Update on Total Endovascular Arch Repair With Branched Endografts

Stéphan Haulon,
D. Fabre, S. Mussot, O. Mercier, D. Mitilian, E. Fadel
Centre de l’Aorte, Hôpital Marie Lannelongue,
Université Paris Sud, France

Disclosures

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  - Cook Medical, GE Healthcare,
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Early neurologic events:
2 major and one minor strokes (11%)
Inner Branched Arch Endografts following Ascending Open Repair

- 70 patients
- 100% prior acute Type A Open Repair
- In-hospital combined mortality and stroke rate was 4% (n=3)
  - one minor stroke, one major stroke causing death, and one death following multi-organ failure.
- Technical success rate was 97%

Reduce Stroke Risk

Risk Factors for Stroke

- Predictors:
  - LSCA/Zone 2 coverage
  - History of prior stroke
    (OR 9.4, p < 0.002)
  - Extensive arch atheroma
    (OR 14.8, p < 0.0001)
- Stroke was associated with 33% in-hospital mortality


Embolic Protection
Sheath in the RCC

Reduce Stroke Risk

- Aggressive anticoagulation
- 100 UI/kg
- Monitoring ACT>300s

Endograft Delivery System through the Arch

Inserting Bridging Stent

- Direct route from RCC & LCC
- Clamp RCC & LCC
- Fusion mask
PROXIMAL SEAL - No Compromise!

- Prox neck length > 25mm
- Asc Aorta diam < 38mm

Previous Ascending Repair

Inner Branched Arch Endografts following Ascending Open Repair

- 70 patients, prior acute Type A Open Repair
- Median follow up: 301 (IR, 138 - 642) days
- 20 (29%) patients underwent secondary interventions:
  - 9 for endoleak correction
  - 10 distal extensions to the thoracic or thoracoabdominal aorta

Distal Seal in Chronic Dissections?

- Perfusion and pressure unchanged in false lumen
- Presence of Intercostals originating from false lumen
- False lumen back flow to Intercostals

Courtesy Tilo Kölbl

CANDY PLUG IN FALSE LUMEN
Dissection of the SAT
Conclusions

- Patient selection
- No compromise landing zones
- Staged procedures