Strategies and Devices for Eliminating False Lumen Flows for TBAD and When Are They Needed

Eric E. Roselli, MD

Disclosures
Apica Consultant
Bolton Consultant, Investigator
Cook Speaker, Investigator
Direct Flow Consultant, Investigator
Edwards Consultant, Investigator
Lombard Consultant
Medtronic Consultant, Investigator
Sorin Consultant, Investigator
St Jude Speaker, Investigator
Vascutek Speaker, Investigator

Why are false lumen strategies needed?
• To Prevent Rupture

Thromboexclusion is Inconsistent ~65-75%

Composite Device
STABLE Trial
• N = 86
• Mortality
  -4.7% 30d
  -11.7% 1yr
  -15.3% 2yr
• Aortic Growth
  -20% 1yr
  -26% 2yr

Failed Thromboexclusion

When are false lumen strategies needed?
• Chronic Dissection
• Acceptable Proximal Landing Zone
• TEVAR for True Lumen entry tear coverage optimized in the Descending (i.e. extended to celiac)
• Large (>5.5cm), Expanding (failed remodeling), or Ruptured FL Aneurysm
• Endo options if Distal descending < 5cm
How to address the false lumen: Strategies and devices

False Lumen Perfusion - Hybrid Solution

Debranching From: Ascending, Infrarenal or Iliacs

Open Conversion / Hybrid Completion

n = 22; 18 w/ dissx

Fen/Branched Graft Solutions

Anatomic Limitations
N = 30
15 extensive
15 focal

Modified Distal Landing Zone
2 Stage Hybrid Repair

Conventional Distal Descending Anastomosis

**Balloon Fracture Fenestration**

**Post Op CT at Day 5 (Stills)**

**False Lumen Endo-Occlusion**

**Access into False Lumen**

**Results**

\[ N = 21; \ 8 \text{ TypeB}, 13 \text{ TypeA} \]

- Op Mortality 4.8%
- No other major comps

- Mean f/u 25±19m
- FL Thrombosis 100%
  - Primary 81%
  - Secondary 100%

Issues w/ FL Embolization

Conclusions

• TEVAR increasingly used for Chronic Dissection with Aneurysm
• TEVAR directed at TL alone is often inadequate
• Adjunctive treatments directed at
  ↓ FL retro-flow
  Safe
  → reverse remodeling
• Need disease specific devices