Gutter endoleaks on completion angiography with ch/EVAR:
When to ignore; How to prevent; When and how to treat

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Disclosure
Speaker name: ...

- Receipt of grants/research support Medtronic
- Receipt of honoraria and travel support
- Participation in a company sponsored speakers’ bureau
- Employment in industry
- Shareholder in a healthcare company
- Co-founder of Vascupedia and of the European Foundation for Cardiovascular Research

Gutter endoleaks in chimney EVAR

Significant variability in the literature (0%-30%) depending on the time of occurrence
- completion angiography
- first postoperative CTA
- new onset of type IA endoleaks

Ruptured TAAA treated with parallel grafts
Gutters endoleak desappeared on

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Chimney EVAR evidence:

Collected World Experience About the Performance of the Snorkel/Chimney Endovascular Technique in the Treatment of Complex Aortic Pathologies

The PERICLES Registry

Konstantinos P. Donas, MD, Jason T. Lee, MD, Mario Luchtel, MD, Giovanni Torsello, MD, PhD,
and Frank J. Welb, MD, on behalf of the PERICLES Investigators

The PROTAGORAS study to evaluate the performance of the Endurant stent graft for patients with pararenal pathologic processes treated by the chimney/snorkel endovascular technique.
Donas KP,Torsello GB,Piccoli G,Pitoulis GA,Torsello GF,Bisdas T,Austermann M,Gasparini D.

Different area of gutters by use of different grafts with a balloon expandable covered stent as chimney graft

Nitinol skeleton

Stainless steel skeleton

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**Classification of Chimney EVAR-Related Endoleaks: Insights From the PERICLES Registry**

Pattern A: Excessive oversizing of the aortic endograft

Pattern B: Undersized aortic endograft in large neck diameters or multiple chimneys

Pattern C: Insufficient sealing length and migration

**Pattern B. Undersized aortic stent-graft**

**Embolization by use of coils and Onyx**

**Lengthening of the sealing zone**
Conclusion

- Gutters endoleaks are benigne
- >95% dissapeared in the follow up
- In case of persistence, evaluation of the degree of oversizing
- .... and length of the new sealing zone
- Therapy according to the pattern of endoleak