How to Perform Endograft Repair of TAAAs Using Branched Endografts via Femoral Access:
The Secret is the Use of Steerable Sheaths.

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First branched EVAR

- Timothy A. Chuter et al:
  An Endovascular System for Thoracoabdominal Aortic Aneurysm Repair.
  JEVT 2001;8:25-33.

Zenith® T-Branch:
Off the Shelf Thoracoabdominal Endograft

Market Maturation
Illustrations from Oderich: Endovascular Aortic Repair

Right or Left?
Slight brachial access is safe for branched endovascular aneurysm repair in complex aortic disease

Fiorucci et al. 2017; J Vasc Surg 66:360-6
Unavoidable Upper Extremity Access?

- Occlusion/stenosis
- Thrombotic/shaggy
- AV-fistula
- LIMA Bypass
- Antegrade branches after arch-repair

TAA after Arch-Branch Graft

- "No" antegrade access

Upper Extremity Access Complications

- Hematoma
- Nerve damage
- Plexus damage
- Stroke
- Rupture
- Ischemia
- Prolonged operating time

Branched EVAR

Hamburg Experience 2015-2017: n=94
- Access complications:
  - Brachial artery revision: 5 (5.3%)
Is Upper Extremity Access Really Unavoidable in BEVAR?

Makaloski et al. 2018; J Endovasc Ther 25:566-70

Case 1

Makaloski et al. 2018; J Endovasc Ther 25:566-70

Case 2

Makaloski et al. 2018; J Endovasc Ther 25:566-70

Case 3

Makaloski et al. 2018; J Endovasc Ther 25:566-70

Case 4

Makaloski et al. 2018; J Endovasc Ther 25:566-70

How About......
## Steerable Sheath in TAAA

**Use of a Steerable Sheath for Retrograde Access to Antegrade Branches in Branched Stent-Graft Repair of Complex Aortic Aneurysms**

- Case series n=4, 8 target vessels
- Technical Success 8/8
- Procedural time unchanged

Makaloski et al. 2018; J Endovasc Ther 25:566-70

## Conclusion

- Endovascular repair of TAAA has matured over 15 years and can be considered gold-standard in TAAA repair.
- Upper extremity access for antegrade branches in TAAA repair is avoidable.
- Success rate of femoral access with steerable sheath may become my favorite access in BEVAR so far 15/15.