Not so: Graft preservation is sometimes best treatment for infected aortic grafts & endografts if certain technical steps and adjuncts are used.

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Infected Aortic Grafts and Endografts
Graft Preservation – Essential adjuncts
• Patent graft
• Intact anastomosis
• IV antibiotics weeks/mos
• Adequately drain infection
  - Groin: operatively (repeated)
  - Intra-cavitary: operatively (repeated) or CT scan-directed catheter

Infected Aortic Grafts and Endografts
Infection Confined to Groin
• No proximal infection based on CT scan and intraoperative findings
• Tunnel new graft lateral to wound
• Excise infected graft in groin
• Graft preservation of remainder of graft

Infected Aortic Endografts
Bad Results Graft Preservation
6 of 9 patients died
• 4 of 5 TEVAR died
• 2 of 4 EVAR died

Infected Aortic Endografts

**Bad Results Graft Preservation**

- 3 of 3 EVARs died  
  *(JVS 2007;46:442-8)*
- 3 of 4 EVARs died  
  *(JVIR 2009;20:173-179)*
- 4 of 4 TEVARs died  
  *(JVS 2013;58:1179-85)*

**Good Results Graft Preservation**

- 11 of 18 patients lived  
  *(J CV Surg 2010;51:33-41. Review of literature)*
- 4 of 6 patients lived  
  *(JVS 2011;54:327-333. Netherlands)*
- 4 of 4 patients lived  
  *(JVS 2013;58:1179. U Penn)*
  All treated with prolonged antibiotics and CT scan-guided catheter drainage

Infected Aortic Grafts

**Good Results Graft Preservation**

- 9 patients treated over 20 years
- 1 amputation
- 1 required graft excision 5 months later
- 7 survived hospitalization and died of other causes during follow-up

What about graft preservation to treat aortic graft - enteric fistulas?

Infected Aortic Grafts

**Secondary Aortic – Enteric Fistulas**

Treated with endovascular stent graft
- Used as “bridging Rx”?
- Persistent or recurrent infection 42-44% of pts who underwent endovascular repair after short-term follow-up
  *(JVS 2009;49:782-9)*
  *(Eur J VEndoS 2016;52:770-786)*

Conclusion # 1

**Good risk patients**

Infection involving intracavitary portion of aortic graft or endograft

Total graft excision and revascularization
Conclusion #2
Poor risk patients
Infection involving intracavitary portion of aortic graft or endograft

*Graft preservation may be successful*
  - prolonged IV antibiotics
  - O.R. or CT-guided catheter drainage
  - Aortic graft – enteric fistulas treated with aortic cuff; half will get infected!