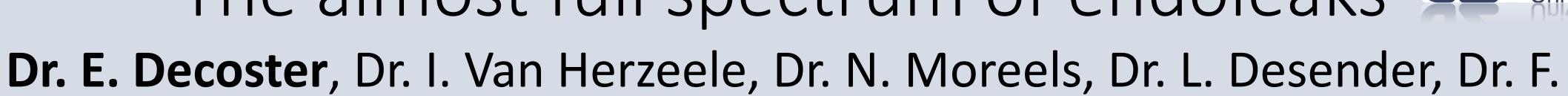


The almost full spectrum of endoleaks 42 Universitair Ziekenhuis Gent





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Vermassen

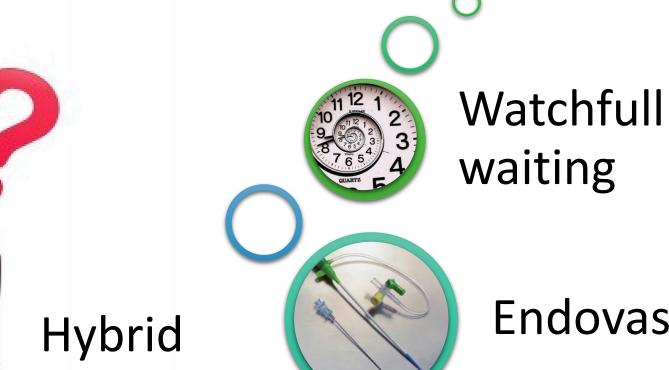
Introduction

The incidence of endoleaks post-TEVAR varies between 0 and 30% with type 1 endoleak being the most common. About 5% of patients will present with more than one type of endoleak. We know that the risk of spinal ischemia after TEVAR is higher in patients who have previous abdominal aneurysms (up to 18%). This risk is also correlated with the length of aorta coverage, operation time, coverage of left subclavian artery, intra-operative hypotension and absence of cerebrospinal fluid drainage.

Case Report

A 73-year old patient who previously underwent an open infrarenal AAA repair presented with a ruptured thoracic aorta aneurysm. An emergency endovascular exclusion using two C-TAG (WLGore) endoprostheses was performed. Preoperatively, a spinal drain was put in place.



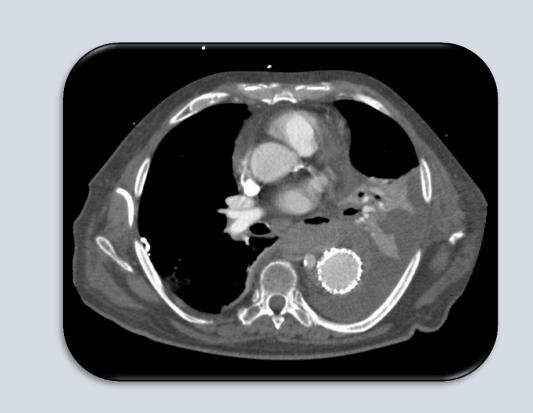


Endovascular

Open Repair

2 days postop

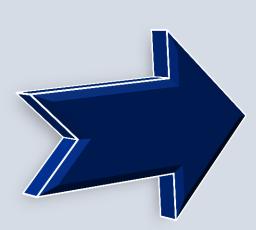
- Type II endoleak (dorsal artery)
- Pulmonary embolism (heparin treatment)



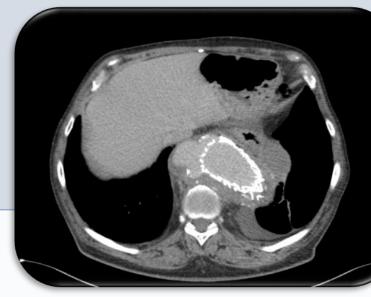
4 months later

- Aneurysmal sac expansion
- Type IB endoleak





Extension Gore TAG 4040150 No endoleak on completion angiogram

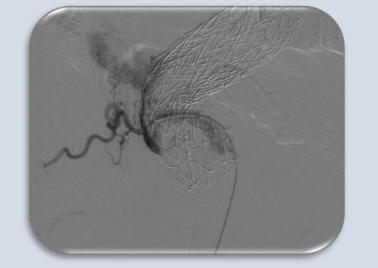


8 months later

- Aneurysmal sac expansion
- Type III endoleak
- Type IB endoleak
- Type II endoleak







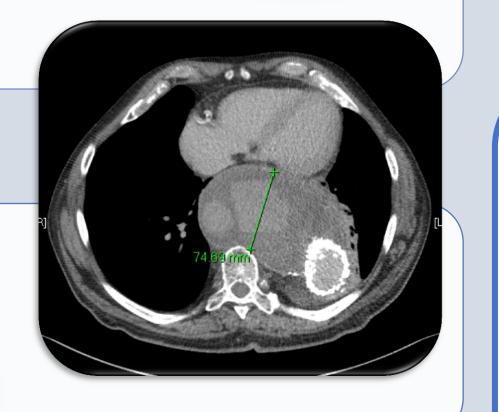
Symptomatic due to compression left atrium



Relining and elongation Gore TAG 4545200 Moulding distal landing zone Tri-Lobe



- Decreased type IB and type II endoleak
- Expansion aneurysmal sac



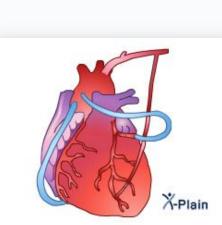
1 year later

15 months

later

2 years later

Semi-urgent CABG



Further expansion

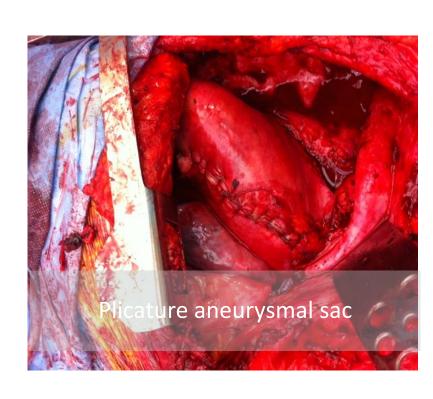


Case Report

We planned our patient for a semi-invasive procedure. A large aneurysmal sac was noted just above the diafragm. We started with a banding of the distal landing zone with a gelsoft prosthesis. Intercostal branches were clipped. Before opening the aneurysmal sac, we ensured that the sac was depressurised. After opening of the aneurysmal sac, old blood cloths were removed and no active bleeding was found. To finish, a plicature of the aneurysmal sac was performed

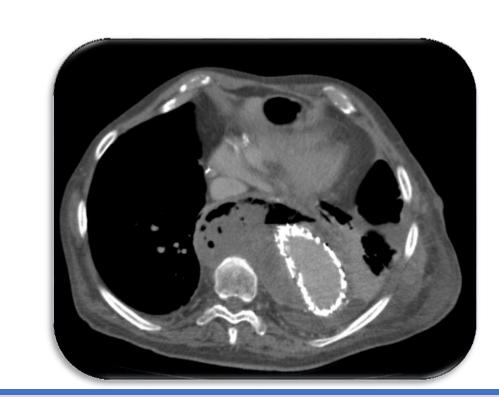






Unfortunately, the anesthesiologist was unable to place a spinal drain and our patient experienced weakness of the left lower limb. However, this has resolved and he is able to walk again.

4 months postoperatively, there is no residual endoleak and the aneurysmal sac is depressurized.



Conclusion

Aortic banding is **feasible** and may be a compromise between minimal invasive endovascular treatment and extensive surgical repair. It can however be complicated by transient or permanent paraplegia.

Martin et al. J Vasc Surg 2009 Feb;49(2):302-6; discussion 306-7 Schlösser et al. J Vasc S009 Feb;49(2):308-14; discussion 314. Parmer et al. J. Vasc Surg 2006 Sep;44(3):447-52 Alsac et al. Ann Vasc Surg 2011 Apr;25(3):345-51. doi: 10.1016/j.avsg.2010.08.002. Epub 2010 Oct 6

Makaroun et al Ann Vasc Surg 2006 Images courtesy of WLGORE®