CCT @ LINC 2019
Various Techniques to Recanalize CTO
Trans-collateral Wiring

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Disclosure Statement

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Consulting for

Cardinal Health
Cordis Endovascular Japan
Boston Scientific
Terumo
Kaneka
Asahi Intecc
Tokai Medical Products
Future Medical Devices (FMD)
Nipro
Medikit
Target arterial lesions of CLI cases are always long total occlusions of BTK arteries.
The techniques we can use to recanalize BTK CTOs

1. Antegrade wiring
2. Bi-directional wiring
   1) Trans-collateral wiring
      Trans-pedal arch wiring
      Trans-perforator branch wiring
      Trans-(pure) collateral wiring
   2) Distal puncture
      ATA, PTA, PA
      Dorsalis Pedis A., Plantar A.
      Digital A.
Case: 80’s Female

Diagnosis: CLI (Rutherford 5, Right 1\textsuperscript{st} & 5\textsuperscript{th} toe)  
DM, Old cerebral infarction

Skin Perfusion Pressure:
- Right dorsal: 10mmHg
- Right plantar: 28mmHg
Control angiography
POBA for SFA lesions

4.0 x 300mm
Angiography after POBA
Stent implantation

Life stent solo
6.0 x 150mm
Post dilatation of stented segment
Angiography after stenting
Selective Angiography from distal PA
Wiring to plantar artery via perforator branch

Regalia 0.014”
Wiring to DP via pedal arch
Retrograde wiring

Chevalier floppy
Corsair PAD
Antegrade wiring to ATA-CTO

Jupiter FC
Prominent
Guidewire Rendezvous
Advance antegrade guidewire to plantar A.
POBA for DP and pedal arch

Shiden HP
2.0 x 200mm
POBA for distal ATA

Shiden HP
2.0 x 200mm
POBA for POP - proximal ATA

Shiden HP
2.0 x 200mm
Angiography of BTA area after POBA
Final angiography
Result of the Case

Skin Perfusion Pressure:

Rt dorsal  10mmHg → 45mmHg
Rt plantar  28mmHg → 48mmHg
Take Home Message

Bi-directional wiring techniques are very powerful to achieve successful result in complex BTK lesions.

Trans-collateral wiring and various distal puncture techniques are essential for the interventionists who treat CLI patients.
Thank you for your attention.
Various Techniques to Recanalize CTO Trans-collateral Wiring

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