EVAR for ruptured TAAA

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Disclosures

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I have the following potential conflicts of interest to report:

X Consulting: Boston Scientific, Cook, Cordis, Gore, Medtronic

Employment in industry

Stockholder of a healthcare company

Owner of a healthcare company

Other(s)
Acute TAAA represents a great challenge!

- Open repair is associated with significant mortality and morbidity
- A remarkable proportion of patients is judged unfit and turned down for open repair
- In the endovascular era many surgeons are not familiar with suprarenal and subdiaphragmatic aortic clamping
Endovascular options for treatment of urgent and emergent TAAA

- CMD graft preordered for an other patient
- Surgeon-modified fenestrated stent-grafts
- T-branch
- Parallel-graft techniques
Endovascular treatment of ruptured AAAs is more challenging than in elective cases

- Aneurysms are larger
- Likely to present with adverse anatomy (angulated aorta and target vessels)
- Off-the-shelf devices do not perfectly match the anatomy of the patient
Important difference between urgent and emergent

- **URGENT**
  - Impending Rupture
  - OTS
  - BEVAR

- **EMERGENT**
  - Rupture
  - CHEVAR
  - CHEVAR
Why is the parallel graft technique the first choice in emergent patients?

• Limited time for planning
• No availability of fenestrated/branched grafts
• No availability of operators with F/BEVAR experience
• Demanding iliac access frequent
Ruptured Type IV TAAA
Ruptured TAAA treated with parallel grafts
Ruptured TAAA after CHEVAS
Demanding cannulation of the renal artery
Aortic endograft consists of two stentgrafts
Ruptured TAAA after CHEVAS Repair with parallel graft technique and Onyx
Ruptured TAAA treated with branched Endograft designed for another patient.
For the left renal the branch of the CT was used and the branch for the left renal was occluded.
• Rupture close to LRA
• Open surgical therapy
• LRA re-implanted from aortic graft
CTA after open repair of ruptured TAAA

Lost of RRA

Celiac Trunk

SMA

RRA

Anastomosis

LRA (through branch graft)

Creates a narrow upright angle
Re-rupture site
Urgent Endovascular Treatment was performed
Post t-Branch
Conclusion I

• Endovascular techniques offer a lower risk alternative for the management of r-TAAAs

• They are good OTS technical solutions applicable in centers with acceptable AAA volume

• In hemodynamically unstable cases parallel graft techniques are good alternative to other procedures
Conclusion II

• In urgent but stable cases branched endografts and physician modified grafts are good alternative

• Long-term durability, including preservation of graft fixation, seal, and branch vessel patency remain to be determined.
Thank you!

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