Complication of TAVR: “Iliac on a stick”

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Disclosure

Speaker name: George S. Chrysant, M.D. FACC, FSCAI, FSCCT

I have the following potential conflicts of interest to report:

CONSULTING:
Abbott Vascular
Boston Scientific
Edwards Lifescience
Medtronic
Preprocedural planning

81 yo woman with 2 prior CABG
STS score 9
Scheduled for 1\textsuperscript{st} generation Edwards transcatheter valve
Combo cardiac and peripheral CT performed (Aquilion One 320 MDCT)
Cath from referring institution showed open grafts (SVG-> RCA, OM, D1. LIMA->LAD)
CT Assessment of Aorta

Aorta 14.2 mm
CT Assessment of Right Iliac System

CIA: 8.3 mm
EIA: 7 mm
CFA: 7.4 mm
CT Assessment of Left Iliac System

CIA: 9mm
EIA: 7.6 mm
CFA: 8.6 mm

L side chosen due to larger size and little calcification
22 F
Dilator gets stuck
Iliac Perforation/Avulsion

• Sudden dramatic drop in blood pressure
• LV cavity became very small
• Clinical situation consistent with catastrophic complication
• Immediate placement of aortic occlusive balloon once problem identified
• Covered stents deployed emergently
After multiple Viabahn Stents
Iliac Perforation/Avulsion

• Even after entire iliac system is covered with Viabahn stents, when aortic balloon is deflated, BP drops
• Decision made to proceed with emergent Aorto-femoral bypass grafting with ligation of L iliac
• TAVR sheath placed inside graft
Postprocedural Course

- Patient maintained on single pressor agent
- Extubated at 48 hr but reintubated
- Transfusion of packed cells, platelets
- SIRS, high bilirubin from hemolysis
- CVVHD
- 15 days in hospital
- Day 16: Family decision not to pursue permanent dialysis -> comfort care/DNR
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