Access for Large Devices

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Disclosures
- Jeffrey P. Carpenter, MD
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Access Requirements

<table>
<thead>
<tr>
<th>Endograft</th>
<th>Graft size available (diameter)</th>
<th>Sheath size required (diameter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GORE TAG</td>
<td>26-40 mm</td>
<td>20-24 Fr (7.6-9.2 mm)</td>
</tr>
<tr>
<td>Zenith TX1/TX2</td>
<td>28-42 mm</td>
<td>20-22 Fr (7.6-8.3 mm)</td>
</tr>
<tr>
<td>TALENT</td>
<td>22-46 mm</td>
<td>22-25 Fr</td>
</tr>
</tbody>
</table>

“Iliac on a stick”

- Inadequate femoral access in 1/3 of TEVAR candidates

Disqualification from TEVAR

- 126 patients (73 men, 53 women) screened for TAA EVAR
- 33 patients (26%) were rejected for anatomic reasons

<table>
<thead>
<tr>
<th>Rejection Reason</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short proximal neck</td>
<td>16</td>
</tr>
<tr>
<td>Short distal neck</td>
<td>7</td>
</tr>
<tr>
<td>Large proximal neck</td>
<td>10</td>
</tr>
<tr>
<td>Large distal neck</td>
<td>5</td>
</tr>
<tr>
<td>Neck diameter too small</td>
<td>3</td>
</tr>
<tr>
<td>Neck calcification</td>
<td>2</td>
</tr>
<tr>
<td>Neck angulation excessive</td>
<td>2</td>
</tr>
<tr>
<td>Distal neck taper</td>
<td>1</td>
</tr>
</tbody>
</table>

Preoperative Imaging

- CTA

Preoperative Imaging

• CTA
• MRA
• Rare need for CA

“Brachial artery catheterization to facilitate endovascular grafting of AAA: Safety and rationale”
Carpenter et al., J Vasc Surg 2000;32:1137-41

“Body Floss”

Dilators

ENDOVASCULAR DILATOR SET
Used for fascial tissue tract and vessel dilation prior to catheter introduction.
• The AQ® hydrophilic coating, greatly reduces the coefficient of friction, facilitates dilator introduction and reduces access trauma.
• The long distal Coons taper, combined with the rigidity of the dilator shaft, facilitates effective dilation.

Supplied sterile in peel-open packages. Intended for one-time use. 20FR.24FR.

Balloon Angioplasty

• Avoid stents
• Perform several weeks prior to TAA repair
• Anti-platelet Rx
• “Touch-up” at time of TAA procedure
• Stent your way out

Retrograde Balloon Endarterectomy (Queral et al.)

Retrograde Balloon Endarterectomy (Queral et al.)
Conduits: Open Surgical

- Work through the conduit
- Double tourniquets for hemostasis

Conduits: Endoluminal

- Stent graft into diseased segment
- Aggressive PTA

Balloon Expandable Sheath

Advanced Sheath Design with Unique Enabling Capabilities

- Access to Difficult or Remote Sites of the Body With Low Profile Catheter Entry
- Expandable Sheath Accepts Larger Diameter Devices
- Collapses for Ease of Removal

Direct Sheath Placement

Left or right retroperitoneal approach

Direct Sheath Placement

- Iliac or aortic exposure/puncture
- Choose healthiest vessel segment
- 4-0 Tycron for native vessels (adventitia only)
- 2-0 Prolene for grafts
- Tourniquets on opposite sides


Direct Sheath Placement

- Secure both tourniquets
- Tie inner pursestring first
- Pledgets for patches