A Novel Technique for SFA-CTO Lesions

~Antegrade Trans-pseudo lumen CART technique ~

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Disclosure

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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)

I do not have any potential conflict of interest
In the SFA CTO EVT, Antegrade 0.014 wire penetration and switching 0.035 knuckle wire technique is commonly used as a standard strategy.

In JAPAN, we still cannot use re-entry devices and also SUPERA and Viavahn.

If the wire didn’t cross to the distal true lumen, we will try “Distal puncture” and consider subsequent “Reverse CART” or “Wire Rendez-vous”.
79 y.o. male  Bilateral PAD （Rutherford: 4）

Feb. 2014.  EVT for Lt.EIA stenosis.

EVT for Rt.EIA CTO.

Target lesion: Rt.SFA-CTO.

Pre ABl: NA / 0.61

SPP: Rt.Dorsal/Plantar:20/14mmHg

S-Cr:0.78, eGFR: 73, BNP:62.4

Antiplatelet: Clopidogrel, Cilostazol, Other: Dabigatran
CT angiogram

Target Lesion
Initial Angiogram

Contra-lateral Crossover approach
Antegradewire penetration

Duplex guided
Wire penetration with
3mm OTW balloon

3x40mm
OTW balloon

0.014
9-40g wire
Knuckle wire
Retrograde approach & Reverse CART

Sheathless Popliteal puncture without changing position

Micro-catheter

0.014 soft wire

3x40mm

0.014 50g wire

Reverse CART
Successful retrograde wiring & Pull-through
IVUS finding

Mid SFA
Wire re-cross with “modified” CART

Antegrade
Trans-pseudo lumen
CART technique
Balloon dilatation & Stenting

4x150mm

MISAGO 6x150mm

MISAGO 7x60mm
Final Angiogram
Antegrade wire didn’t pass to the distal true lumen.
Performed POP puncture and completed “Pull-through method”.
Unfortunately, it became clear with IVUS that the wire had passed through the outside of EEM only a part of mid-portion of the lesion.
The 2nd hard wire could not penetrate a part of lesion which 1st wire go outside.
Put in the balloon antegradeley through the 1st “pseudo-route” and antegrade 2nd wire was passed to the true lumen with CART technique.
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