Single Center Experience with the GORE C3 Excluder in more than 300 Patients

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Disclosures

– Thanos Katsargyris
   – None

– Eric Verhoeven
   – Consultant & Speaker for Gore
   – PI for Gore C3 Study in Europe
C3 Excluder Stent-graft

- Stent-graft design unchanged

- **New deployment mechanism:**
  - Recapturable and Repositionable Top Stent
  - Separate Step to deploy ipsilateral Limb
• Recapturing enables repositioning for Level and Orientation
• Preservation of right IIA by readjusting the Limb length
European C3 Module

Global Registry for Endovascular Aortic Treatment

GREAT
Real-world Performance of the New C3 Gore Excluder Stent-Graft: 1-year Results from the European C3 Module of the Global Registry for Endovascular Aortic Treatment (GREAT)

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• August 2010-December 2012
• 13 European Centers
• 400 patients
AAA Characteristics

- **Mean Neck length:** 28 $\pm$ 14mm
  - Neck length <10mm: N=6
    - Renal Chimneys: N=2

- **Mean Neck Angulation:** 29.1 $\pm$ 24°

- **Outside IFU:** 17% (68/400)
Early Results

• Technical Success: 99% (396/400)
  – 2 Conversions
  – 2 Unplanned renal chimneys

• 30-d Mortality: 0.5% (2/400)

• 30-d Reintervention: 0.5% (2/400)
Late Type Ia Endoleak

- N=7
  - Inside IFU: 0.6% (2/332)
  - Outside IFU: 7.4% (5/68)
    - All treated with additional cuff/palmaz stent/onyx
Freedom from Late Type Ia Endoleak

1 Year
Inside IFU: 99.7% (95% CI 97.7-100%)
Outside IFU: 96.7% (95% CI 87.5-99.2%)

5 Years
Inside IFU: 99.3% (95% CI 97.3-99.8%)
Outside IFU: 88.5% (95% CI 72.9-95.4%)

P < 0.001
Limb Occlusion

- N=3/800 (0.4%)
  - Thrombectomy: N=2
  - Thrombolysis: N=1
Nuremberg C3 Experience

- August 2010 – December 2018
  - N = 319

- Confounding Factors
  - EVAR with Cook Zenith: N = 275
  - FEVAR: N = 493
AAA Characteristics

• Dmax: 58.8 ± 10.0mm
• Neck length: 29.2 ± 14mm
  – Range: 8-45mm
Perioperative Outcome

- **Technical Success**: 97.8% (312/319)
  - 6 Early Type I Endoleak (disappeared at 1st CT)
  - 1 Intraoperative death (ruptured aorta after TAAAB)
- **Cuff use**: ZERO
- **30-d Mortality**:
  - Elective: 0/289
  - Acute: 4/30
    - 1 Intraoperative death (ruptured aorta after TAAAB)
    - 3 MOF (ruptured AAA)
Follow-up
Mean: 28 ± 12 months

- **Type Ia Endoleak**: N=2
- **Limb Occlusion**: N=0

- **Aortic Related Death**: N=1
  - aortoenteric fistula and conversion
    (was most probably aortoenteric fistula to start with)
Type Ia Endoleak, Pt #1

- 2010 EVAR
  - AAA (Dmax 58mm)
- 2015 IMA Embolisation
  - (Type II Endoleak)
- 2016 Limb Extension
  - (Type Ib Endoleak)
- 12.2018 Endoanchoring
  - (Type Ia Endoleak)
• EVAR Final Angio (2010)
• Postop CTA 2010
• CTA 2015
• CTA 12/2018
  – Type Ia Endoleak?
    • (other Hospital)
• CTA 12/2018
  - After Endoanchoring
  - Persistent Type Ia Endoleak
    • (other Hospital)

• Pt unfit for Conversion
Type Ia Endoleak, Pt #2

- 1999 EVAR (Endologix)
  - AAA (Dmax 58mm)
- 2006 Proximal Cuff + Palmaz
  - (Type Ia Endoleak)
- 2015 Relining (Gore C3)
  - (Type III + Ia Endoleak?)
- 2018 FEVAR
  - (Extension of Disease, small type Ia Endoleak)
- Sac Expansion + Type III Endoleak
• CTA 07/2015
  – After Relining with Gore C3
• CTA 09/2018
  – Extension of Disease
    • Small type Ia Endoleak?
    • Sac Expansion
• 10/2018
  – FEVAR (RRA + SMA)
Conclusions

- C3 Excluder
  - Excellent early results
  - Repositioning frequently useful
    - Precise positioning, ↓ need for cuff extenders
  - Excellent mid-term outcome
    - ↓ Type Ia Endoleaks inside IFU
    - ↓ Limb occlusions
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