The PERICLES Registry: Midterm results with a variety of devices

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Chimney technique

- Current evidence base?

Current evidence base

- Limited number of patients
- Wide variety of treated entities
- Several combinations of off-the-shelf devices

To provide the latest pooled evidence about chimney grafts in pararenal pathologies
To resolve the controversy and to see if the skepticism about them is justified
Methods

- Data were collected in a standarized and uniform manner
- All commercially available abdominal endografts and chimney grafts were included
- Statistical analysis: Stanford University, US
- Non-industry funded project
Indications

**Disease**
- Degenerating Aneurysm: 85.2%
- Type la endoleak after prior EVAR: 8.7%
- Para-anastomotic aneurysm after AAA Repair: 8.3%

**Clinical Status**
- Asymptomatic: 80.2%
- Symptomatic: 10.1%
- Rapidly growing: 4.1%
- Rupture: 5.6%

Anatomic/Device Characteristics

**Abdominal Main Body Endograft**
- Endurant: 260 (50.2%)
- Zenith: 91 (17.2%)
- Excluder: 75 (14.5%)
- Jotec: 17 (3.2%)
- Other devices: 74 (14.9%)

Anatomic contribution of the used devices

Chimney Grafts: n=898
- Right Renal: 342 (38%)
- Left Renal: 306 (34%)
- Acc. Renal: 34 (3.7%)
- SMA: 156 (17%)
- Celiac: 50 (5.6%)

Balloon-expandable (Covered): 49.2%
Self-expanding (Covered): 39.6%
Balloon-expandable (Bare Metal): 11.2%

New neck length

Infrarenal neck length (mm): 4.8±7.4
Neck length/seal zone changed to 21.1±12.7 (9-43)

Perioperative Outcomes

- Intra-op type Ia endoleak: 7.9%
- Persistent intra-op type Ia endoleak: 2.9%
- Type IA endoleak at latest fu: 5.8%

Technical Success: 97.1%

...for 517 patients from 13 international centers

AAA follow-up (17.1 months, 1-70)

- Mean Pre-op Sac Diameter (mm): 65.9±21.6
- Mean Latest F/U Sac Diameter (mm): 61.2±19.7, p.001
**Primary Patency of the chimney grafts**

94.1% at latest f/u

**Conclusions**

- Chimney EVAR is a safe and effective alternative endovascular treatment for pararenal pathologies
- Widespread skepticism that has existed is probably not justified
- Pericles registry helps to bring chimney grafts “out of the shadows”

- Workshop about the chimney technique on Friday the 20th November 9.30-12.30
- New York Suite, 4th floor

Moderators:
Prof. G. Torsello
Ass. Prof. K. Donas