Complex Intervention to a CTO TP Trunk and Peroneal Artery, with Intervention to the Popliteal Artery and SFA Requiring Supera Placement

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Disclosure

Speaker name:

I have the following potential conflicts of interest to report:

☒ Consulting – Abbott, CSI
☐ Employment in industry
☐ Stockholder of a healthcare company
☐ Owner of a healthcare company
☐ Other(s)

☐ I do not have any potential conflict of interest
PATIENT PRESENTATION

- 68 year old Hispanic male with a history of an ischemic cardiomyopathy, with an EF of 40%, post CABG, PAD with Right great toe amputation, Hypertension, Hyperlipidemia, 60 pack year history of tobacco abuse presented with severe claudication at 10 feet involving his Left calf. Pt states the pain has been getting progressively worse, and he occasionally develops rest pain. He has not had any issues with ulceration or non healing wounds involving the left leg. The pain has resulted in severe limitation of his lifestyle.
PAST MEDICAL HISTORY

- PMH:
  - ischemic cardiomyopathy, with an EF of 40%,
  - CAD post 4 Vessel CABG,
  - PAD with Right great toe amputation
  - Hypertension
  - Hyperlipidemia

- PSH:
  - 4 Vessel CABG 2008
  - Right SFA intervention, stent placement -2013
  - Right Great Toe amputation

- Social History
  - 60 pack year tobacco abuse
  - Denies alcohol or recreational drug use
  - Lives at home with wife and daughter

- Family history
  - Positive for Diabetes Mellitus, CAD
Physical Exam

• Gen: patient in NAD
• Pulm: CTA – B/L
• CV: RRR, S1S2, no m/r/g, no carotid bruit, old midline scar intact
• Abd: soft, nontender, nondistended
• Ext:
  • Right LE: Great Toe amputation, Doppler PT and DP, 1+ Popliteal, 2+ Common Femoral
  • Left LE: delayed capillary refill, trace doppler PT, non Doppler DP, Doppler Popliteal, 2+ Common Femoral
Non-Invasive Testing

• ABI:
  • Right: 0.98 DP, with Biphasic Waveform
  • Left: 0.35 PT with Monophasic Waveform
• Arterial Duplex
  • Right: patent SFA stent, 50-75% stenosis of mid SFA, >75% stenosis of distal Popliteal Artery
  • Left: 50-75% stenosis of mid SFA, >90% stenosis of Popliteal Artery, severe Infrapopliteal disease
Plan

• Severe disease affecting the distal SFA into the Popliteal artery with chronic totally occluded Left Anterior Tibial, Posterior Tibial, and short segment of Proximal Peroneal Artery. Timi 1-2 flow down the reconstituted Peroneal artery, with collateral flow to reconstitute the Posterior Tibial at the foot.

• Give the patient’s complaint of rest pain, we will plan to perform intervention to the Peroneal artery, with attention to the Popliteal and mid to distal SFA.
• 6 French destination sheath was pass from Right CFA to Left CFA. Patient was loaded with Heparin to maintain an ACT greater than 275.

• An 014 Command wire was advanced with a Trailblazer to the level of the CTO of the peroneal artery
• After successfully crossing the CTO, injection through the Trailblazer confirmed intraluminal status.
After crossing the proximal occlusion, the Command wire was advanced to the distal vessel, and was successful in crossing an additional short segment occlusion at the ankle.

Following the successful crossing, the Command was exchanged for an 014 Viper Wire for orbital atherectomy utilizing a 1.25mm Burr CSI Diamondback.
We performed successful Atherectomy of the Peroneal Artery at 80,000 RPM for 3 runs for a total of 1.5 minutes. Additional atherectomy of the Popliteal and Distal SFA was performed utilizing the same 1.25mm burr at high speeds for 2 runs for a total of 1 minute.
• Below knee post atherectomy
• 6.0 X 150mm Inpact DCB for 3 minutes to prox popliteal and distal SFA.
Despite multiple long balloon inflations, there were persistent dissections affecting the P1 segment and distal SFA. Decision was made to deploy a supera in the Popliteal
After successful Supera placement in the Adductor Canal, the more proximal dissection became a bigger concern.
3 Month Follow Up

- Patient with significantly improved symptoms, back to his ADL’s. Enrolled in cardiac rehab.
- Repeat ABI at 3 months improved to .75, with duplex ultrasound revealing patency of SFA/Popliteal stents and patent Peroneal artery.
Questions?
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