REMOTE ENDARTERECTOMY

F.L. Moll
Vascular Surgeon
Remote Endarterectomy Advantages Thesis

- Minimally invasive
- Short hospital stay
- Comparable patency data
- Preserves bypass options
- Failures do not compromise distal vessels
Technique
Technique
Technique
Technique
The SFA is Unique

Knee Extension

Knee Flexion
A unique blood vessel may be treated best with a unique stent.
- Stents in the SFA, spirals are preferred -

- precise delivery control
- possibility to preserve important collaterals
- match with SFA flow profiles
- prepared for physical conditions
- such as kink and crush resistant (flex areas)
Technique
Remote superficial femoral artery endarterectomy and distal aSpire stenting: results of a multinational study at three-year follow-up

D. Rosenthal 1, J.D. Martin 2, L. Smeets 3, J.P. de Vries 4, S. Gisbertz 4, F. Moll 3

Table 1.—Cumulative primary patency rates for RSEAP procedures.

<table>
<thead>
<tr>
<th>Interval (months)</th>
<th>No. of grafts at risk</th>
<th>No. of grafts failed</th>
<th>Lost follow-up</th>
<th>Total withdrawn</th>
<th>Interval patency (%)</th>
<th>Cumulative patency rate (%)</th>
<th>SE</th>
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<tr>
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<td>210</td>
<td>7</td>
<td>15</td>
<td>22</td>
<td>96.6</td>
<td>100</td>
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<td>7</td>
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<td>1.4</td>
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<td>95.7</td>
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<td>96.2</td>
<td>75.5</td>
<td>2.9</td>
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<td>100</td>
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<td>6</td>
<td>99</td>
<td>60.6</td>
<td>4.8</td>
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Cumulative primary and primary-assisted patency after RSFAE.
Endovascular treatment of long lesions of the superficial femoral artery: Results from a multicenter registry of a spiral, covered polytetrafluoroethylene stent

Massimo Lenti, MD, a Enrico Cieri, MD, a Paola De Rango, MD, a Pietro Pozzilli, MD, a Carlo Coscarella, MD, a Carlo Bertoglio, MD, b Roberto Troiani, MD, c and Piergiorgio Cao, MD, FRCS, a Perugia, Imperia, and Carrara, Italy

Conclusion: Endovascular treatment of SFA occlusive lesions provides interesting results. Length of lesion and clinical symptoms influence negatively the patency. The aSpire covered stent showed good mid-term results, but a number of reinterventions were necessary to obtain an optimal secondary patency. Risk of patency failure was related to critical limb ischemia as an indication for the procedure. Technologic and pharmacologic improvement and longer follow-up are needed to define the indications for the aSpire stent.
**Secondary Patency**

- **Claudication**: 73.9%
- **CLI**: 58.2%

**P = 0.01**

**Table:**

<table>
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<th></th>
<th>months</th>
<th>0</th>
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<th>12</th>
<th>18</th>
<th>24</th>
<th>30</th>
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<td>n°</td>
<td>92</td>
<td>74</td>
<td>61</td>
<td>34</td>
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<td></td>
<td>patency%</td>
<td>100</td>
<td>90.2</td>
<td>83.1</td>
<td>81</td>
<td>73.9</td>
<td>73.9</td>
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<tr>
<td><strong>CLI</strong></td>
<td>n°</td>
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<td>57</td>
<td>40</td>
<td>18</td>
<td>11</td>
<td>1</td>
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<tr>
<td></td>
<td>patency%</td>
<td>100</td>
<td>75.4</td>
<td>63.3</td>
<td>63.3</td>
<td>58.2</td>
<td>58.2</td>
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</tbody>
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Short-term Results of
Remote Endarterectomy
versus
Bypass Surgery for Long Occlusions of the SFA
A randomized trial

J.P.P.M de Vries, S.S. Gisbertz, R. Tutein Nolthenius, F.L. Moll
Nieuwegein, The Netherlands
Introduction

- Chronic long (>20cm) occlusions of the SFA
- Above knee bypass
  - 5 yrs patency rate of prosthetic grafts 37 – 50%
  - “ “ “ “ “ “ venous grafts 70 – 76%
- Remote Endarterectomy
  - 3 yrs. patency rate 40 – 60%
Introduction

- A randomized trial comparing remote endarterectomy and above knee bypass surgery is lacking
Study protocol

- Randomized, multi-centre
- Long occlusions (>20 cm) of the SFA
- Chronic (>6 months) disabling complaints
- SFA diameter > 4 mm
- No previous PTA / surgery of the target SFA
- Bypass: venous, if available
- Signed informed consent
Follow-up (prim. patency)

Cumulative prim. patency (%) vs Time (weeks)

- RSFAE
- PTFE
- Venous

P = 0.64
Follow-up (sec. patency)

![Graph showing cumulative secondary patency over time for different materials: RSFAE, PTFE, Venous. The graph indicates a comparison with a p-value of 0.056.](image)

- **RSFAE**
- **PTFE**
- **Venous**

The graph shows the cumulative secondary patency (%) over time (weeks) from 0 to 30 weeks, with the X-axis representing time in weeks and the Y-axis showing cumulative secondary patency in percentage. The line representing PTFE shows a decline in patency from 100% to approximately 40% over 30 weeks, while the RSFAE and Venous lines remain relatively stable. A p-value of 0.056 suggests a statistically significant difference between the materials.
Remote endarterectomy

Advantages

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- Short hospital stay
- Comparable patency data
- Preserves bypass options
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Remote endarterectomy

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Remote endarterectomy
How to improve patency

Prescribe
Aspirin 100 mg
Clopidogrel 75 mg
Statin 20-40 mg

Control
Diab. Mell.
Hypertension
Obesitas
Smoking

operation

Universitair Medisch Centrum Utrecht
Conclusion

The latest results of remote endarterectomy of occluded femoro popliteal arteries are comparable to AK non-venous bypass surgery
Conclusion

If endarterectomized femoro popliteal arteries reocclude the clinical symptoms are usually mild
Conclusion

The results of femoro popliteal remote endarterectomy are likely to improve due to better pharmacological and molecular strategies.