



A BEVAR stuck in an EVAR: how did I treat it?

80 years old man

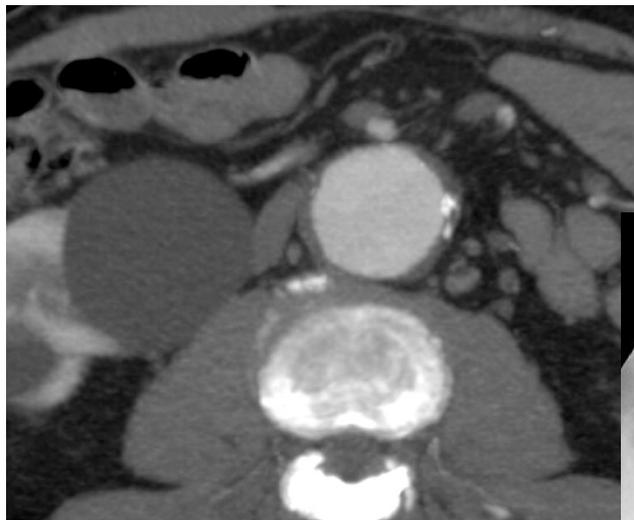
Past medical history

- former smoker
- hypertension
- hyperlipidemia
- hypothyroidism
- PPM
- symptomatic right carotid stenosis s/p endarterectomy
- Cardia cancer s/p subtotal esophagectomy

Medications: ramipril, atorvastatin, levothyroxine, ASA

Case presentation

Asymptomatic infrarenal AAA 52 mm
(2015)



EVAR



Control CTA POD 3



Aortic endoprosthesis 28 mm x 12 cm
Controlateral leg endoprosthesis 20 mm x 11.5 cm
Ipsilateral leg endoprosthesis 20 mm x 9.5cm

Case presentation

July 2020, follow-up CT: asymptomatic, 45 mm type IV thoracoabdominal aortic aneurysm, above the preexisting abdominal stent graft

→ indication to cranial extension with a BEVAR



BEVAR planning

- branched and bifurcated custom-made endograft (from the right femoral access) with iliac leg extension stent grafts
- balloon-expandable stent grafts for: right and left renal arteries, superior mesenteric artery and celiac trunk (from the omeral access)
- vascular plugs for superior right and left polar renal arteries

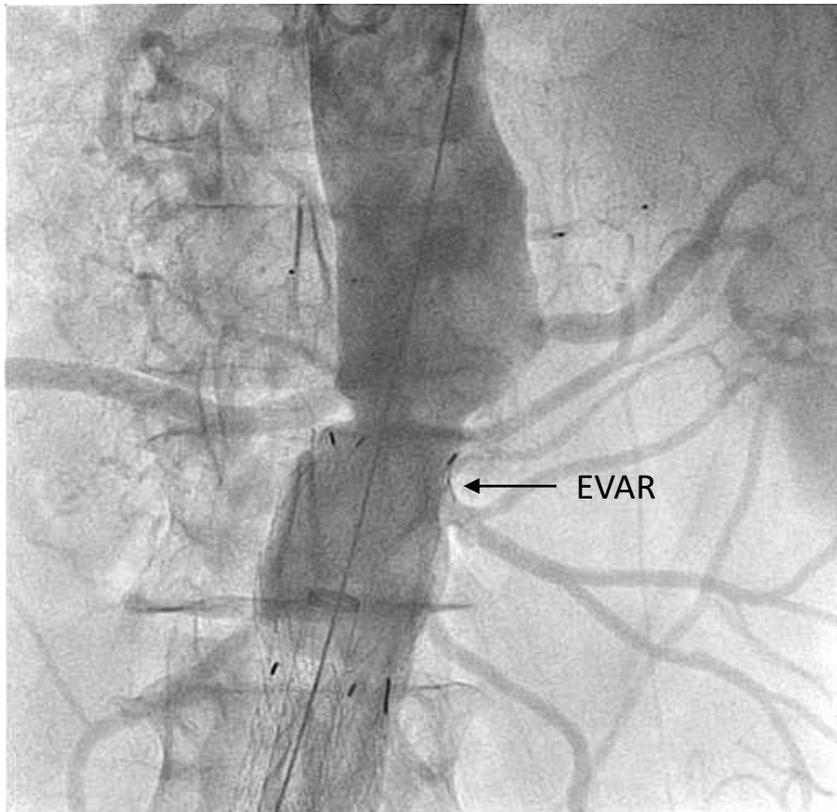
Angiography and procedure

General anaesthesia

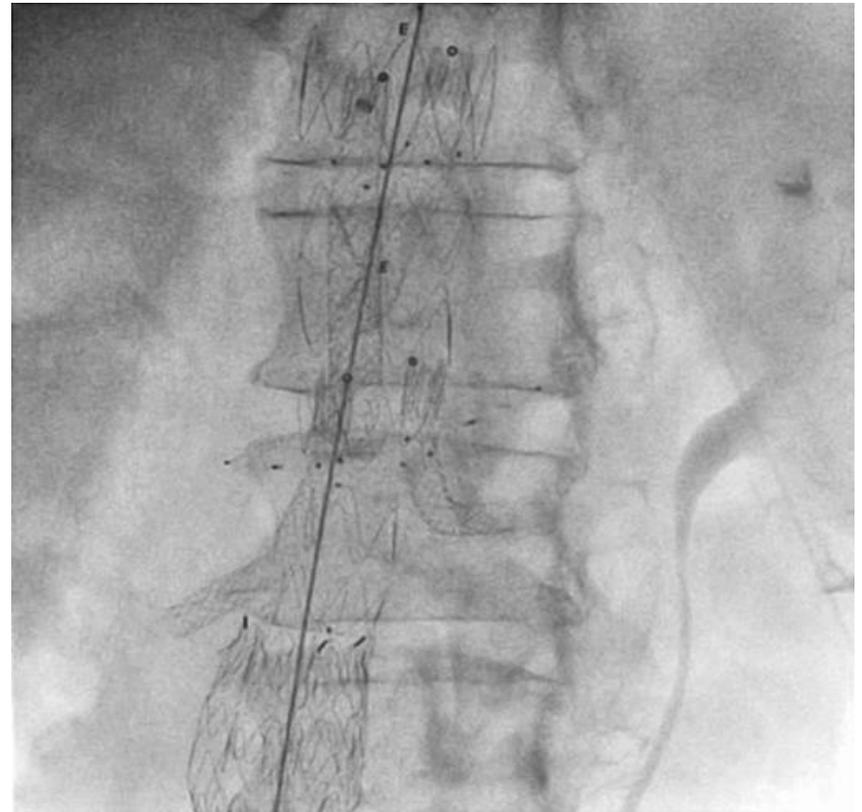
Percutaneous bilateral femoral artery accesses

Percutaneous left omeral artery access

Selective stenting (covered stents) of coeliac trunk, superior mesenteric artery, right and left renal arteries, two plugs in the polar renal arteries



First diagnostic angiography

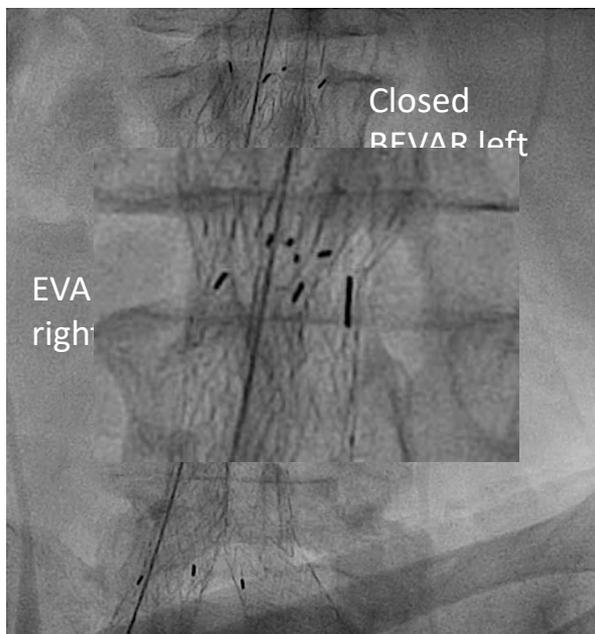


Complete branching

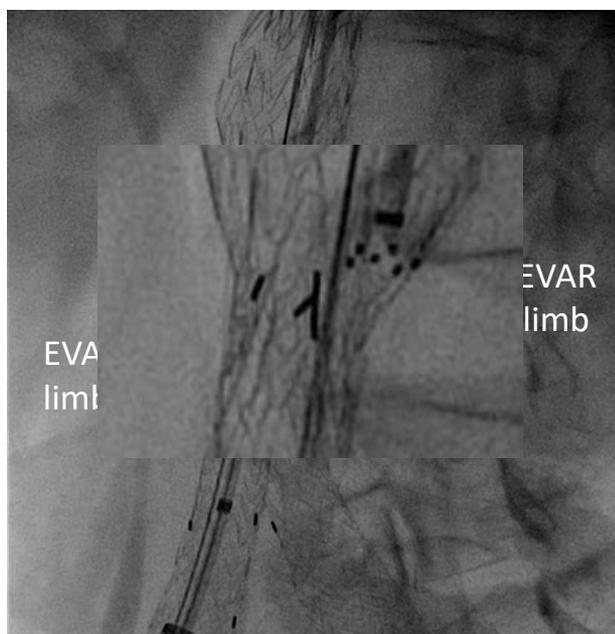
Procedural complication

Control angiography: well deployed visceral stent grafts and plugs

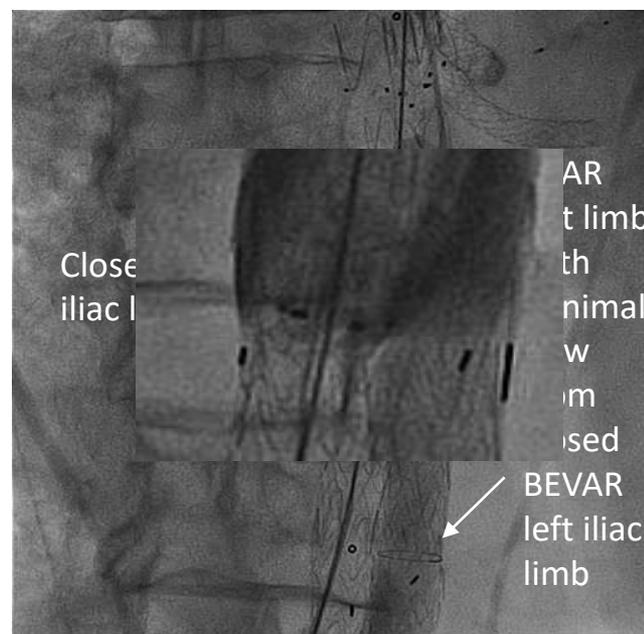
... but no opening of BEVAR iliac limb



A/P



LAO 60°



RAO 60°



- Coronary wire from the left omeral access through the distal BEVAR left limb. Distal wire tip in the EVAR body
 - Snaring of the coronary wire from the left femoral access (omeral to left femoral rail) followed by coronary balloon inflation
- Snaring of an hydrophilic 0,035'' wire from the left femoral access (omeral to femoral rail)



12mmx80mm balloon inflation -> BEVAR left limb expansion

End of the procedure

Iliac branch extensions and balloon post-dilatation

Good result with exclusion of the aneurysm, well deployed endograft, regular patency of visceral stent grafts and of iliac leg extension, no endoleaks

Total procedural time: 6 hrs

Total contrast administration: 300 ml

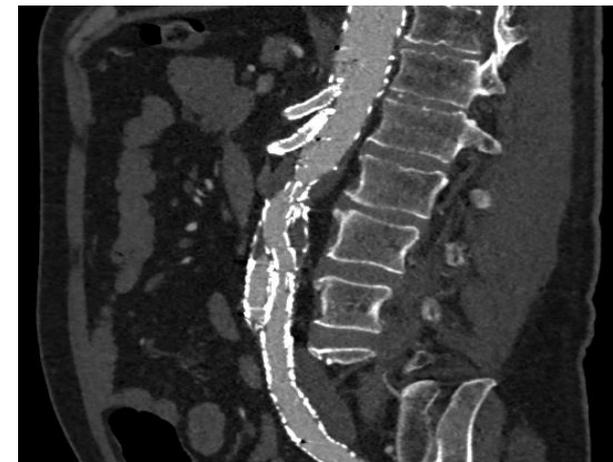
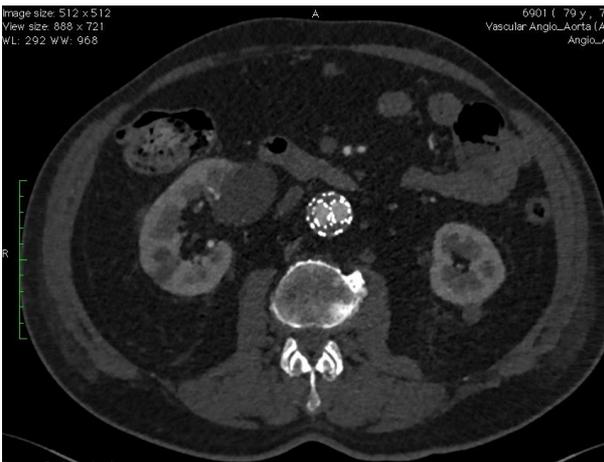


Final Angiography



CTA POD 2

CTA POD 2



- Regular postoperative course with no acute kidney injury
- Discharge on POD 6

Conclusion

- BEVAR is a well known alternative to open surgery to treat thoraco-abdominal aortic aneurysm, with lower risks of perioperative mortality and postoperative complications
- Intraoperative complications (e.g. difficulty of target vessel cannulation, malpositioning of visceral stents, bifurcated components or iliac extensions) are rare, but can occur
- Endograft markers are not the real end of the graft
- Wire-based ormeral to femoral rail was the key for a successful bail-out strategy