Michael Jenkins
St Mary’s Hospital
Imperial College, London

Does FEVAR solve the durability problem of using standard EVAR devices to treat AAAs with short or difficult necks: The GLOBALSTAR Registry says YES

Disclosures
• President of BSET
• GLOBALSTAR funded by Cook and Vascutek

Life expectancy

RCT evidence

Durability of EVAR

• How long should it last?

EVAR re-interventions
EVAR re-interventions

Need continued surveillance to detect these severe complications before they lead to rupture.

Proximal neck remodelling

- Proximal seal with FEVAR – better durability?
  - Why?
    - Histologically different
    - Extrinsic “wrap” from crus?
    - Side branch fixation

Neck dilatation

FEVAR proximal progression
FEVAR proximal progression

GLOBALSTAR

GLOBALSTAR II

FEVAR Aortic neck analysis

GLOBALSTAR II

FEVAR Aortic neck analysis

- 2007-2010
- 318 patients / 14 UK sites
- Cook Zenith
- 1S 2F or 1S 3F
- Procedural success 99%
- Peri-op mortality 4.1%
- 3 year FU
  - Survival 89%
  - Target vessel loss 15%
  - Re-intervention 30%

- 2007-2010
- 318 patients / 14 UK sites
- Cook Zenith
- 1S 2F or 1S 3F
- Procedural success 99%
- Peri-op mortality 4.1%
- 3 year FU
  - Survival 89%
  - Target vessel loss 15%
  - Re-intervention 30%

- 2007-2017
- 877 patients
- Cook Zenith and Vascutek Anaconda
- Original cohort
- Updated implants since
- 58 patients assessed
- 33 deaths at 30 days
- 5.6% early mortality

- 2007-2017
- 877 patients
- Cook Zenith and Vascutek Anaconda
- Original cohort
- Updated implants since
- 58 patients assessed
- 33 deaths at 30 days
- 5.6% early mortality

- 42 patients
- 7.8 years FU
- Immediate post op to latest FU
- Median diameter change:
  - A 30mm proximal to stent struts
  - B Proximal Dacron edge
  - C Distal end of lowest renal fenestration

- 42 patients
- 7.8 years FU
- Immediate post op to latest FU
- Median diameter change:
  - A 30mm proximal to stent struts
  - B Proximal Dacron edge
  - C Distal end of lowest renal fenestration
FEVAR Aortic neck analysis

• Median diameter change:
  • A +0.1mm IQR -1.0 to +3.3mm
  • B +2.2mm IQR +0.5 to +4.8mm
  • C +0.5mm IQR -0.4 to +4.3mm

• No significant aortic neck dilatation

Conclusions

• Well established that a proportion of EVAR seal zones are lost over time
• More prevalent in “difficult necks”
• FEVAR necks do not seem to dilate
• Early GLOBALSTAR data is encouraging