Endovascular Approaches for Complex BTK Lesions

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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
Complex BTK/BTA CTO Lesions

Antegrade approach
- Long CTO
- Severe Calcification
- Thin vessel
- Tortuousness
- Poor run off

Failure

Bi-directional approach

Success rate
- ~70%
- ~95%
Bi-directional approach

✓ Utilize collateral (Trans-collateral approach)

✓ Utilize existing Artery to Artery connection (e.g. Trans-pedal arch approach)

✓ Distal puncture
Trans-collateral / Trans-pedal arch approach

◆ Approach
  ✓ 4.5~6F Sheathless guiding Cath.
    • Ipsilateral >> contralateral

◆ Support Catheter
  ✓ 0.014inch compatible micro catheter
    (Prominent BTK, Corsair)

◆ Guidewire
  ✓ 0.014inch hydrophilic soft wire
    Vassallo floppy, Regalia, Chevalier floppy, Commando
  ✓ After Crossing the channel
    Tapered wire, CTO wire
Control Angiography
Trans-collateral approach

Regalia
Completion Angiography
How to Intervene BTA

- Trans-collateral approach
How to Intervene BTA

• Trans-collateral approach

Prominent advance + Regalia
How to Intervene BTA

- Trans-collateral approach

Jade 1.5 × 120mm + Regalia
How to Intervene BTA

- Trans-collateral approach
Kasukabe style

- **Distal puncture**
  - 0.014 inch polymer-coated guidewire through 22G intravenous catheter or 21G(20G) needle
  - *Sheathless approach, Introduce 0.014 compatible microcatheter*
Extreme Distal Puncture
New Frontier of Distal Puncture

After passing the wire, no device can pass through the lesion!

- Low profile balloon
- Microcatheter
- Tornus PV®
- Additional wire (Crusade PV®)
- Crosser®
- Excimer laser®
- Rotablator®
- GuideLiner®
- Subintimal passage
- Needle cracking technique
- Brockenbrough needle
- Tag of wire

BADFORM Technique
Forcible Manner
A novel lesion crossing technique: Balloon deployment using FORcible Manner (BADFORM) technique.

Nakabayashi K¹, Ando H¹, Kaneko N¹, Shiozaki M¹, Sunaga D¹, Matsui A¹, Tanaka K¹, Shimizu M¹.
Case

BADFORM Technique
Completion Angiography
Conclusions

• Bi-directional wiring method can greatly enhance your initial success rate of EVT for PAD patient.

• BADFORM technique can be the most promising option for device delivery failure.
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