Open vs. Endo Repair For Popliteal Aneurysms. Which Is Best: From A Real World National Italian Registry

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Outcomes of surgical management for popliteal artery aneurysms: An analysis of 583 cases

In conclusion, our data strongly suggest that even in high-risk patients with multiple co-morbidities and dependent functional status, surgical therapy for PAA can be performed with acceptable perioperative morbidity, low operative mortality, and excellent two-year limb salvage.

(2008)

A 33-year experience with surgical management of popliteal artery aneurysms

DISCLOSURES

travel grants from W.L. Gore & Associates Inc

Long-Term Outcome of Endovascular Popliteal Artery Aneurysm Repair

Elusa Ang, Jeffrey Jia, Brian G. Rubin, Laura A. Gauthier, Eric T. Chiu, Gregory A. Brand and Patrick J. Gargiulo, St. Louis, Missouri

CONCLUSION

This study complements the existing literature on long-term outcomes of EVAR. Although the total number of patients is small, the mean follow-up is above 5 years. There were high primary cases and no incidence of limb loss. The need for secondary intervention is low, and each case was successfully managed. This data suggests EVAR is a safe and effective alternative to a surgical repair procedure.

(Ann Vasc Surg, 2010)

Long-term outcomes and intimal volume shrinkage after endovascular popliteal artery aneurysm repair

M. Marco,*, M. Montenegro, A. Forist, S. Bevolo, L. Nieves, F. Frizgat, F. Ospina, M. Pedrol

(2014)

Disclosures

travel grants from W.L. Gore & Associates Inc
A Multicentric Experience with Open Surgical Repair and Endovascular Exclusion of Popliteal Artery Aneurysms

- All the patients had endoprosthesis placement (Hemobahn or Viabahn, W.L. Gore & Associates Inc., Flagstaff, AZ, USA).
- In 82 cases an ipsilateral surgical femoral approach was used, while 39 patients had ipsilateral percutaneous access: in three cases contralateral femoral access was used.
- The outflow vessel was in all but two cases the proximal and middle popliteal artery (P1 in 78 cases and 82 in 54 cases), while in the remaining patients it was the distal popliteal or tibioperoneal trunk.
- The mean number of placed stents was 2 (range 1-7), with a mean length of 200 mm (range 100-350).

Perioperative outcomes

<table>
<thead>
<tr>
<th></th>
<th>OR group</th>
<th>ER group</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>2 (1.5%)</td>
<td>0.58</td>
<td></td>
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<tr>
<td>Thrombosis</td>
<td>6 (3.3%)</td>
<td>13 (9.7%)</td>
<td>0.05</td>
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<tr>
<td>Amputation</td>
<td>3 (1.6%)</td>
<td>1 (0.6%)</td>
<td>0.4</td>
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<tr>
<td>Reintervention</td>
<td>9 (5%)</td>
<td>13 (9.7%)</td>
<td>0.05</td>
</tr>
</tbody>
</table>

(Chir.Vasc. FI, 2013)
Mean duration 29 months (1-124)

Update 2015

Mean duration 45 months (1-180)

Reinterventions OR group ER group
OR for thrombosis 19 10
OR not for thrombosis* 2 -
Thrombolysis and ER 8 14
ER not for thrombosis** - 6

*Anastomotic pseudoaneurysm and aneurismatic distal progression
**Type II endoleaks and distal disease progression

Take home messages...

- In the daily practice OR and ER for PAAs are definitely used in different patients under clinical and anatomical points of view.
- If this tailored approach is done correctly, the results with both procedures are excellent.
- Late survival is better in OR, late limb preservation is better in ER, reflecting the different indications.
- Shall we need a RCT to achieve such obvious results?