Disclosures

• None
History

• 54 yo male with Marfan Syndrome

• PMH:
  – Acute Type B aortic dissection with R leg malperfusion
  – Fem-fem bypass
  – Infrarenal aorto bi-iliac replacement with visceral debranching

• Referred for extensive aneurysmal disease
  – Root/Ascending: 5.0 cm
  – TAAA: 7.5 cm
Preop CT scan
Operative plan

• Valve Sparing Root/Total Arch replacement with proximal transposition of the great vessels
• 2\textsuperscript{nd} Stage Completion TEVAR-TAAA
  – Proximal and distal LZ-Dacron
Preoperative TEE
Conduct of Operation

- Right axillary artery cannulation
- Initiation of CPB, cool to 26°C
- Aortic cross clamp
- Aortic root dissection
- MHCA + uSACP
- Excision of ascending aorta and arch
- Distal aortic (26 Gelweave) and LSA (8 Gelweave) anastomoses under HCA
Conduct of Operation

- Reperfusion of lower body
- Left carotid artery anastomosis (8 Gelweave)
- David V Valve sparing aortic root reimplantation
  - Annulus 27mm
  - 32 Gelweave straight graft (David-Feindel Formula)
  - Tailored graft
  - 3 subannular stitches
  - Prolapse of L cusp-
    - Plication stich at Nodule of Arantius 6-0 Gore-Tex
Conduct of Operation

- Graft to Graft anastomosis
- Cross clamp removed
- Innominate artery anastomosis (10 Gelweave)
- Weaned CPB to 1 liter
- TEE
After cross clamp removal
After cross clamp removal

Baseline

Post Repair
What to do

• Mild-Moderate AI along Right-Non Commissure
• CPB: 354 minutes
• X Clamp: 294 minutes
• Options
  – Leave it
  – Replace valve
  – Repair valve
Conduct of Operation

• Re-cross clamp
• Narrowed the Right-Non subcommissural triangle with 4-0 prolene horizontal mattress sutures x 2
• Graft-Graft Anastomosis
• Weaned from CPB
• TEE
After 2\textsuperscript{nd} cross clamp removal
After 2\textsuperscript{nd} cross clamp removal
Conduct of Operation

- Mild AI
- Weaned from CPB
- Extubated POD# 1
- 2\textsuperscript{nd} Stage TEVAR on POD#7
Completion Aortogram
TEVAR
Hospital course

• Discharged on POD#16
• BP 119/68. Could not hear diastolic murmur
• Pre-Discharge TTE
Pre-Discharge TTE
Valve Sparing Root Replacement
Case Presentation

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