Choosing the Route of Access in CLI

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Disclosures

Speaker’s Bureau:
- Astra-Zeneca
- Johnson and Johnson

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- Medtronic
- Volcano

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Access for CLI/Infrapopliteal intervention

• Incidence of severe infrapopliteal disease is on the rise
• Very common in the CLI pt.
• Challenges → Total Occ., Ca++, angulation, small diameter
• Good arterial access a MUST
• Amputation or Limb Salvage
• Minor vs Major amputation
• Physician Preference and experience
Considerations

• Anatomical Issues
• Ipsilateral vs Contralateral CFA
• Physical Exam/Angiosomes
• Non Invasive Imaging → Duplex Ultrasound, CTA, Selective invasive angiography
• Lab capabilities
Antegrade vs Retrograde CFA approach

• Antegrade/Ipsilateral vessel

  • Advantages → Shorter working distance, Shorter working lengths equipment, better pushability, torqueability

  • Disadvantages → Patient anatomic factors, More access site complications, More limited closure options

• Retrograde/Contralateral vessel

  • Advantages → “usual” room setup, Closure devices, Less radiation exposure

  • Disadvantages → Aortoiliac Disease, Longer working lengths, Less pushability/torqueability
Hybrid Access using Pedal Approach

• Becoming more routine and probably needs to be an option for optimal results
• Improvement in access technologies. Radial Cath
• More common use of US guided access
• Can be combined with the Ante or Retro CFA approach
• Somewhat takes away the disadvantage of crossing the distal cap of CTO antegrade where the cap tends to be convex
Technique using pedal access

• Antegrade or Retrograde CFA with Sheath in place
• Access of pedal artery using ultrasound
• 0.014 vs 0.018 wires. Various tip strengths
• Cross lesion from below (wire and crossing catheter) and snare wire vs crossing lesion from above and below and snare within the lumen (hibernating)
• Access “transformed” to work from CFA access
• Hemostasis obtained at tibial site
• Vessel intervention performed from CFA access
Case Presentation

• 55 yo Smoker
• HTN, DM, Dyslipidemia
• Wound Plantar aspect of toe
• CTA shows SFA CTO and severe infrapopliteal disease
Angiogram ➔ Contralateral CFA
Pedal Access from PTA
Sheath in posterior tibial
Wire retro and antegrade
Assisted crossing and Snare
Intervention from CFA sheath
Clinical success
Thank You for Your Attendance!
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