Tips and tricks for endovascular treatment for Pararrenal / Thoracoabdominal Aortic Aneurysm

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Financial Disclosures
The authors have no financial disclosures related to this presentation

Techniques Guidelines
Chimney Graft (ChG) vs Sandwich Graft (SG)
They work very well, however they are NOT a miracle
- ChG: Juxtarenal and Pararenal Aortic Aneurysms
- SG: Thoracoabdominal Aortic Aneurysms

✓ You should follow some rules:
- One ChG: needs a heath neck of 1.5cm in length.
- Two ChG: need a health neck of 2.0cm in length.
- Three ChG: need a health neck of 2.5cm in length.
- Four ChG: it is NOT advisable (3 ChG and 1 SG)
  - Proceed to one renal with Sandwich Periscope.

✓ You should follow some rules:
- One Chimney: 20% Endograft oversizing.
- Two and three Chimneys: 30% Endograft oversizing
- Four Chimneys: it is NOT advisable.
  - Proceed to one renal with Sandwich Periscope.

✓ You should follow some rules:
- First: Endograft deployment.
- Second: Latex balloon accommodation.
- Third: Covered stent deployment (if you have used a self-expandable one).
- Fourth: Bare-metal self-expandable stent deployment inside of the covered stent (if you have used a self-expandable one).
You should follow some rules:

- Covered Stents (CS): Options in Size and Length
- 1mm bigger than the Target Vessel (self-expandable)
- 2cm inside the Target Vessel
- Overall w/ 50mm in length
- The CS proximal end above the celiac axis is advisable
<table>
<thead>
<tr>
<th>Aneurysm Type</th>
<th>Tech. Success per vessel (%)</th>
<th>30-day Neo.</th>
<th>Mortal (%)</th>
<th>IntraOp. Endoleak (%)</th>
<th>Persistent Endoleak (%)</th>
<th>Mortality (%)</th>
<th>SCI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAAA I</td>
<td>22/24 (91.7)</td>
<td>0/0</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
</tr>
<tr>
<td>TAAA II</td>
<td>16/18 (88.9)</td>
<td>1/5 (20)</td>
<td>1/5 (20.0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
</tr>
<tr>
<td>TAAA III</td>
<td>22/22 (92.7)</td>
<td>0/0</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
</tr>
<tr>
<td>TAAA IV</td>
<td>58/62 (93.7)</td>
<td>3/6 (50.0)</td>
<td>3/6 (50.0)</td>
<td>3/6 (50.0)</td>
<td>3/6 (50.0)</td>
<td>3/6 (50.0)</td>
<td>3/6 (50.0)</td>
</tr>
<tr>
<td>TAAA V</td>
<td>25/25 (100)</td>
<td>0/0</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
</tr>
<tr>
<td>Total</td>
<td>227/242 (94.3)</td>
<td>6/78 (7.7)</td>
<td>12/78 (15.4)</td>
<td>7/78 (9.0)</td>
<td>13/78 (16.7)</td>
<td>0/0 (0)</td>
<td>0/0 (0)</td>
</tr>
</tbody>
</table>

**Aneurysm Type**

- **TAAA I**: Total Aortic Abdominal Aneurysm I
- **TAAA II**: Total Aortic Abdominal Aneurysm II
- **TAAA III**: Total Aortic Abdominal Aneurysm III
- **TAAA IV**: Total Aortic Abdominal Aneurysm IV
- **TAAA V**: Total Aortic Abdominal Aneurysm V
- **Juxtarenal**: Juxtarenal Aneurysm

**Tech. Success per vessel (%)**

- The success rate of the technical procedure per vessel

**30-day Neo. Mortal (%)**

- Mortality within 30 days

**IntraOp. Endoleak (%)**

- Endoleak detected during the operation

**Persistent Endoleak (%)**

- Endoleak persisting post-operation

**Mortality (%)**

- Mortality post-operation

**SCI (%)**

- Spinal Cord Injury