Endovascular Treatment of Ruptured Thoracoabdominal Aneurysms

G. Torsello

Department of Vascular Surgery,
St. Franziskus Hospital and University Hospital Münster, Germany
Disclosure

Speaker name:

.........G. Torsello.................................................................

I have the following potential conflicts of interest to report:

☐ Consulting

☐ Employment in industry

☐ Stockholder of a healthcare company

☐ Owner of a healthcare company

☐ Other(s)

I do not have any potential conflict of interest
Ruptured TAAA

- Incidence: 5 per 100,000
- 41% alive on arrival at the hospital
- Up to 60% operative mortality
- 40% survival at 1 year

Ruptured TAAA treated with branched Endograft designed for an other patient
For the left renal the branch of the CT was used and the branch for the left renal was occluded
Final result after treatment of the ruptured TAAA with a CMD designed for another patient
CTA after treatment of the ruptured TAAA with a CMD designed for another patient
T-branch as off-the-shelf endograft
Ruptured TAAA after TEVAR for dissection
CTA after repair with T-Branch
Ruptured TAAA
Sandwich technique in TAAAs
Ruptured TAAA
Ruptured TAAA

Vascular surgery- SFH Münster
Ruptured TAAA after CHEVAS

- Too long stent for the right renal artery
- Aortic endograft consists of two stentgrafts
Ruptured TAAA after CHEVAS Repair with parallel graft technique and Onyx
Combination of t-branch and CHIPS
Ruptured and symptomatic TAAA 2009-2017

<table>
<thead>
<tr>
<th></th>
<th>Endovascular</th>
<th>Open/ Hybrid</th>
<th>Death before without treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contained rupture</td>
<td>22</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td>Symptomatic</td>
<td>30</td>
<td>17</td>
<td>NA</td>
</tr>
<tr>
<td>Total urgent</td>
<td>52</td>
<td>17</td>
<td>2</td>
</tr>
</tbody>
</table>
Mortality of ruptured and symptomatic TAAA treated by endovascular means

<table>
<thead>
<tr>
<th></th>
<th>30-day mortality</th>
<th>Mortality during follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contained rupture</td>
<td>4/22 (18.2%)</td>
<td>3/18 (16.7%)</td>
</tr>
<tr>
<td>Symptomatic</td>
<td>2/30 (6.7%)</td>
<td>4/28 (14.3%)</td>
</tr>
<tr>
<td>Total urgent</td>
<td>6/52 (11.5%)</td>
<td>7/46 (15.2%)</td>
</tr>
</tbody>
</table>
Conclusions

• Both parallel and branched techniques offer a lower risk alternative for the management of rTAAAs

• Main parameters affecting selection criteria are the anatomical characteristics of the access and target vessels, applicability and availability of grafts.

• Long-term durability, including preservation of graft fixation, seal, and branch vessel patency remain to be determined.
Thank you!

Universitätsklinik Münster

St. Franziskushospital Münster
What technique for ruptured TAAA?

Decision factors

• Availability of and experience with branched grafts (technique and planning)

• Operators preference and experience

• Technical skills approaching renal and visceral arteries
Endovascular Treatment of Ruptured Thoracoabdominal Aneurysms

G. Torsello

Department of Vascular Surgery,
St. Franziskus Hospital and University Hospital Münster, Germany