Thrice distal puncture below the ankle for successful revascularization in a single endovascular treatment session

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Disclosure

Speaker name: Tetsuya NOMURA

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)

- [x] I do not have any potential conflict of interest
EVT techniques for conquering very complex lesions of infrapopliteal arterial diseases

Distal puncture

- Bidirectional approach
- Needle Rendezvous technique
- BADFORM technique (BAlloon Deployment using FORcible Manner)

Case: 60 y.o. Male

Chief complaint: Gangrene of right digits (Rutherford 5)

Comorbidity: Chronic hemodialysis for 35 years

Skin perfusion pressure: 23mmHg (dorsal) 3mmHg (plantar)

WIfI classification: Stage 3 with W-1, I-3, fI-1
GLASS classification: Stage III with FP grade 0 and IP grade 4, IM P2

* Not available for optimal great saphenous vein (GSV)
EVT for Posterior Tibial Artery (PTA)

**Lateral plantar artery**

**GW:** Gladius MG (ASAHI INTECC)

**MC:** (antegrade) Prominent AS (TOKAI MEDICAL)
       (retrograde) Ichibanyari PAD (KANEKA)

**BC:** Coyote 2.0/150 (BOSTON) → hemostasis

**20G puncture needle (Medikit)**
EVT for Dorsal Artery (DA)

**First dorsal metatarsal artery**

GW: Naveed Hard 30 (TERUMO)

MC: Corsair Armet (ASAHI INTECC)

22G indwelling needle (Surf flow: TERUMO)
Distal ATA

Needle Rendezvous technique

GW: Naveed Hard 30

Pull-through formation

MC: Ichibanyari PAD

Planned strategy

20G puncture needle (Medikit)
GW: Astato 9-40 (ASAHI INTECC)

MC: (retrograde) Corsair Armet

MC: (antegrade) Ichibanyari PAD

(retrograde) Corsair Armet
BADFORM technique

**GW:** Regalia (ASAHI INTECC)

**BC:** Coyote OTW 1.5/20

**BC:** Coyote 2.0/150

→ hemostasis
**Procedure time:** 2hrs 41mins
**Irradiation dose:** 0.606 Gy
**Consumed contrast media:** 135mL

SPP
- 23mmHg (dorsal)
- 3mmHg (plantar)

SPP
- 47mmHg (dorsal)
- 39mmHg (plantar)
Retrograde tibioperoneal access is a safe option for recanalization of complex CTOs after a failed antegrade approach. Complications at the puncture site were rare. 


Caution

- Consider the potential risk of causing vessel injury
- Ensure the hemostasis management
We can markedly increase the success rate of revascularization by effectively utilizing the retrograde approach in EVT for complex lesions in infrapopliteal arterial diseases.

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