DISCLOSURE

- Nothing to disclose with current speech

ISSUES FOR COS VS EVAR IN EMERGENT RAAA TREATMENT

- Feasibility
- Short-term outcomes
- Long-term outcomes

FEASIBILITY

Short-term outcomes outcomes

FEASIBILITY @ USZ

Long-term survival after EVAR for RAAA is better than after open repair: What factors are predictive

Feasibility

Feasibility

Long-term survival after EVAR for RAAA is better than after open repair: What factors are predictive

FIG. Change in the use of open versus repair (ROR) and endovascular aneurysm repair (EVAR) in the treatment of ruptured abdominal aortic aneurysm (AAA) over the study time period

Short-term outcomes outcomes
Long-Term Survival After EVAR for RAAAs is Better Than After Open Repair: What Factors Are Predictive

**SHORT-TERM OUTCOMES**

COS EVAR

30d Mortality

30/148 (20%) 41/242 (17%)  

**LONG-TERM OUTCOMES**

Methods

Retrospective analysis rAAA treated by eEVAR

Period 1997-2018

242 patients

To identify factors for EVAR long term survival

Age

Gender

RFI

Hb level (<9g/dl)

AAA size

Blood loss (>3000 mL)

Hemodynamic instability

Post-operative complications

- Myocardial infarction
- Respiratory failure
- Renal failure
- Brain infarction
- Bowel ischemia

EVAR LONG-TERM OUTCOMES

COS LONG-TERM OUTCOMES

PRINCIPLES OF MINIMALLY INVASIVE AORTIC ANEURYSM REPAIR

Methods

Retrospective analysis rAAA treated by eEVAR

Period 1997-2018

242 patients

To identify factors for EVAR long term survival
Long-Term Survival After EVAR for RAAAs Is Better Than After Open Repair: What Factors Are Predictive?

Patients at Risk

Chi-square = 1.08
Logrank (p-value .300)

Patients at Risk

Chi-square = .638
Logrank Overall (p-value .727)

Patients at Risk

Chi-square = 10.1
Logrank (p-value .002)

Patients at Risk

Chi-square = 6.1
Logrank (p-value .014)
CONCLUSIONS

- Predictive factors of long-term survival after eCOS are well known
- But similar factors for eEVAR need to be identified

CONCLUSIONS

- Predictive factors of long-term survival after eCOS are well known
- Same factors after eEVAR need to be identified
- @ USZ were identified
  + Shock
  + Reintervention
  + OAT
  as related to a reduced long-term survival

5 MANAGEMENT KEY POINTS @ USZ

- Time
- Imaging
- Devices and techniques
- Abdominal compartment syndrome
- Limits
“NO-TREATMENT” IN RAAA UNFIT PATIENTS (56)

5%/hour mortality rate during first 6 hours after admission!!!!

HYPOTENSIVE HEMOSTASIS

+ Permissive hypovolemia
  - No or little infusions

- Controlled hypotension
  - MAP >50 mmHg
  - SBP > 70mmHg

IMAGING

PREOPERATIVE CTA
- CONFIRM DIAGNOSIS

POST-SURGERY CTA (3 PHASES)

PLAN THE CASE
**REVAR PRS**

- N=10
- PRS time need 52' (SD 12')
- PRS was completed 22' (SD 35') before EVAR started

**DEVICES AND TECHNIQUES**

- Standard endovascular material
- Endoclamp
- Reliant or Expand balloon
- 12 Fr 45 cm long sheath

**ENDOVASCULAR MATERIAL**

- Standard endovascular material
- Reliant or Expand balloon
- 12 Fr 45 cm long sheath

**REVAR IN CHALLENGING NECK**

- Short neck (>5mm)
  - Angulated neck
  - Transrenal device
    (Endurant, Medtronic)

- No neck (<5mm)
  - PG-EVAR

**ACS**

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<th>Author</th>
<th>Year</th>
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LIMITS?

REVAR INAPPROPRIATE I

- Ruptured PRAA requiring suprarenal endoclamping for hemodynamics stabilization should probably be repaired fast-track with open surgery.

REVAR INAPPROPRIATE II

- Patients presenting too many technical challenges (access and/or neck) should probably also be repaired fast-track with open surgery.

THANK YOU FOR YOUR ATTENTION.