Percutaneous Transvenous Prosthetic Arterial Bypass for Long Complicated Fem-Pop Occlusions: the PQ Bypass Procedure: Concept and Technique for Performing

A. Schmidt, MD
Clinic for Angiology
University Hospital Leipzig
Germany

Percutaneous Endovascular Femoro-Popliteal Bypass
The “DETOUR” Procedure
- Fully-percutaneous stent graft bypass
- Originates in SFA, travels through the femoral vein, ends in popliteal artery
- Designed for long, complex lesions

Potential conflicts of interest
Speaker’s name: Andrej Schmidt
✓ I have the following potential conflicts of interest to report:
Consulting:
Abbott, Boston Scientific, Cook, Cordis, C.R.Bard, Intactvascular, ReFlow Medical, Upstream Peripheral

Proof of Concept
El Camino Hospital (ECH) 2003/13
(James D. Joyce, DO)
- 21 Patients / 25 Limbs with long, complex lesions
- utilizing off-the-shelf devices

Lesion Characteristics
<table>
<thead>
<tr>
<th>Lesion Characteristics</th>
<th>21 ± 4.4</th>
<th>88.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASC D</td>
<td>42.9%</td>
<td></td>
</tr>
<tr>
<td>Rutherford 5 - Tissue loss</td>
<td>28.6%</td>
<td></td>
</tr>
</tbody>
</table>

Primary patency @ 1 year: 82%
Secondary patency @ 4 years: 91%
No objective venous morbidity

PQ Bypass DETOUR™ System
Designed Specifically for DETOUR Procedure
Proprietary Stent Graft and Bypass Kit

Torus™ Stent Graft
- 2 mm elongated exposed proximal rings designed to reduce edge stenosis
- Designed with increased radial force and resistant to compression at anastomoses
- Variable radial force at proximal and distal ends designed to gently conform to native vessel wall

DETOUR Bypass Kit
Simplify Guidewire Placement
- DETOUR Snares
- DETOUR Crossing Device

Initial Angiography
Access, arterial, venous

Ultrasound-guided puncture of a posterior tibial vein

Nitinol-Basket for GW-snaring

Vein Passage to distal reentry-point
10mm femoral vein

6-8mm duplicate veins

15 months FU