Concominent Treatment of a Thoracic Aneurysm and 1B Endoleak from Abdominal Aneurysm Graft in a 91-year-old

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Background

- A 91-year-old female presented in transfer for acute onset chest pain and a systolic blood pressure over 200mmHg.
- She had a past surgical history of an endovascular aneurysm repair (EVAR) for an abdominal aortic aneurysm and type 2 endoleak coil embolization.
- She was noted to have a thoracic aortic aneurysm measuring 6.6cm with 5mm of growth in the last 4 months.
- Her abdominal aortic aneurysm was 9.7cm with 6mm of growth over 4 months with a Type 1 B endoleak.
- Given concern for symptomatic thoracic aneurysm, decision made to proceed to operating room for thoracic aneurysm repair, and iliac branch endoprosthesis for the type 1B endoleak.

References

Case

- From the side with the 1B, a thoracic endovascular aneurysm repair was performed with a Cook Alpha 2 (Bloomington, IN) graft.
- Next a Cook Zenith Iliac Branch Device was brough up. A 16F Ansel sheath was tracked over the previous EVAR bifurcation parked in the main body of the iliac branch device.
- An 8F Ansel was brough over the through and through wire and the internal iliac artery cannulated and a Rosen placed in the internal iliac.
- Multiple VBX and ICAST stents were attempted to bring over into the internal iliac but would not pass through the 8F sheath with the through and through buddy wire in place.
- The through and through buddy wire was removed. With it removed the sealing stent would not track over the bifurcation.
- The Branch Device was fully deployed. The cook sheath was removed and replaced with a Dryseal.
- A new through and through buddy wire was placed and the 8F sheath upsized to a 9F. Over this system a 7-29 VBX was successfully placed in the hypogastric and post dilated to 9mm.
- Completion angiography showed exclusion of her thoracic and abdominal aortic aneurysms.
- She had an uneventful post-operative course.

Discussion

- When placing an iliac branch device in a previously placed EVAR, if there are issues tracking the sealing, the main device can be fully deployed, the sheath replaced and a new shorter sheath and through and through wire placed to help track over the previous endovascular repair's bifurcation.
- Even if patients with advanced age, imminent death from rapidly expanding symptomatic aneurysm can be successfully treated with endovascular methods.

Case Images