Coil embolization of aortic dissection false lumen after TEVAR

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

☒ Consulting: *Medtronic, Inc.; Cook, Inc., Terumo*

☐ Employment in industry

☐ Stockholder of a healthcare company

☐ Owner of a healthcare company

☒ Other(s): *Educational grafts (Medtronic, Cook, Abbott)*

☐ I do not have any potential conflict of interest
Patient Information

• 57 yo male CP 3m prior to outpatient consultation
• At that time, cardiac w/u negative
  • CT showed uncomplicated TBAD
  • Medical management
  • Imaging surveillance
• HTN, GERD
• No aortic history
• HD stable, no additional episodes of pain
• 3m CT showed new aneurysmal expansion
CT @ 3m
Operative details

- To OR electively
- L C-SC bypass
  - L SCA dissected
- B CFA perc access
- IVUS
- TEVAR:
  - Valiant 38-207
  - Valiant 40-150
Follow-up CT
Options??

- Observation
- Surgical explant
- Something in between?
Operative details of secondary intervention

- R groin access
- 8F sheath
- Aortogram
Operative details of secondary intervention

- R groin access
- 8F sheath
- Aortogram
- IVUS to identify iliac fenestration
- Glidewire and angled catheter to gain access to FL
- FL-based aortogram
Angiogram
Post-op CT
TEVAR for cTBAD

- Open surgical replacement
- Complex endovascular solutions
  - N=80 patients undergoing TEVAR for cTBAD
  - 2.5% mortality at 30 days
  - 16% re-intervention within the treated aortic segment
  - 70% 5-year survival

Secondary interventions after TEVAR

N=585 patients, 2004-2011

False lumen embolization

- N=21 patients, 8 of whom had cTBAD
- FL embolization induced thrombosis in all patients
  - 4 patients required multiple embolizations
- Endograft occluders, plugs, coils
1 year follow-up

- Stable aneurysm size
- No endoleak
- No CP
- BP controlled
Conclusion

• cTBAD with aneurysm can be treated endovascularly

• Post TEVAR surveillance important
  • Endoleaks
  • Aneurysm growth
  • FL thrombosis

• Re-intervention rate significant
  • Coil embolization is one solution
  • Proximal and distal dissection therapies
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