The value of the retrograde femoral access for recanalisation of challenging CTOs

*Scrup in with the experts: Challenging femoro-popliteal lesions*

Erwin Blessing, MD, FESC
SRH Klinikum
Karlsbad-Langensteinbach
Germany
Disclosure

Speaker name:
Erwin Blessing

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): speakers honorarium

I do not have any potential conflict of interest
Patient population

April 1st 2014 – January 15th 2017
161 consecutive retrograde femoro-popliteal CTO cases
Out of total 1621 interventions: 9.9%
Average age: 73.2
Male/female: 97/64
Rutherford: 3.8 (3-6)
Claudicants: 65 (40.4%)
CLI: 96 (59.6%)
Technical specifications

Sheath access:
CFA: crossover, antegrade  Brachial artery

Retrograde access:
Angiographic guidance
21 G needle (4, 7, 12 cm)
V 18 wire (Boston Scientific)
Cook CXI 0.018” support catheter
4-6 F sheath (rarely)
CTO/Reentry Device: Outback, Wingman (rarely)
“snaring” technique, wire externalization
Haemostasis: blood pressure cuff or balloon dilatation
Procedural specifications

**Primary access site:**
Common femoral artery: 148  (Crossover: 122  antegrade: 26)
Brachial artery: 13

**Puncture site:**
Distal SFA: 75  Proximal SFA: 2  Direct stent puncture: 7
Popliteal artery: 2  Deep femoral artery: 3
Peroneal artery: 36
Anterior tibial artery: 32
Posterior tibial artery: 13
Dorsal pedal artery: 2
Bypass: 2
Multiple access sites: 7
Procedural specifications

Recanalized arteries:
Femoropopliteal only: 99
Multilevel: 34
Bypass: 11
Common femoral artery involved: 12

Adjunctive therapy:
POBA: 9  Scoring Balloon: 2  Scoring and DCB: 1
BMS (mainly Supera): 84  DCB ony: 15  DCB and BMS: 31
DES: 4  Rotarex: 9  Lysis: 3
Outback: 13  Wingman: 1
Case example #1
Case example #1
Case example #1
Case example #2
Case example #2
Case example #3

Supera reverse
Case example #4
Reasons for failure?
Reasons for failure?
Reasons for failure?
Reasons for failure?
Acute outcome, technical success

Successful retrograde access: 161/161 (100 %)
Successful wire passage: 148/161 (91.9 %)
Successful adjunctive therapy: 148/161 (91.9 %)
Complication rate: 2/161 (1.2 %): haematoma at retrograde access side (distal SFA), prolonged hospital stay, fully resolved
Conclusions

Retrograde access for complex femoropopliteal occlusions:

- high technical success rate
- low complication rate
- might help to reduce procedure time
- might help to reduce cost (less need for reentry and/or CTO devices)
The value of the retrograde femoral access for recanalisation of challenging CTOs

Scrup in with the experts: Challenging femoro-popliteal lesions

Erwin Blessing, MD, FESC
SRH Klinikum
Karlsbad-Langensteinbach
Germany