Access Alternatives for Complex CLI Therapy

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Faculty Disclosures

**Bret Wiechmann:** Consultant – Boston Scientific Corporation Intact Vascular Morris Innovative Medtronic BD/Bard; Grant/Research Support – Intact Vascular Medtronic; Major Stock Shareholder – PQ Bypass

Dr. Bret Wiechmann has disclosed that the off-label use of coronary drug-eluting stents and drug-coated balloons in the tibial vessels will be discussed.

*Brand names are included in this presentation for participant clarification purposes only. No product promotion should be inferred.*
alternative
alternative adjective
al·ter·na·tive | ˌəl·tər·nə·tiv|ˌal-

1 : offering or expressing a choice
   // several alternative plans

2 : different from the usual or conventional:

femoral
Considerations: Choose wisely

- Clinical presentation
  - Tissue loss/wound/ulceration location
  - Angiosome concept
- Body habitus
  - Limited groin access/infxn/obesity
- Lesion characteristics
  - Length, location within pop/tibial artery
  - CTO vs multisegment dz
  - Multivessel dz
- Importance of superselective angiography
  - May be better off than you think
CLI: *Best* Access for Tibial Artery Intervention Pedal?
Direct SFA access ante/retro

- Avoid unfavorable anatomy
  - Tortuosity/previous ABF, endograft
  - Obesity
  - Hostile groin

- Strategic advantage
  - E.g. Flush SFA occ

- Avoid tricks to stay out of profunda (ante)

- Avoid changing patient position
Mechanical Advantage: CTO Cap Analysis
Access/crossing strategy based on CTO type

More favorable intraluminal crossing with approaching concave cap
- e.g. retrograde concavity = retrograde pedal/SFA-pop access
- e.g. antegrade concavity = antegrade access
Direct SFA access: Indications

- Obesity
- Hostile groin (infection, hematoma, scarring/keloid)
  - Antegrade for fem-pop, infrapopliteal intervention
  - Retrograde for CFA, iliac intervention
    - Especially with steep bifurcation/ABF
ANTEGRADE POPLITEAL ACCESS
SFA CTO – unable to be recanalized,
well collateralized from deep femoral artery

Case: A. Fearing, MD
84YO F progressive foot pain, discoloration
h/o ABF, R fem-AK Pop PTFE bypass
DUS: distal graft thrombosis
PMH: HTN, CRI (GFR=35)
On Eliquis
Direct antegrade fem-pop graft puncture
Post-thrombectomy patent graft, DES distal
2.5mm DP & PT PTA
Ulcer develops, MRI suggests osteomyelitis
Wound care, 8 weeks IV Abx, no change
L BKA recommended
Plan A
IF "Plan A" (or B)
Didn't Work.
The alphabet has
25 more letters!
Stay Cool.
DP OCCLUDED
70yo F nonhealing amputation site great toe
Failed antegrade recanalization
Attempted lateral plantar access
Schmidt technique

Direct stick of occlusion

Case: Alex Powell, MD
Plantar artery access: The Final Frontier?

Novel retrograde puncture technique for infrapopliteal artery revascularization: transplant retrograde access

Tatsuya Nakama1 · Hiroshi Ando2 · Nozomi Watanabe1 · Kenji Ogata1 · Tatsuro Takei3 · Yoshisato Shibata1
Summary

• Alternative access techniques necessary in >30% CLI pts
  – Frequently multiple sites employed
  – “Alternative” may be an outdated term as primary pedal approach used more frequently

• Planning entrance (& exit) strategy critical for technical success
  – CTOP

• “If you can see it, you can probably stick it”
  – Occluded grafts/stents/native vessels