Not so: Open Repair Is Still The Best Treatment For Many (Possibly Most) TAAAs

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TAAA Treatment Options

- Open Repair
- Hybrid (debranching)
- Endovascular
  - Custom Made
  - Off the shelf
  - Parallel Grafts
    - (Snorkel/Sandwich)
- Nonoperative / Palliative

Modern Open TAAA Repair

- Adjunct
- DAP
- CSFD
- Moderate passive hypothermia
- Sequential clamping
- ICA reattachment
- Neuromonitoring

Endovascular TAAA

- Custom made devices
  - 6-8 wks
- Off the shelf
- 40-60% of pts
- Radiation
- Contrast
- Long operative time

Endovascular TAAA

- Anatomical restrictions:
  - Angulation/Tortuosity
  - Calcification
  - Thrombus
  - Luminal diameter
  - Iliac access
  - LSCA access

No disclosures.
**Endovascular TAAA: Contraindicated**
- Genetically triggered aortic disease
- Syndromes
  - Marfan's, LDS, EDS
- Familial Aneurysms (Up to 20% of pts)
  - ACTA2, TGFBR, MYH11
- Ruptured aneurysms
- Mycotic aneurysms
- Dissection

**WINDOWs: French Trial**
- f/b EVAR
  - 268 pts total
  - 42 pts. (TAAA I, II, III)
  - 30 day mortality 11.9%
  - In-hosp mortality 21.4%
  - CMSC 31%
  - "new strategies should be investigated to improve outcomes"

**Multibranched Endografts: TAAA**
- Paraparesis/Paraplegia 21%
- Reintervention in 40%
  (21 months)
- All-cause mortality 52%
  (48 months)

**UT Houston Experience**
- 1991-2014
- 1896 TAA & TAAA repairs
- Paraparesis/Paraplegia 5%
- Reintervention in <5%
  (21 months)
- All-cause mortality 22%
  (48 months)

**The Cost**
- 268 cases – WINDOW
- 1678 Open Controls
- €38,212 Endo vs.
- €16,497 Open *
- "f/b EVAR does not appear justified…"

**Adjunct**
- 1. Distal Aortic Pressure
- 2. CSF Pressure
- 3. Moderate Hypothermia 32-34°C
Risk of Neurologic Deficit

Risk Stratification: Mortality

DTAA&TAAA: Normal eGFR

- All Extents: 5%
- Non II and III: 3%

Long-term Survival

Late Survival: eGFR

Conclusions

- Open Repair Better:
  - Lower rates of paraplegia
  - Lower cost
  - Lower reintervention rates
  - Lower mortality rate
“#1 Fan”

Thank You

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