

Target vessel stents – how to match stent for the purpose

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Target Vessel Stents

Maintenance of perfusion to visceral arteries with modular EVAR

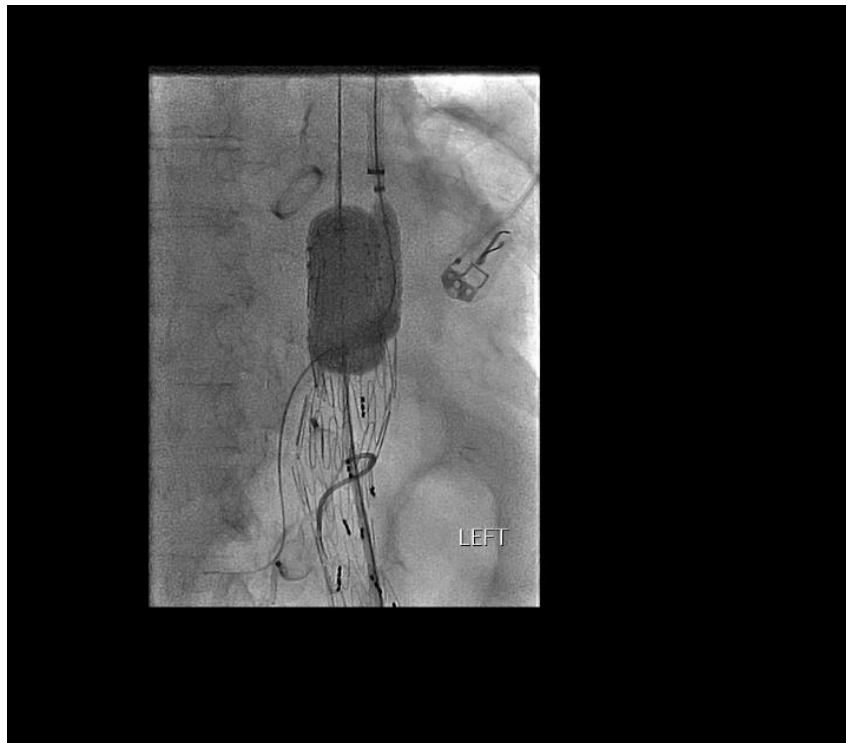


Contained rupture-previous thoracoabdominal surgical

- 64 yo female
- Perfusion Snake to intercostals
- Branch to CA from mid DTA

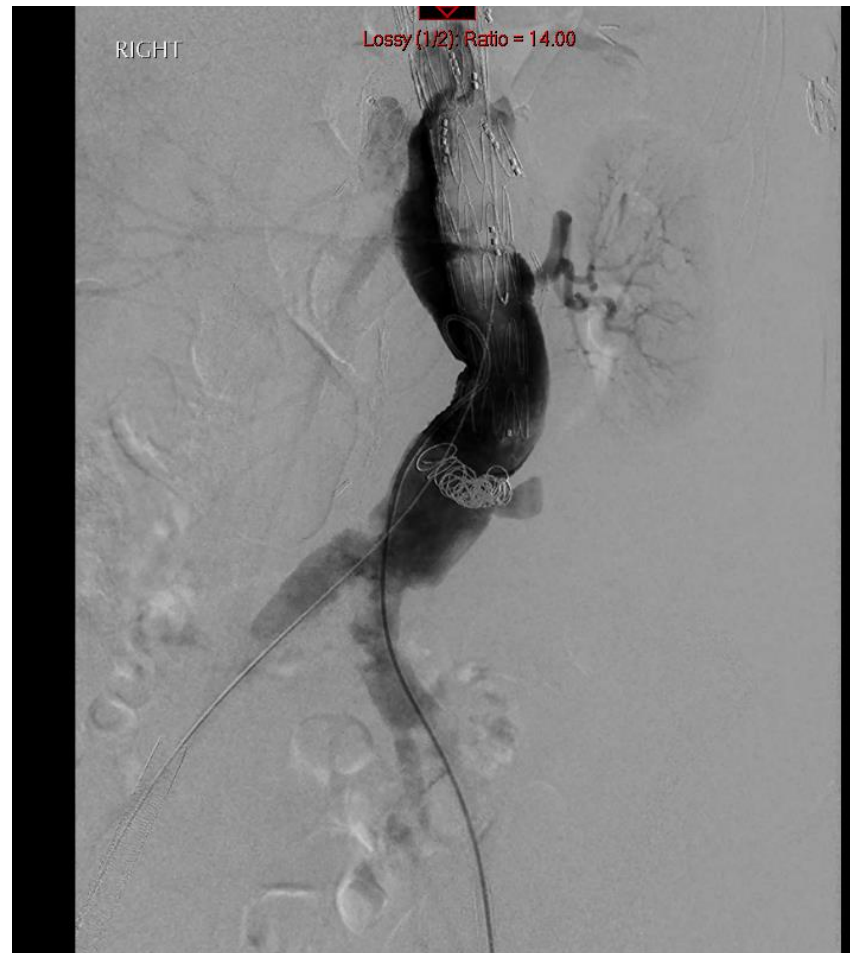


Chimney to CA Graft, T-Branch plus Bifurcated distally

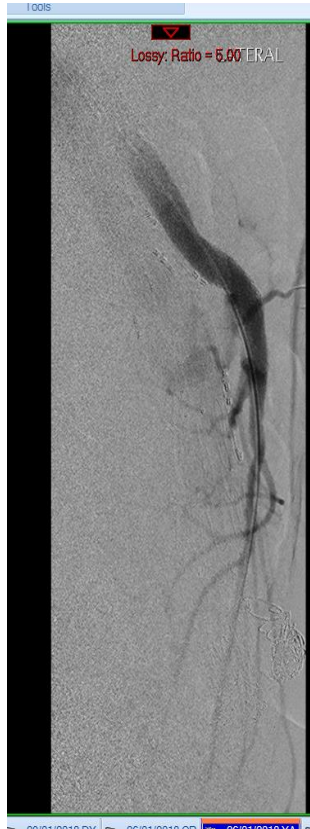


9 x 59 Atrium

T-Branch



SMA and Right Renal

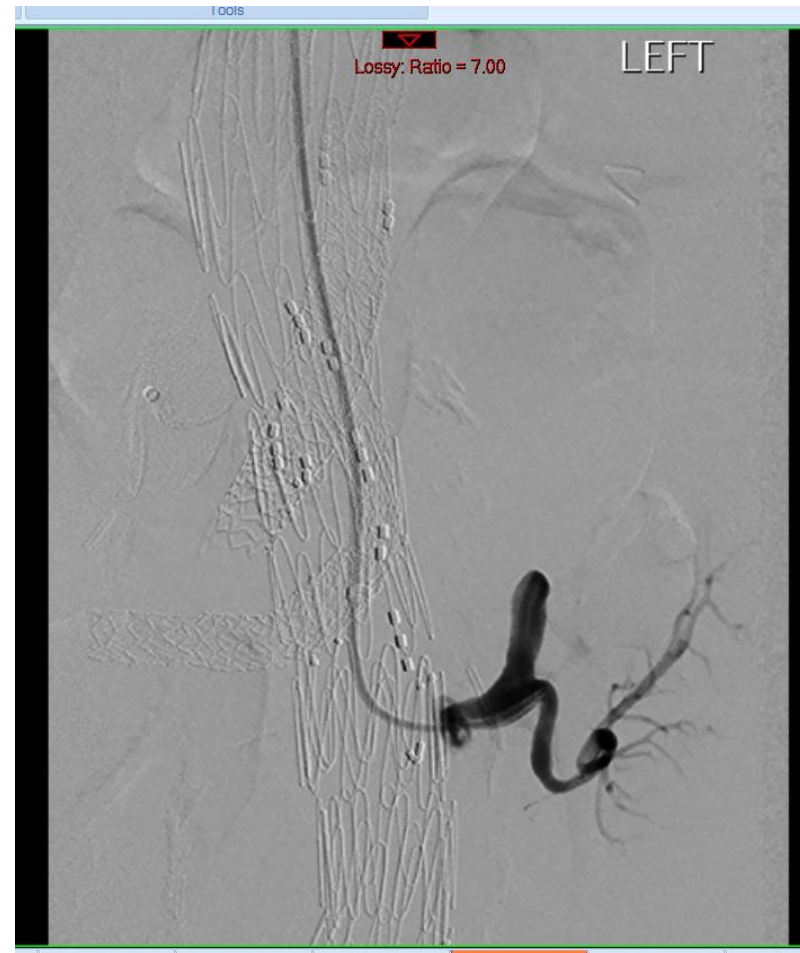


9 x 59 and 9 x 38 Atrium



7 x 59 plus 7 x 38 Atrium

LRA –sacrificed as unable to track bridging stent-angle plus stenosis





Greatest Vascular Surgeon Ever!



Performance of Bridging Stent Grafts in Fenestrated and Branched Aortic Endografting ☆

G. Panuccio^{*}, T. Bisdas, B. Berekoven, G. Torsello, M. Austermann
Eur J Vasc Endovasc Surg (2015) 50, 60–70

- One hundred and fifty consecutive patients underwent f/bEVAR
- **The technical success rate 99% (520/523 target vessels).**
- Balloon expandable BSGs were mainly used 95% and in 65% relining stents were combined.

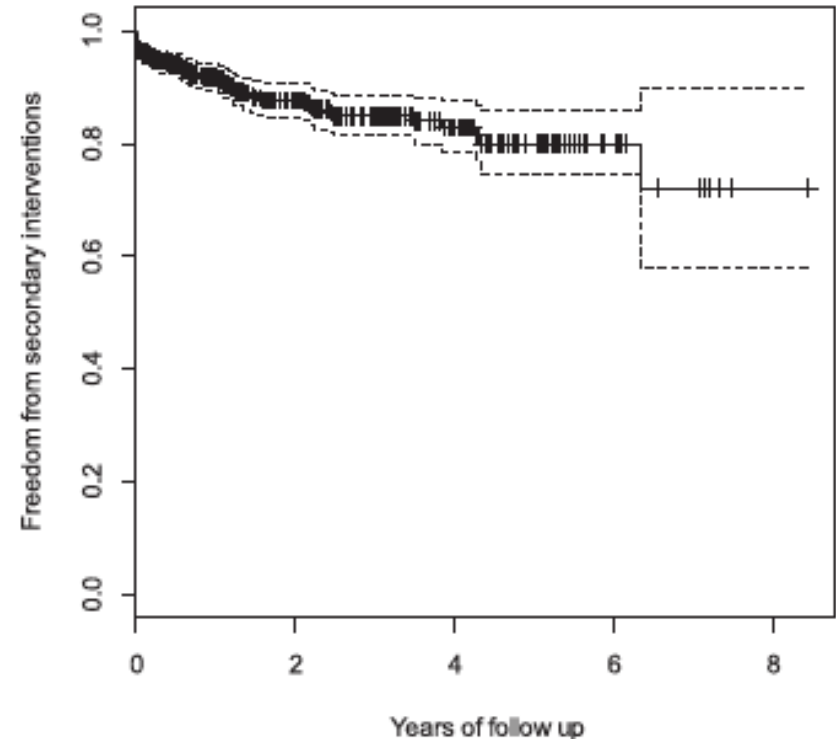


Durability of branches in branched and fenestrated endografts

Tara M. Mastracci, MD, Roy K. Greenberg, MD, Matthew J. Eagleton, MD, and Adrian V. Hernandez, PhD,
Cleveland, Ohio

J Vasc Surg 2013;57:926-33.

- 650 patients
- 9 years followup
- 30/1679 (1.7%) Branch stent occlusion
- 30 day freedom from re-intervention 98%
- 5 year freedom from re-intervention 89%

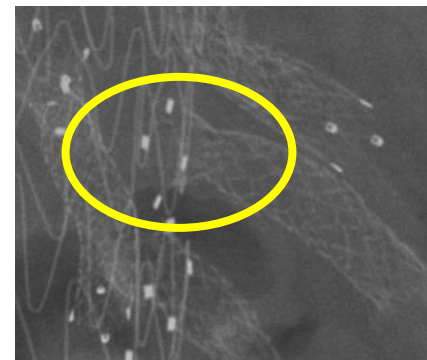


Long term failure modes- Target vessel stents

- Endoleak,
- Kink,
- Fracture
- Migration
- Occlusion
- Stenosis
- Perforation.



CA Stent
perforation



SMA stent
dislocation

Control in an unstable world



Happy ending-1

- Graft Planning.
 - Prioritize stability in seal zone.
 - Consider Fenestrations for renals c.f Branches
- Long term surveillance

Happy Ending-3

Choosing a Target Vessel stent-
No stent is perfect!

- Robust AND Flexible
- Visible And Low profile
- Available in a great range of sizes and be economical
 - Overdilation (flare and in situ adjustment
 - Recanulation



Happy ending-3

- Pay special attention to stents that bridge space.
 - Atrium ✓
 - Viabahn ✓
 - Fluency ✓

Happy ending-3

- Pay special attention to stents that bridge space.

- Atrium ✓
- Viabahn ✓
- Fluency ✓



Happy Ending!



- Plan Aortic Graft carefully
- Size bridging stent well
- Use additional bare stents to manage transition or kinks.
- Be wary of bridging space