The Day I Met the Mother of All Pseudoaneurysms

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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
Case History

- 70 year woman with CAD, PAD, CHF, HTN and ESRD on HD
- PAD history
  - 2001: Aorto-bifemoral bypass surgery
  - 2007: Femoral-femoral bypass surgery for left leg ischemia
  - 2008: Surgical repair of right CFA PSA
  - 2011: Left limb above knee amputation
  - 2012: Patient diagnosed with right CFA PSA during diagnostic cardiac catheterization

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Case History - Imaging

PSA Size: 3.3 x 3.7 cm by CT

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Case History

• Patient referred for surgery
• Deemed to be at high risk of complications – surgery deferred
• Four months later patient presented with pulsatile right abdominal mass
• Surgery aborted after skin incision because the PSA size and location posed ‘prohibitive risk’
• US showed that the PSA had grown: 6.2 x 6.8 cm
• Patient re-admitted six weeks later with painful RLQ swelling
Treatment Considerations

Objective: Exclusion of the PSA using covered stents and/or stent grafts

1. Optimal access site(s)
2. PSA crossing strategy
3. PSA exclusion strategy
4. Treatment of native PAD
1. Optimal access site(s): needs both antegrade and retrograde options
   - *LUE and left groin not an option*
   - *Right radial too far from the PSA*
   - *Right SFA occluded*

   **Right brachial + right popliteal**
Treatment Considerations

1. Optimal access site(s)
2. PSA crossing strategy
   • Angled catheter + soft-tipped jacketed wire + snare
Treatment Considerations

1. Optimal access site(s)
2. PSA crossing strategy
3. PSA exclusion strategy
   - Type of stent graft
   - Stent sizing
   - ‘Modular approach’
Treatment Considerations

1. Optimal access site(s)
2. PSA crossing strategy
3. PSA exclusion strategy
4. Treatment of native PAD
   • Revascularization of the SFA via the popliteal if possible
Treatment Plan

1. Optimal access site(s): R popliteal + brachial
2. PSA crossing strategy: Retrograde first
3. PSA exclusion strategy
   • Type of stent graft: Viabahn (various sizes)
   • Stent sizing: 6 – 8 mm
4. Treatment of native PAD
   • SFA PTA and stent on way out
Intervention

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Treatment Plan Revised

• Optimal access site(s): Right brachial
• PSA crossing strategy: Antegrade
• PSA exclusion strategy
  • Type of stent graft: Viabahn (various sizes)
  • Stent sizing: 6 – 8 mm
• Treatment of native PAD
  • Stent the CFA and proximal PFA
PSA Exclusion: Step 1

Lossy compression - not intended for diagnosis

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PSA Exclusion: Step 3

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Final Angio

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Case Follow-up

• Patient’s abdominal pain resolved
• Persistent swelling gradually improved – non tender on day 2
• Remained wheel chair bound on account of prior left sided AKA
• Expired 6 months later from complications of ischemic heart disease and CHF
Thank You
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