Case Presentation

Staged repair of chronic Type A dissection

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Speaker name:

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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)
History of Present Illness

45 yo presented with acute onset substernal chest pain radiating to left arm found to have a type A dissection to b/l common iliac arteries (2012)

PMH:  
HTN

Family history:  
No family members with aortic pathology

SH:  
– No tobacco
– No ETOH or Drugs

ColumbiaDoctors  
Aortic Center
Renal Arteries

Common Iliacs
Ascending Replacement

Underwent:

• Aortic valve resuspension

• Ascending aortic replacement
  - 30 mm Gelweave

• Transverse hemiarch replacement
  - 26 Gelweave
Post Op Imaging
Lower extremity malperfusion

• Continued to complain of bilateral buttock claudication

• Underwent aortic angioplasty, septal fenestration, and bilateral kissing iliac stents (5/3/2013)
After Septal Fenestration

After B/L Iliac Stents
2014

- At 47 found to have severe AR
- CT showed significant progression of arch disease demonstrating progressive arch dissection and enlargement
2014

6/2014 underwent

- Re-do Sternotomy
- Total arch replacement with elephant trunk
  - 32 mm Siena graft
- Bypass to innominate, left carotid, and subclavian
- Composite aortic root
  - 27 mm CarboMedics composite valve
  - 30 mm conduit
- Coronary reimplantation
Aneurysmal Degeneration

Size increased to 7.8 cm in 2016
TEVAR to downstage

Percutaneous TEVAR
Cook Alpha
38x34x167
34x30x161
32x32x157
Aortic Replacement

Options:
- Open extent III TAAA
- Infra renal tube graft with staged fenestrated repair from TEVAR to tube graft
Fenestrated EVAR

• Bilateral percutaneous access
• COOK Alpha 32 x 155mm 4 vessel physician modified graft
• COOK Alpha 32 x 155mm bridge
• Amplatz plug and coil embolization of splenic artery
  - Secondary to type III endoleak
Fenestrations and Graft dep.
Bridging stent deployment
Type III endoleak

Common hepatic and splenic wire access
Embolicization / Stent extension

Coil embolization of splenic

Extension of covered stent into com. hepatic
Postoperative course

**POD 0**
Extubated late in the evening
Levophed for SBP > 170
CSF drain for spinal cord perf.

**POD 1**
Heparin restarted for mechanical AVR
Diet advanced

**POD 2**
Spinal drain capped →
Neuro exam unchanged

**POD 3**
Spinal drain removed
Midodrine to maintain high SBP

**POD 5**
Transferred to floor

**POD 6**
Coumadin restarted w.
Lovenox Ambulating
Tolerating regular diet
Discharged to home
Clinical pearls

• Long term (life long) follow up essential
• Multidisciplinary care
  - CT surgery
  - Cardiology
  - Vascular surgery
• Multimodal approach / multiple operations
  - Open
  - Endovascular
  - Hybrid
Thank You

Aortic Center
1-800-RxAorta
www.columbiasurgery.org/aortic
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