With acute or ruptured TAAAs an Off–The-Shelf (OTS) endograft is a solution for one-third of patients but for two-third of patients open repair is the best treatment.

Roberto Chiesa
Vascular Surgery, Università “Vita-Salute”
San Raffaele Scientific Institute, Milano – Italy

With acute or ruptured TAAAs an Off–The-Shelf (OTS) endograft is a solution for one-third of patients but for two-third of patients open repair is the best treatment.

Disclosure statement
- PI/Co-PI for several thoracic and abdominal aortic stent graft trials (Cook, Inc, Cordis® Corporation, Bolton Medical)
- Proctor and participated as a lecturer at symposia hosted by Cook, Inc., Bolton, W.L. Gore and Associates, Jotec and Medtronic, Inc.

Case #1
- M, 77 yo
- Severe cardiac dysfunction
- Two previous open surgical repair for AAA
- Extent IV TAAA with contained rupture

rTAAA Endo Repair
- Emergency treatment with Cook Zenith t-Branch
- Technical success
- Paraplegia in 7° p.o day.

OSR experience
Ruptured TAAA: Endovascular
9 cases - Performed only in stable patients

30-day results
Mortality 11% (1/9)
SCI 22% (2/9)
rTAAA Endo repair with OTS

**Limitations**

- Hemodynamic instability
- Unsuitable accesses
- Target vessel diameter (<4mm)
- Aortic Lumen diameter (<25mm)
- Unsuitable target vessels orientation
- Extreme aortic tortuosity

OTS devices in acute settings

“Only one-third of these pts were suitable for the T-branch device”

For two-third of patients in acute setting:

Open repair!

rTAAA open repair is not a second choice!

To be preferred in:

- Unstable pts / Frank rupture
- Young pts
- Connective Tissue Disease
- Suspected infection
- Dissected / Giant rTAAA

TAAA Open Repair

Multimodal approach with the use of adjuncts

But in a truly Emergency setting ...
Back to simple Clamp & Go!

Aortic reconstruction

Contained rTAAA management in Experienced Center

- Adjuncts also in emergency settings!
  - Cardiac anesthesiologist
  - CV perfusionist
  - Neurophysiologist

Thanks to 24/7 availability of:

- MEP
- SEEP
- CSFD
- LHP

Case #2

Giant Extent II TAAA with contained rupture

Patient with abdominal pain and shock

Case #2

17 cm TAAA with abdominal contained rupture

Emergency treatment

Case #2

Surgical open repair with toraco-phreno-laparotomy
Conclusions - rTAAA

- Threatening condition
- Endovascular approach limited by several issues but represent a valuable alternative
- Open surgical repair is feasible but presents not negligible risks and high mortality rate