ENDOVASCULAR AORTIC SEALING COMBINED WITH TREE VESSEL CHIMNEY FOR TYPE 1 A ENDOLEAK TREATMENT

CATARINO Joana; QUINTAS Anita; ABREU Rodolfo; FERREIRA Rita; CAMACHO Nelson; ALVES Gonçalo; ALBUQUERQUE E CASTRO João; FERREIRA Maria Emília; MOTA CAPITÃO Luís

Vascular Surgery; Santa Marta Hospital; Lisbon; PORTUGAL
Disclosure

Speaker name:

........................................... Joana Catarino...........................................

I have the following potential conflicts of interest to report:

☐ Consulting

☐ Employment in industry

☐ Stockholder of a healthcare company

☐ Owner of a healthcare company

☐ Other(s)

☒ I do not have any potential conflict of interest
Introduction

Type 1A endoleaks are one of the possible complications after any endovascular aortic repair and must be corrected to avoid extensive aneurysm sac growth.

The chimney technique using parallel grafts offers a viable alternative to fenestrated or branched endovascular procedures.

The use of chimney technique using the Nellix® device (Ch-EVAS) has become attractive as it brings the theoretical advantage of avoiding gutters endoleak.
Case Report

- 74-year-old male
- **Bifurcated stent graft** for an infra-renal AAA 3 years earlier
- Presented with an asymptomatic type 1A EL with 138mm aneurysm sac growth

6 month Fup CTA:
no loss of proximal sealing zone or EL
Case Report

To achieve a proximal sealing zone, an off-label endovascular solution was planned:

3 vessels chimney technique (renal arteries and superior mesenteric artery) in combination with EVAS system Nellix® (Endologix, Irvinem CA, USA)
Case Report

- Surgical exposure of the left axillary artery - 3 parallel 7F
- Cateterization and deployment of a balloon-expandable covered stent - left and right renal arteries and superior mesenteric artery - (Bentley® InnoMed GmbH; two 6x38mm, one 7x37mm)
- Nellix® device - introduced and delivered from bilateral femoral access
- Proximal edge of all covered stents was placed just below the level of the celiac trunk origin
Follow-up

1 month post-op CTA: successful resolution of the endoleak and the normal patency of visceral chimney covered stents.
Conclusion

Ch-EVAS may provide a feasible solution to difficult problems such as type 1A endoleaks in complex anatomic aortic features in need of urgent treatment.

Long term follow-up is needed to determine its durability and safety.
Thank you for your attention
ENDOVASCULAR AORTIC SEALING COMBINED WITH TREE VESSEL CHIMNEY FOR TYPE 1 A ENDOLEAK TREATMENT

CATARINO Joana; QUINTAS Anita; ABREU Rodolfo; FERREIRA Rita; CAMACHO Nelson; ALVES Gonçalo; ALBUQUERQUE E CASTRO João; FERREIRA Maria Emília; MOTA CAPITÃO Luís

Vascular Surgery; Santa Marta Hospital; Lisbon; PORTUGAL