Strategies for managing a patient with a growing AAA sac after EVAR, but no apparent endoleak: open or laparoscopic, Fenestrated cuff or relining or observe?

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Introduction

- Ultimate “failed” EVAR is a rupture
- ? How common:
  - 25 publications – 157 out of 17,769 EVARs (<1%)  
- Before rupture:
  - Endoleak – treated, but continues to expand
  - Endoleak not amenable to endovascular Rx
  - Sac expansion without endoleak

A problem

- Some patients likely to be unfit when implanted
- Now 5-10 years older
- No endoleak – no target?

Disclosures

• None relevant
Introduction

- Problems more common in larger aneurysms
- Endoleak ➤ Sac expansion ➤ Endoleak
- Sac expansion without evidence of endoleak
- Options:
  - Coils
  - Glue
  - Proximal/Fenestrated cuff
  - Distal extension
  - Re-lining
  - EVAS
  - Surgery

Exclude a target to treat

- CT – late phase
- MRA
- Duplex (plus contrast)
- Angiography

Fenestrated cuff

- Flexible design
- Up to 4 fenestrations
- Augmented valley/scallop to accommodate vessels
- Cuff is tapered or flared to suit specific patient anatomy

FEVAR cuff technique
Technical difficulties

• Access
• Rotational limitations
• Short bodied devices
• Angulation

A solution

• Need to extend seal zone proximally
• Seal all endoleaks
• Re-line/onyx/embolise

Evidence

• Convert EVAR to FEVAR and reline
Laparoscopy
- Potentially useful for certain endoleaks
- Requires skill
- Limited role in expanding sac scenario

Surgery
- Last resort?
- Patient group older and less fit
- Mean time to surgery 3-5yrs
- Mean age 81yrs
- Surgical correction vs explant

Evidence

Surgical technique
- Questions
  - Explant or not?
  - Sac opening or not?
  - X clamp or not?
- Approach
  - Subcostal
  - Anterior laparotomy
- Clamp
  - Supra-coeliac
  - Juxta-renal

Surgical technique
- Explant
- Hybrid reconstruction
- Banding the neck
- Endoleak repair
- Graft repair

Graft explant
**Surgical technique**

- Planning from CT essential
- Keep an open mind
- Minimal approach vs “belt and braces”
- Patient specific approach
  - Age and life expectancy
  - Emergency vs elective
  - Previous endoleak treatments

**Partial graft replacement**

**Graft problems**

**Conclusions**

- Uncommon, but increasingly recognised
- Difficult group
- Observation only in the most infirm
- Majority need treatment
- FEVAR cuff +/- full reline
- Surgical exploration
- Results reasonable