Endovascular treatment of complex thoracic dissection

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Disclosure

Speaker name:
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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
Endovascular Treatment
Complex thoracic dissection

A. Morphological and anatomical criteria.
   - Pattern of aortic dissection.
   - Number of affected vascular segments.
   - Proximal and distal extension.

B. Complicated dissection.
   - Impending rupture.
   - Rupture.
   - Malperfusion syndrome.
   - Pressurized false lumen.

C. Etiology.
   - Marfan syndrome
## Endovascular treatment
### Complex thoracic dissections

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N: 70</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malperfusion syndrome</td>
<td>17</td>
<td>24.3</td>
</tr>
<tr>
<td>Rupture/Impending rupture</td>
<td>29</td>
<td>41.4</td>
</tr>
<tr>
<td>Proximal extension</td>
<td>6</td>
<td>8.7</td>
</tr>
<tr>
<td>Distal extension</td>
<td>5</td>
<td>7.1</td>
</tr>
<tr>
<td>Marfan syndrome</td>
<td>13</td>
<td>18.6</td>
</tr>
<tr>
<td>≥ 2 vascular segments</td>
<td>19</td>
<td>27.1</td>
</tr>
</tbody>
</table>
In-Hospital outcomes

MACE: Major adverse cardiovascular events. SC: Spinal cord
Endovascular treatment
Complex thoracic dissection

Additional procedures (%)

- EVT: 10%
- Hybrid treatment: 5.7%
Complex thoracic dissection

<table>
<thead>
<tr>
<th>Additional procedures</th>
<th>Patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proximal extension</strong></td>
<td></td>
</tr>
<tr>
<td>Double stenting (BT &amp; LCCA)</td>
<td>4.2</td>
</tr>
<tr>
<td>Single stenting (LCCA)</td>
<td></td>
</tr>
<tr>
<td><strong>Distal extension</strong></td>
<td></td>
</tr>
<tr>
<td>Renal artery stenting</td>
<td>5.7</td>
</tr>
<tr>
<td>Iliac artery stenting</td>
<td></td>
</tr>
<tr>
<td>Distal aorta-BMS &amp; SMA stenting</td>
<td></td>
</tr>
<tr>
<td>Distal aorta-Stent-graft</td>
<td></td>
</tr>
<tr>
<td>SMA stenting</td>
<td></td>
</tr>
<tr>
<td><strong>Hybrid treatment (debranching &amp; stent-graft)</strong></td>
<td></td>
</tr>
<tr>
<td>Supra-aortic vessels</td>
<td>2.8</td>
</tr>
<tr>
<td>Distal aorta (CA &amp; SMA &amp;RA)</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15.7</td>
</tr>
</tbody>
</table>
Complex thoracic dissection-1
Complex thoracic dissection-I
Complex thoracic dissection-I
Complex thoracic dissection-II
Complex thoracic dissection-II
Complex thoracic dissection-II
Complex thoracic dissection

Survival freedom from re-intervention

77.6%
Complex thoracic dissection

Long-term Survival (10 y)

89%
Conclusions

1. Endovascular treatment in complex type B dissection is feasible and safe.
2. Early outcomes: In-hospital mortality of 7.1%, and neurological complications rates of 5.7%.
3. Long-term survival in this group of patients was 89% estimated at 10 y.
4. The benefit of TEVAR in our study were durable and sustained.
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Danke........  (Gracias........)