With rAAAs patients with hostile neck anatomy do not have a worse outcome than those with favourable anatomy: our data differ from those in the IMPROVE Trial.

Marc RHM van Sambeek
Pieter Broos, Yannick 't Mannetje, Philippe W Cuypers, Joep AW Teijink
Department of Vascular Surgery
Catharina Hospital Eindhoven

Disclosure
Marc RHM van Sambeek
I have the following potential conflicts of interest to report:
Consulting and speakersfee
WL Gore & Associates
Medtronic
Unrestricted research grants
Medtronic
Abbott Vascular
Philips Medical Systems

The literature on hostile neck

Liberalized interpretation of the instructions for use is associated with increased risk of aneurysm sac enlargement, which can lead to re-intervention and rupture of the aneurysm.


In a meta-analysis it was demonstrated that patients treated with hostile neck anatomy were at significantly increased risk for operative morbidity, additional adjunctive procedures at treatment, Type I endoleak at one year, and aneurysm related mortality at one year.


What is challenging anatomy?

There’s no univocal definition.
In general:
- Neck length ≤ 15 mm
- Neck angulation ≥ 60°
- Double angled necks
- Irregular (thrombus, bulge, calcium)
- Wide (> 28 mm)

Objective and Methods

To compare the mid-term results of EVAR for RAAAs in patients with favourable aortic neck anatomy (FNA) and hostile aortic neck anatomy (HNA):

HNA was defined as rAAA with a proximal neck of <10 mm, or a proximal neck of 10-15 mm with a suprarenal angulation (α) >45 and/or an infrarenal angulation (β) >60, or a proximal neck of >15 mm combined with (α) >60 and/or (β) >75.

Baseline Characteristics
EVAR in RAAAs with hostile infrarenal aortic necks appear technically feasible and safe in experienced hands.

Endograft related complication rates and secondary intervention rates were not significantly higher in RAAA patients with HNA at 1 year.