How to perform CFA Supera deployment

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Disclosure slide

Speaker name: Koen Deloose, MD

- I have the following potential conflicts of interest to report:

  - Consulting: Medtronic, Spectranetics, Biotronik, Abbott, BD/Bard
  - iVascular, Bentley, Cook, GE Healthcare, Contego medical,
  - Boston Scientific, Cardionovum, B Braun, Terumo

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

- I do not have any potential conflict of interest
Among vascular surgeons, the common femoral artery remains one of the last areas of open reconstructive surgery.

**Location prone to crush**

**Bulky, eccentric, heavily calcified plaques**
Among vascular surgeons, the common femoral artery remains one of the last areas of open reconstructive surgery
...So... the Supera is thé tool for a majority of CFA lesions treatment...

**VMI-CFA trial**

Prospective, multicenter, single arm trial to evaluate the Supera Peripheral Vascular Mimetic Implant Device (Abbott Vascular) for symptomatic (RB 2-4) CFA disease treatment
VMI-CFA trial: 1 year results

Freedom from > 50% restenosis as indicated by DUS PSV-ratio <2,5 in the target lesion - CORE-LAB VERIFIED

HOW CAN WE REACH THESE RESULTS ?? RESPECTING METICULOUSLY IFU OF SUPERA
1. GETTING ACCESS

- Contralateral, cross-over approach
- (left) Brachial approach
- Retrograde SFA/PA/distal approach
  (mostly for passing, no definitive treatment)

- 6F sheath 45/65/90/100 cm

6F Working-channel as close as possible to the lesion
2. PASSING

- STAY INTRALUMINAL if possible
- 0.035” – 0.018” guide wires
- Workhorses – CTO guidewires
- Low profile supporting (balloon) catheters
- Fast spinning/drilling
- Retrograde/bidirectional approach if needed

Try to stay intraluminal with all currently available devices & techniques
2. PASSING

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- 0.035” – 0.018” guide wires
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2. PASSING

**High Tensile Strength SS**
- High Torque
- Pushability
- Durability

**Nitinol**
- Flexibility
- Durability
- Kink Resistance

**Stainless Steel + Nitinol**
- High Torque
- Pushability
- Durability
- Kink Resistance
- Flexibility

Flat Core: Flat so whip motion occurs
Round Core: Better Torque Response
No Whip Motion

Empty: Nothing Protecting Core
Only Core Wire Torqueing
ACT ONE: Protect Core From Kinking
Increases Torque Force
3. VESSEL PREPARATION

- Low profile balloons
- High pressure balloons
- Scoring – cutting – sculpting
- (debulking)

- 1\(_{(,1)}\):1 balloon - RVD ratio
- Upgrading diameters/pressures
- Prolonged inflations

Vessel prep up to a 1\(_{(,1)}\):1 RVD is **mandatory**
If impossible, contra-indication for this technique
3. VESSEL PREPARATION

- High performance balloons

**PUSHABILITY – TRACKING**
- Robust shaft
- Perfect flexibility/stiffness balance

**REWAPPING-RECROSSABILITY**
- Large internal lumen

**CROSSING PERFORMANCE**
- Low profile
- Perfect tapering: 360° bevel to GW
- Durable/flexible tip
- Dedicated coating balloon/ shaft
- Avoiding hang-up points*
3. VESSEL PREPARATION
4. Definitive treatment

- Meticulous sizing of the SUPERA
- Diameters of 7 – 7.5 mm
- Lengths of 40 – 60 – 80 mm
- Short/long shaft depending on access
- Perfect imaging (max magnification, ipsilateral anterior oblique)

Meticulous sizing SUPERA in perfect imaging circumstances
4. Definitive treatment

- Preparing/unlocking device
- Starting implantation with roadmap
- Continue without roadmap
- Very slow release
- Nominal implantation !!!
- Rule of 3 to define landing zone

Meticulous NOMINAL implantation
SUPERA in perfect imaging circumstances
4. Definitive treatment

- Starting implantation with roadmap
- Continue without roadmap
- Very slow release
- Nominal implantation !!!
- Rule of 3 to define landing zone
5. Final result imaging

- Final angiogram
- AP- & ipsilateral anterior oblique view
- Outflow check
5. Final result imaging
6. Challenging situations
6. Challenging situations
Summary

• the Supera is thé endovascular alternative for surgery for a majority of CFA lesions treatment

• Getting access: 6F Working-channel as close as possible to the lesion

• Passing the lesion: Try to stay intraluminal with all currently available devices & techniques

• Vessel preparation: Vessel prep up to a 1(,1):1 RVD is mandatory; if impossible, contra-indication for this technique

• Definitive treatment: Meticulous sizing & nominal implantation of SUPERA in perfect imaging circumstances
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