With complicated TBADs, Are The Hard Indications For Treatment (Rupture And Malperfusion) Associated With Higher Mortality And Morbidity Than The Soft Indications (Pain And Persistent Hypertension)

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Financial Disclosure Slide

- Consultancy fees, Speakers bureau, Research funding
  - Medtronic
  - Endologix

Malperfusion / rupture
Persisting pain / hypertension

Medical Management of TBAD with Pain and Hypertension

- Presence of refractory pain / hypertension increases risk of mortality OR 3.3
- Clinical practice – treat these patients within 3-4d of dissection

Early TEVR and Complications (RTAD)

- 38 reports: 9594 patients
  - TAA: 1.1% [TAT 0%]
  - Acute dissection 8.4%
  - Chronic dissection 3%
  - OR (relative TAA): 7.8 AAD / 2.7 CAD

Presentation of cATBD and Outcome

- Epidemiology of presentation – hard indications (rupture / malperfusion) vs. soft indications (pain / hypertension)
  - Influence of presentation on timing of surgery
  - Effect of type of presentation on operative mortality
MOTHER Database of TEVAR

- > 1000 TEVAR
- Medtronic trials plus institutional database
- Prospective event adjudication
- 172 acute dissections TEVAR

Patient Cohort – Acute TBAD

<table>
<thead>
<tr>
<th>Clinical feature</th>
<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td>Pain</td>
<td>123 (71.1%)</td>
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<tr>
<td>Uncontrolled BP</td>
<td>47 (27.5%)</td>
</tr>
<tr>
<td>Malperfusion</td>
<td>79 (45.6%)</td>
</tr>
<tr>
<td>Rupture</td>
<td>25 (14.5%)</td>
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</tbody>
</table>

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<tr>
<td>&quot;Hard&quot; indication</td>
<td>100 (61%)</td>
</tr>
<tr>
<td>&quot;Soft&quot; indication</td>
<td>64 (39%)</td>
</tr>
</tbody>
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Overall 35% of cases requiring TEVAR were secondary complicated

Patient Cohort – Acute TBAD

Presentation, Timing and Early Outcome

- Mortality hard indication – 12%
- Mortality soft indication – 7.9%

Presentation, Timing and Late Outcome

- 30d mortality similar for hard and softer indications aTBAD
- Timing of surgery does not appear to influence mortality
- Patients operated for 2nd complications have poorer long term prognosis
- Important to identify factors that predict early progression of TBAD and intervene early