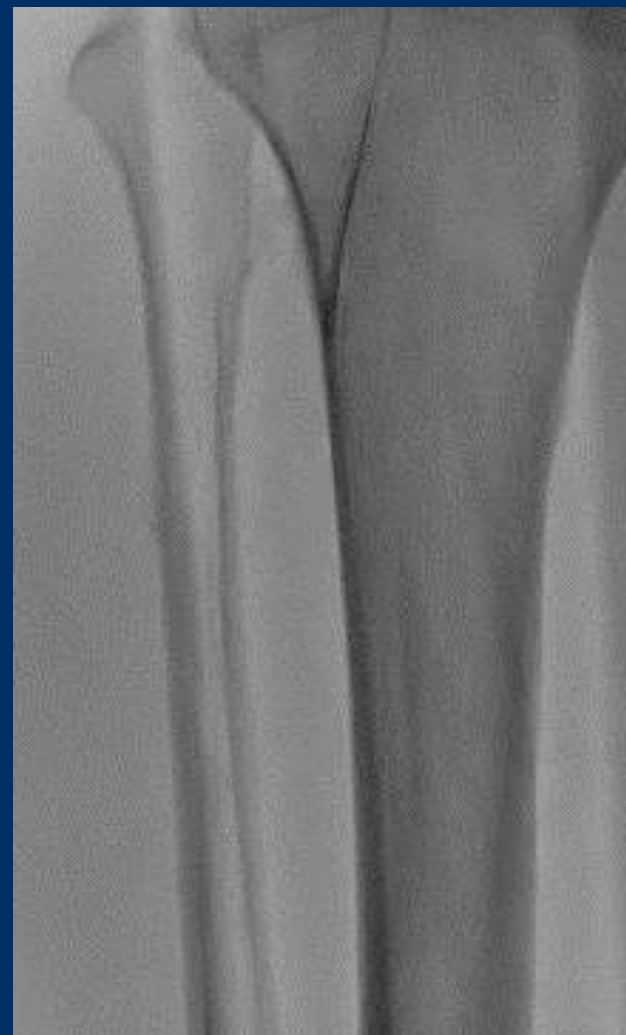
Occlusion with stump



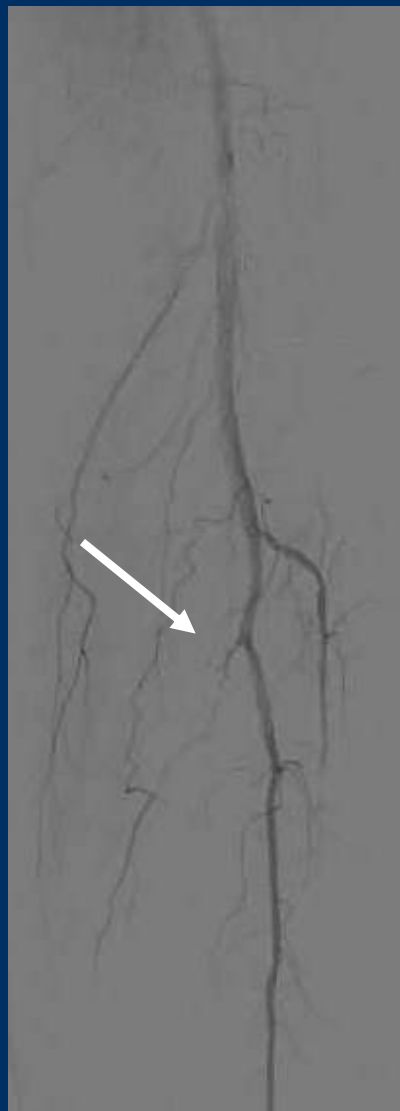
'drilling'



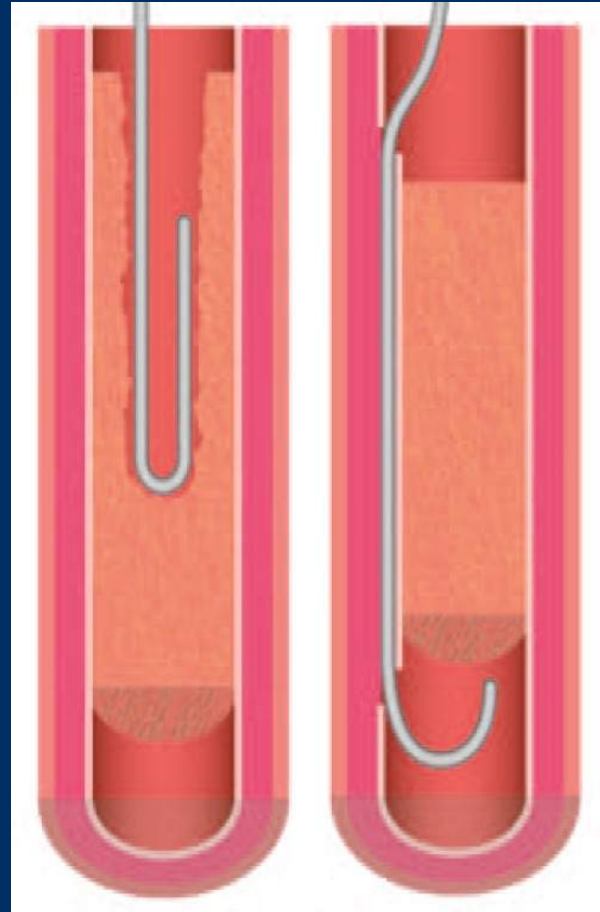
0.014" Proceed 170T



Occlusion with stump



Occlusion with stump



'loop'-based recanalization



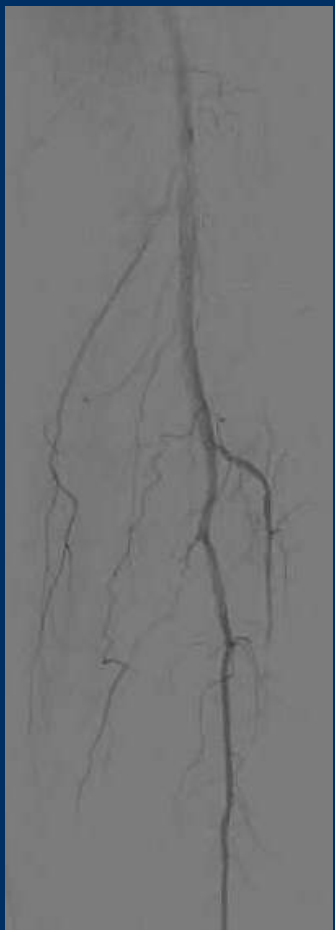
0.014" High Torque Command

Occlusion with stump



'loop'-based recanalization with co-axial support catheter-tip durability

Occlusion with stump

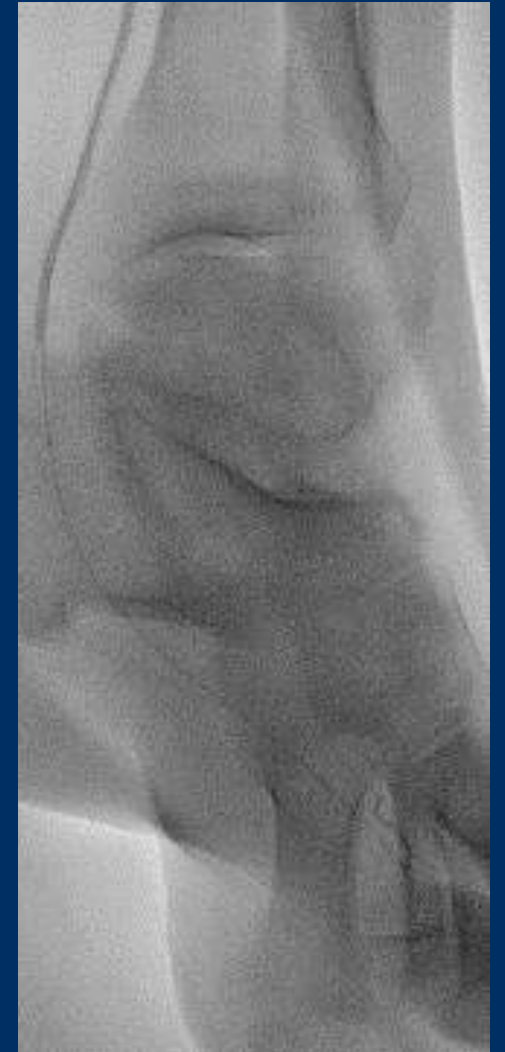
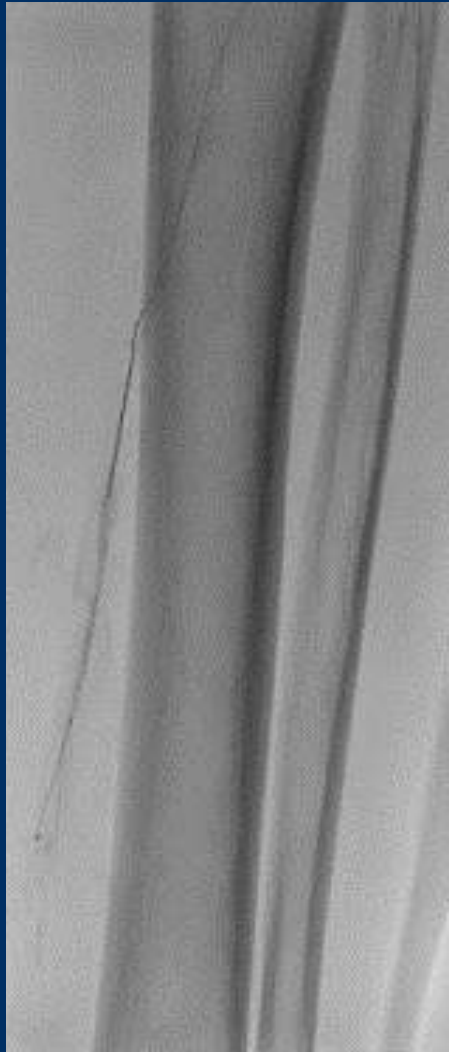


pre



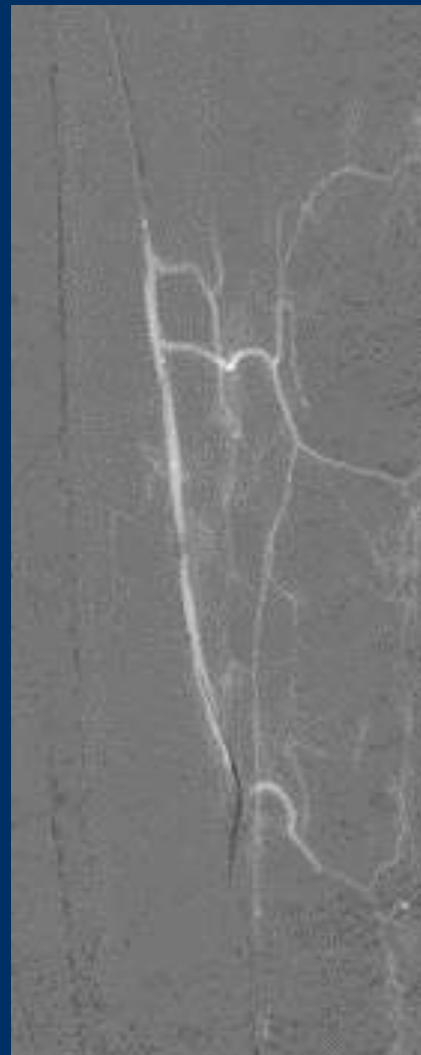
post

Occlusion with stump



'loop'-based subintimal recanalization with Armada XT-catheter

Occlusion without stump

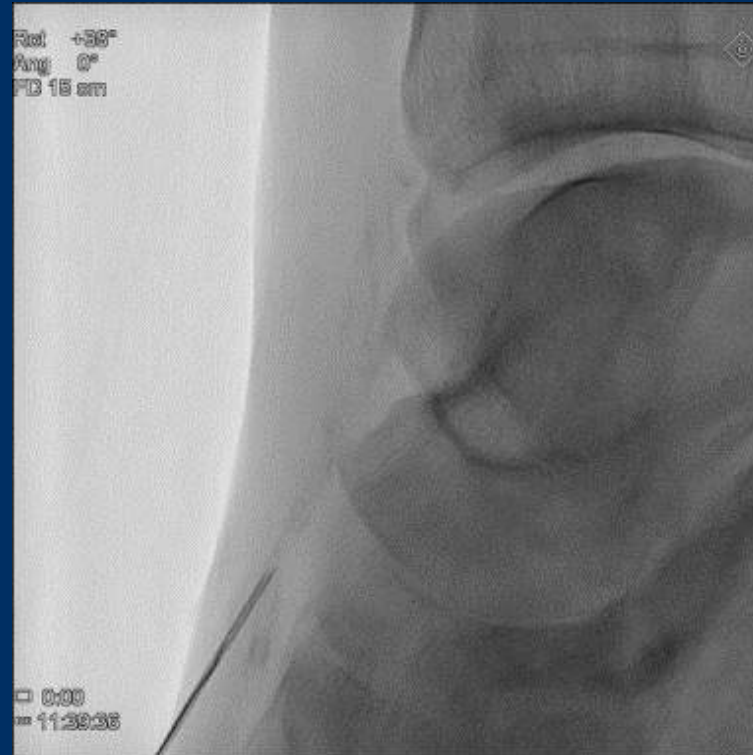
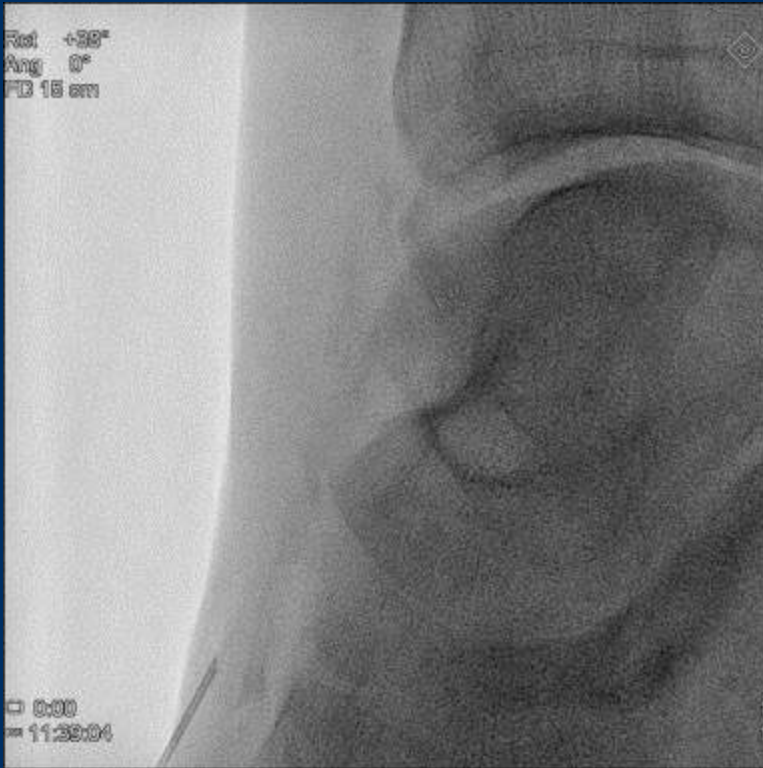


0.014" Proceed 210T

Other applications

- Distal puncture
 - Needle and wire
 - Support catheter and wire

Distal puncture-sheathless (support catheter)



Conclusion

- Know your wires and limit your choice to 3-5
- Wire selection based on lesion characteristics
- Anticipate use of multiple wires in one procedure
- Think about role of support (balloon) catheter