Optimal Management Of Malperfusion Syndrome From TBADs: What To Do When TEVAR Is Not Enough

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Malperfusion Syndrome From TBADs

Incidence 31%; Mortality 43%-50%

bowel
kidney
limb

Malperfusion usually resolved after TEVAR when branches uninvolved and entirely from the TL.

Pre-TEVAR Abdominal aorta occluded

branch

TL

FL

Post-TEVAR Abdominal aorta improved

FL

TL

FL

TEVAR probably not enough when...

- distal aortic TL cannot be adequately opened
- branch ostium involved, its FL compresses TL (static)
- branch completely from FL which is hypoperfused after TEVAR
- SMA trunk involved (not only its ostium)
  malperfusion of intestinal segment that thrombosed FL supplies

No disclosure

Story @ Zhongshan Hosp.

- 2000-2014, TEVAR for TABDs 2173
- Malperfusion 326 (15.0%)
  - Lower extremity 197 (60.4%)
  - Mesenteric 62 (19.0%)
  - Renal 67 (20.6%)
- Resolved after TEVAR 298 (91.4%)
- Unresolved after TEVAR 28 (8.6%)
  - Additional stenting 20 (SMA, AA, IA, RA)
  - Bypass 7
  - Medical 1

No disclosure
1. Distal aortic TL cannot be adequately opened
Male, 56Yr, chest pain & 5P in bilateral lower extremities for 24hr

2. SMA ostium involved, its FL compresses TL (static)

3. SMA & celiac trunk completely from FL which were hypoperfused after TEVAR

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Fudan University
Vascular Surgery
Zhongshan Hospital
4. SMA trunk involved (not only its ostium), malperfusion of intestinal segment that thrombosed FL supplies

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Results

Among the 28 TBADs patients with malperfusion that TEVAR had not been enough, 1 case end-organ loss and 2 cases death occurred perioperatively or during the mid-to-long-term follow-up.

Conclusion

- Malperfusion syndrome from TBADs could usually be reversed just by TEVAR.
- For those that TEVAR is not enough, various strategies selected on the basis of the individual morphology, hemodynamic features, and general condition, including additional stenting at the aorta or branches, bypass and medical Tx, could yield an encouraging mid-to-long-term outcomes.