TEVAR Can Be Performed Safely Soon After Symptom Onset With TBADs Under Certain Conditions

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INSTEAD XL: Key Results

Cumulative Clinical Results: Year 0 through Year 5

Uncomplicated TBAD Treatment

- CONCEPT
  - TEVAR to expand and repressurizes TL
    - Induces FL thrombosis
    - Prevents aneurysmal degeneration

Timing of Treatment for Uncomplicated TBAD

- Acute ≤14 days
- SubAcute 15 days-3 months
- Chronic>3 months

- Acute: Flap most mobile and malleable
  - Pressurization and Expansion of TL has highest chance of success
- Subacute-Chronic: Flap becomes rigid and immobile
  - TL and FL pressures and volumes fixed

Disclosures

- None
Why Wait-?

Complications

- Mortality
- SCI
- Stroke
- MI
- Retrograde Type A

Theory of increased complications in the Acute Period is Flawed

Our Experience

- 25 patients underwent TEVAR for acute uTBAD.
- Mean time to intervention was 5.9 days.
- Mean maximal aortic diameter was 41.9mm
  - Mean maximal false lumen diameter of 19.9mm in the upper thoracic aorta
  - Mean minimal true lumen diameter of 16.2mm
- No 30-day aneurysm related or all-cause mortalities
- No cases of spinal cord ischemia
- One patient (4%) developed a stroke that was recovered on third month follow up
- No MI
- No Retrograde Type A dissections
- Mean post-operative follow up was 11.3 months
Avoiding risks of early treatment

• Minimal oversize
• Avoid ballooning the proximal landing zone
• Minimal manipulation of the arch
• SCI protection: revascularize LSA, spinal drain, neuromonitoring

Conclusion

• TEVAR appropriate for selective patients in uncomplicated TBAD
  – Treatment in the acute period is indicated