THE ROLE OF OPEN SURGERY FOR AAA IN THE ENDOVASCULAR ERA

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Disclosure of Interest

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- I do not have any potential conflict of interest
MODERN AAA REPAIR: Open or EVAR?
EVAR represents the first choice today

When is OPEN REPAIR recommended?

1. Selected cases, in elective AAA repair
2. Challenging cases for EVAR / FEVAR
3. Infections
4. Post-EVAR complications, with no other endovascular options
Selected cases in elective AAA repair

AAA repair: our flow chart today

AAA

High risk
- Favourable Anatomy for EVAR
  - EVAR
    - Conventional surgery Accepting increased surgical risk
- Unfavourable Anatomy for EVAR
  - FEVAR or other endovascular solution

Low risk
- Favourable Anatomy for EVAR
  - EVAR
    - Conventional surgery after evaluation of: age and predisposition to type II endoleaks
- Unfavourable Anatomy for EVAR
  - Conventional surgery
Challenging cases for EVAR
Challenging cases for FEVAR

Exclusion Criteria:

- Severe aorto-iliac occlusive disease, tortuosity or calcification;
- Circumferential thrombus/ateroma in the sealing region;
- Unsuitable artery anatomy
  - Inability to maintain patency of one hypogastric
  - Inadequate (<15mm) main renal artery length
  - Renal stenosis >50%

Not feasible because of:

- Angulation of thoracic descending aorta and abdominal subrenal aorta;
- Median arcuate ligament compression on celiac trunk;
- Diameters and morphology of renal arteries.
Juxta-renal aneurysm
Juxta-renal aneurysm
Para-renal aneurysm

Aortic blister
Horseshoe kidney
Ectopic kidney
Graft or Endograft infections
Graft or Endograft infections
Aorto-enteric fistula
Aorto-enteric fistula
Post-EVAR complications
Endoleak type I: Open conversion
Endoleak type I: Open conversion
Conversion to open repair: Neoneck technique
Early conversion

Aortic rupture caused by endograft’s hooks

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Early conversion
Conclusions

Open repair maintains its role in the treatment of abdominal aneurysms, thanks to its efficacy and long term durability.

- It is the primary choice in young patients.
- It represents the preferential choice in low risk patients with complex aorto-iliac anatomies.
- It is the only solution in infected cases.
- It is the only solution in cases with EVAR complications, otherwise untreatable with other endovascular options.
TAKE-HOME MESSAGE

Surgery in the Past

Low risk patients  Open Surgery

High risk patients  EVAR

Surgery Today

Low and high risk patients  EVAR

Unfit for endovascular  Open Surgery

Surgery in the Future

Low and high risk patients  EVAR

Unfit for endovascular  INOPERABLE

THIS MUST NOT BE OUR DESTINY

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THANK YOU FOR THE ATTENTION