

F/B-EVAR

Rescue Options for failed Target Vessel Catheterization

E.L.G. Verhoeven, MD, PhD

Department of Vascular and Endovascular Surgery,
General Hospital & Paracelsus Medical University, Nuremberg, Germany

Disclosures

- William Cook Europe/Cook Inc.
- Getinge
- Bentley
- More than 2000 F&B grafts Experience
 - All possible Complications...
 - All possible mistakes...

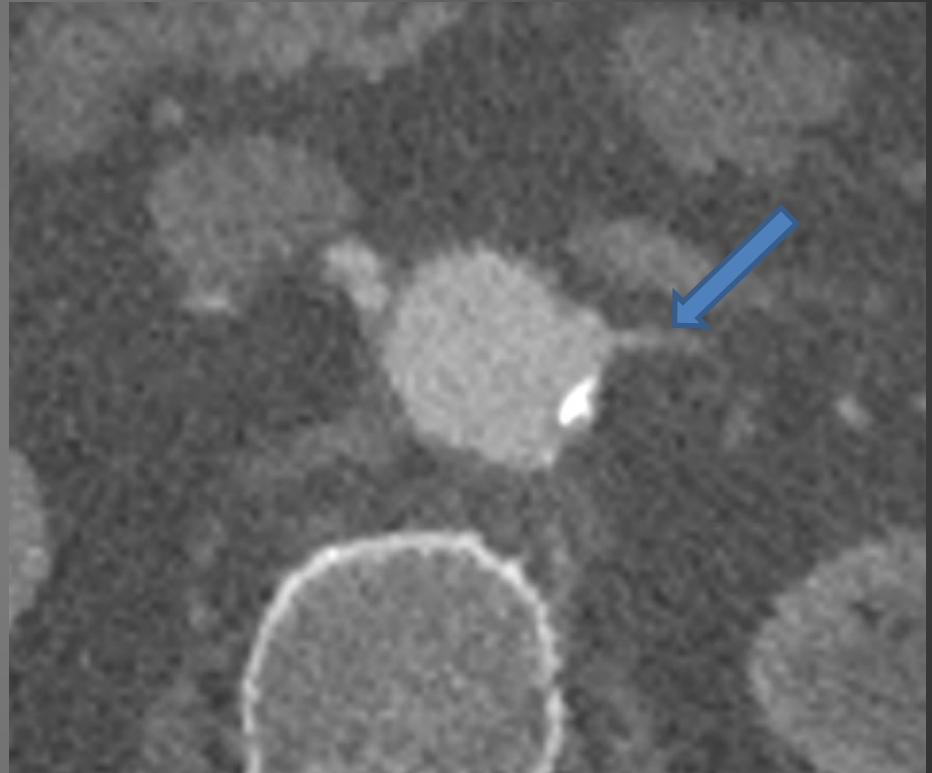
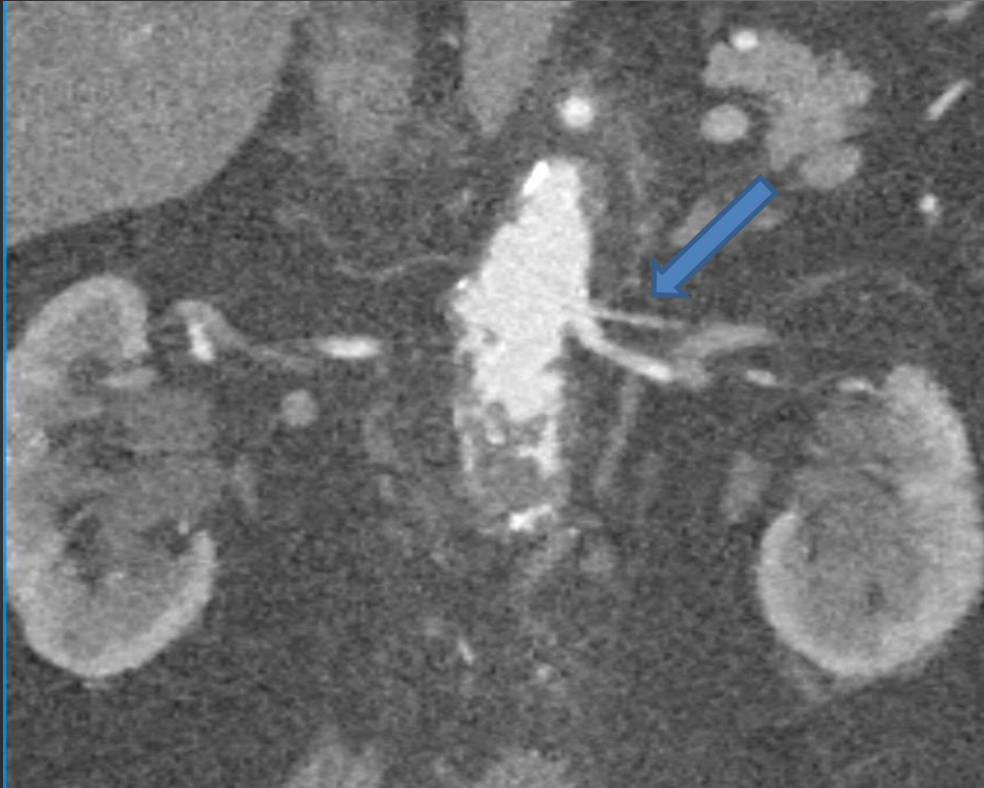


Lay-out

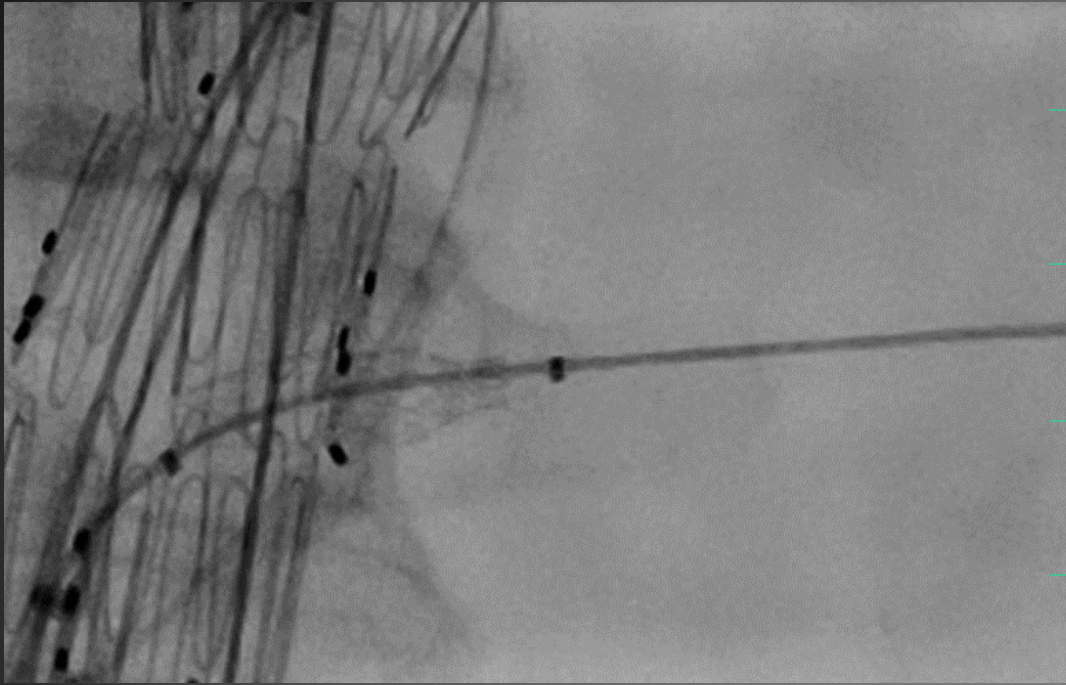
1. Avoid mistakes
2. Adjunctive techniques and materials to achieve catheterization
3. Bail-out techniques
4. Recatheterization of occluded bridging stents

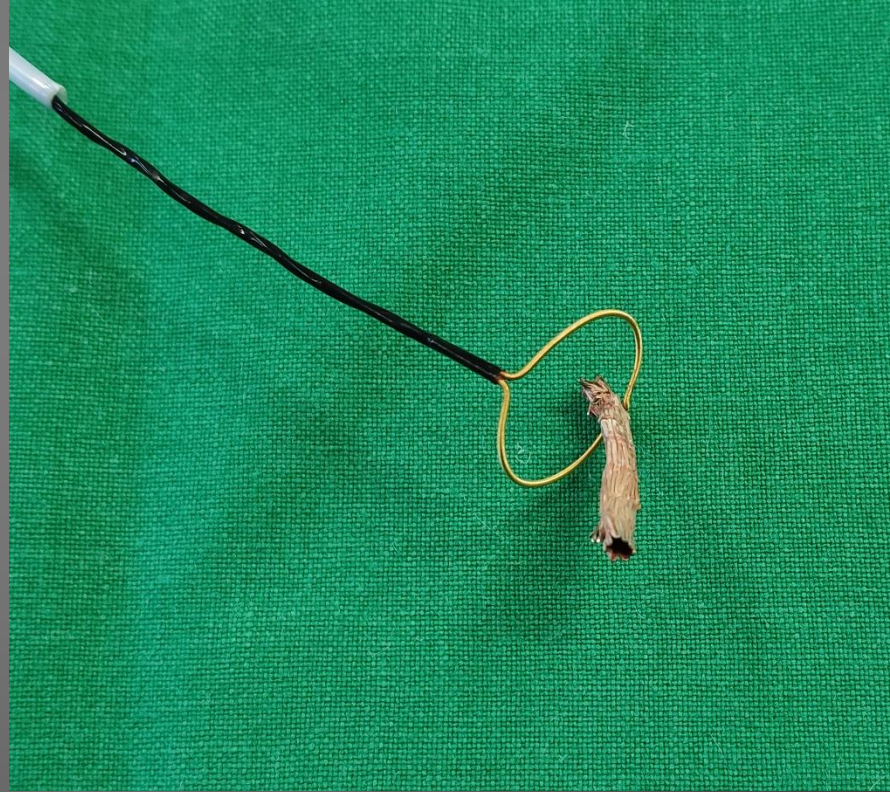
1. Avoid Mistakes

- Correct deployment of F/B graft
- „Check-List“ is the Holy Grail: Check correct position in each Target Vessel every time!



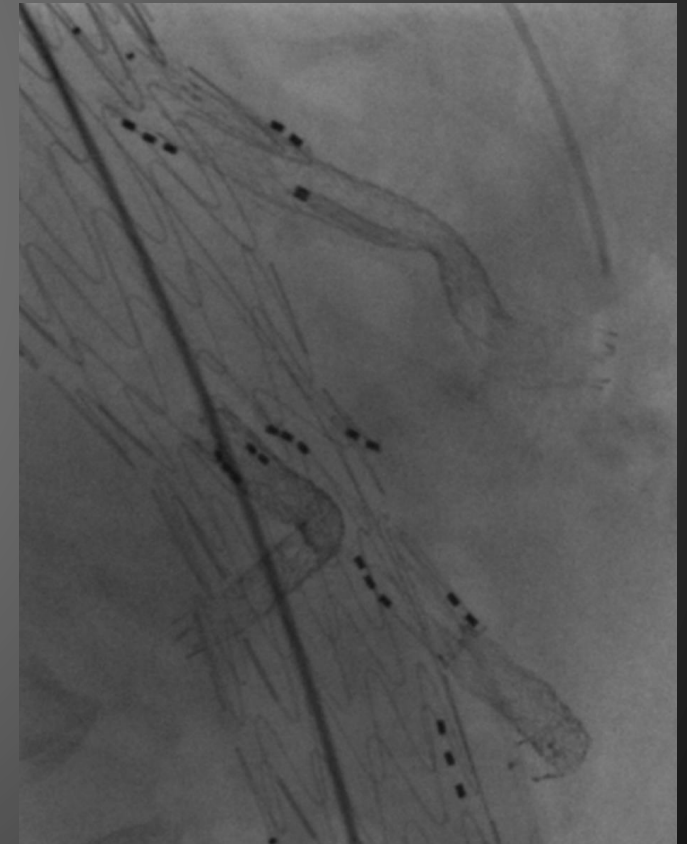
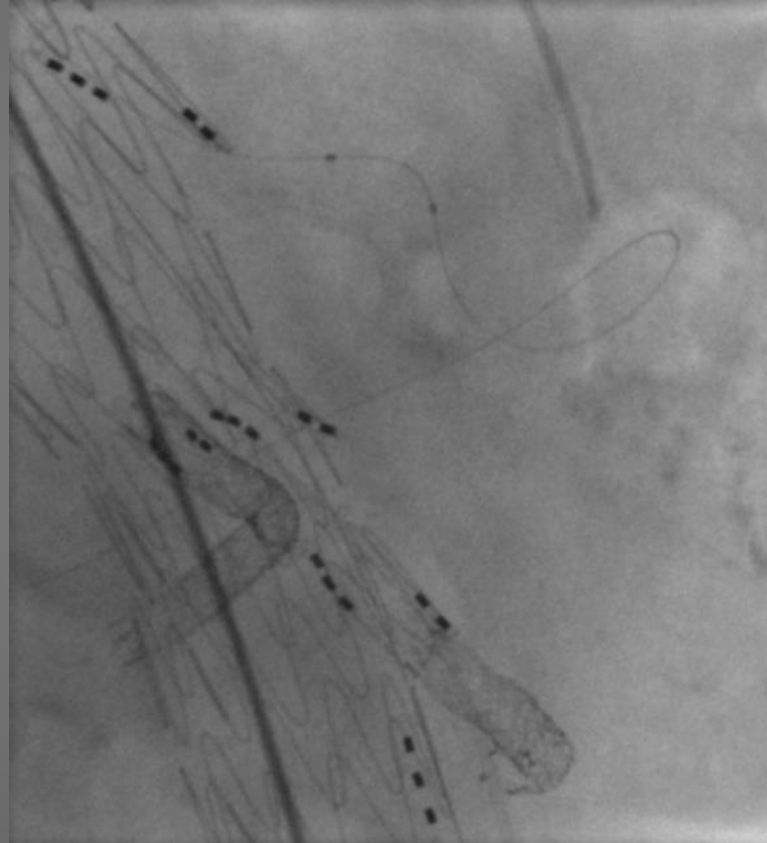
Small side branch LRA



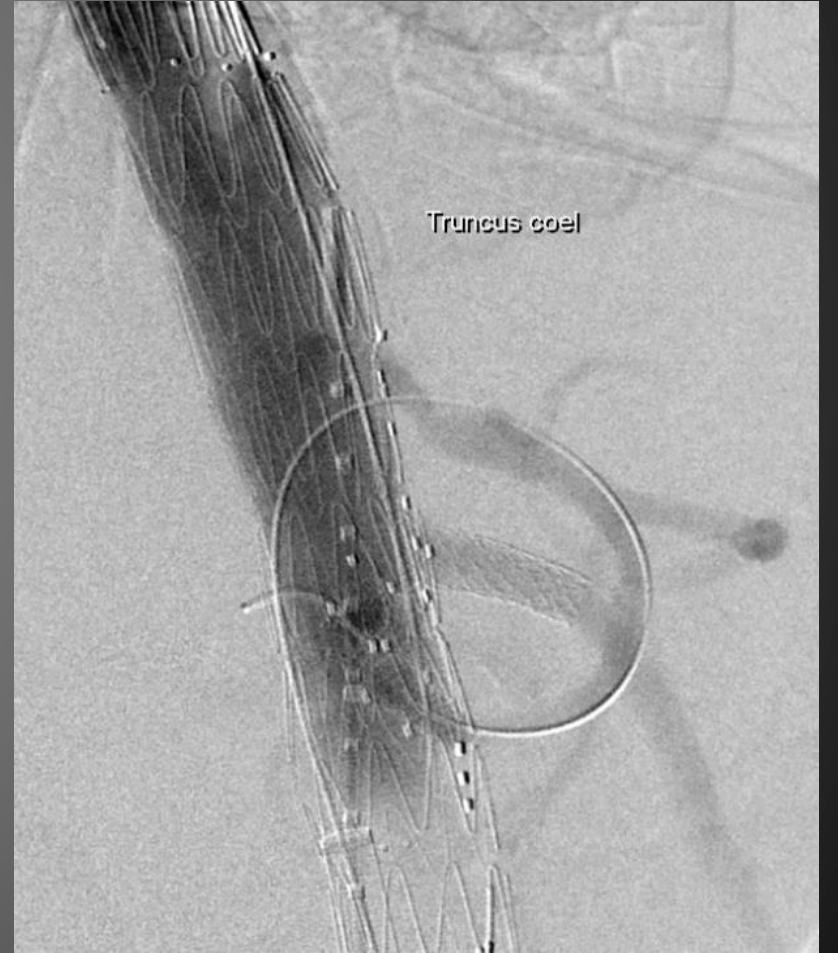
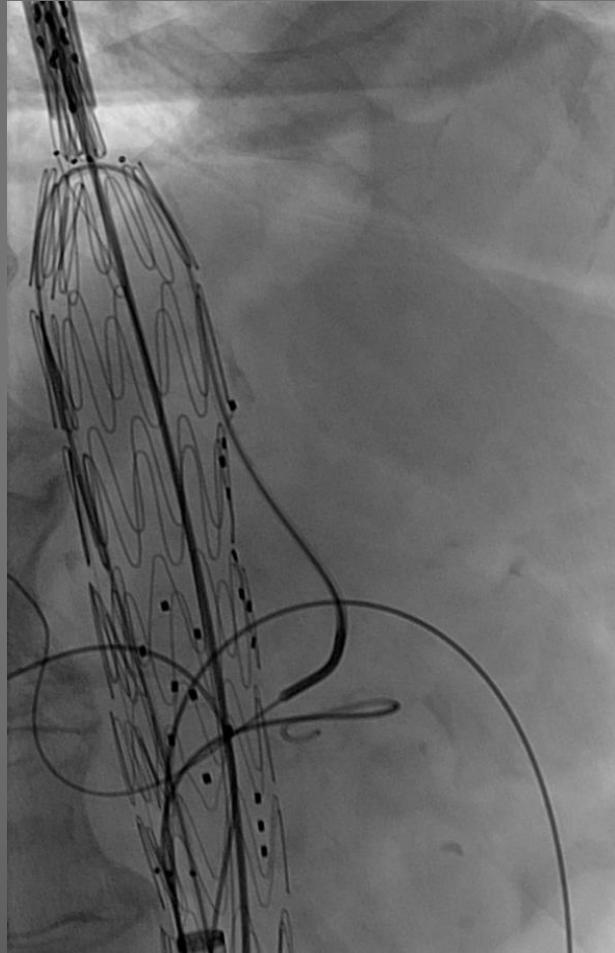


2. Adjunctive Techniques and Materials (to achieve catheterization)

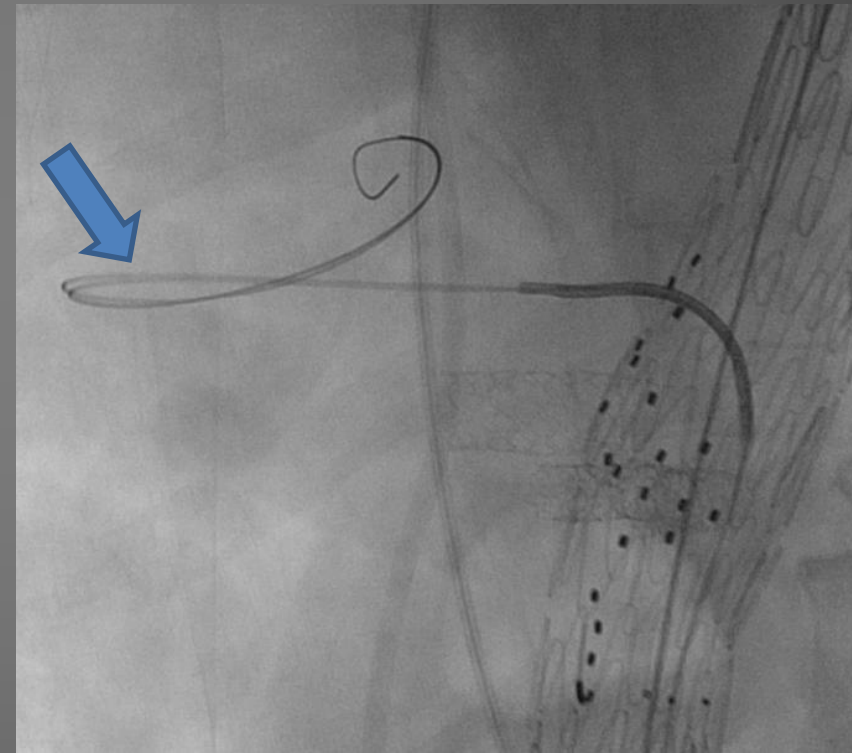
0.014" Wire and Sterling Balloon



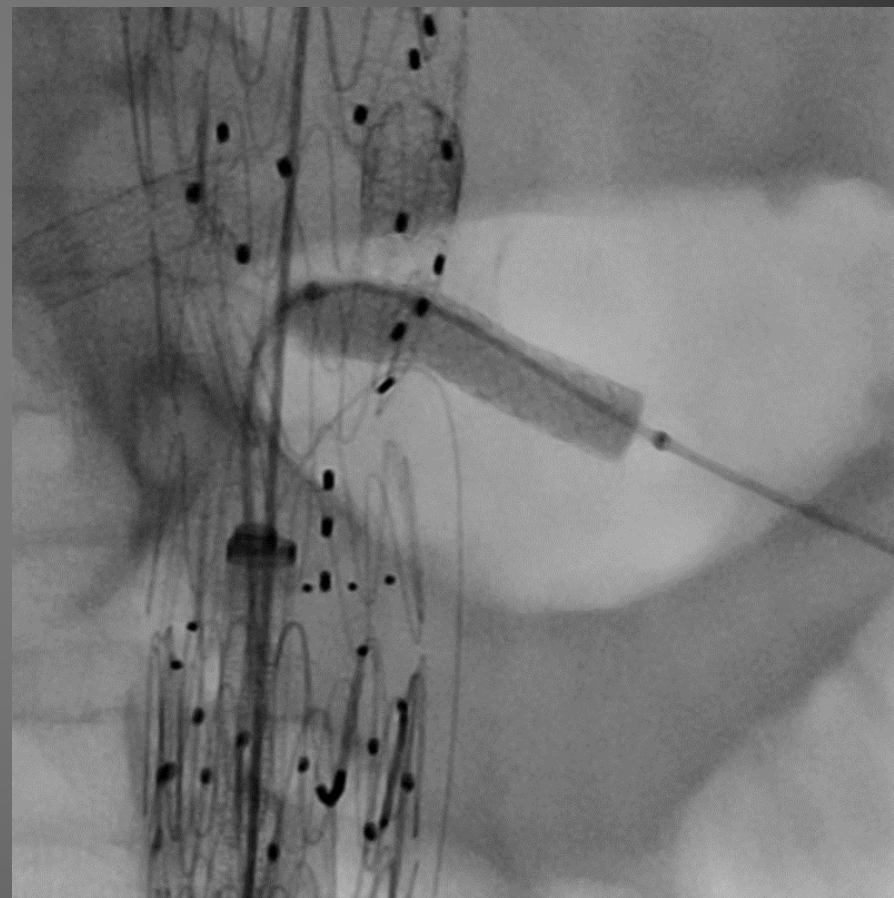
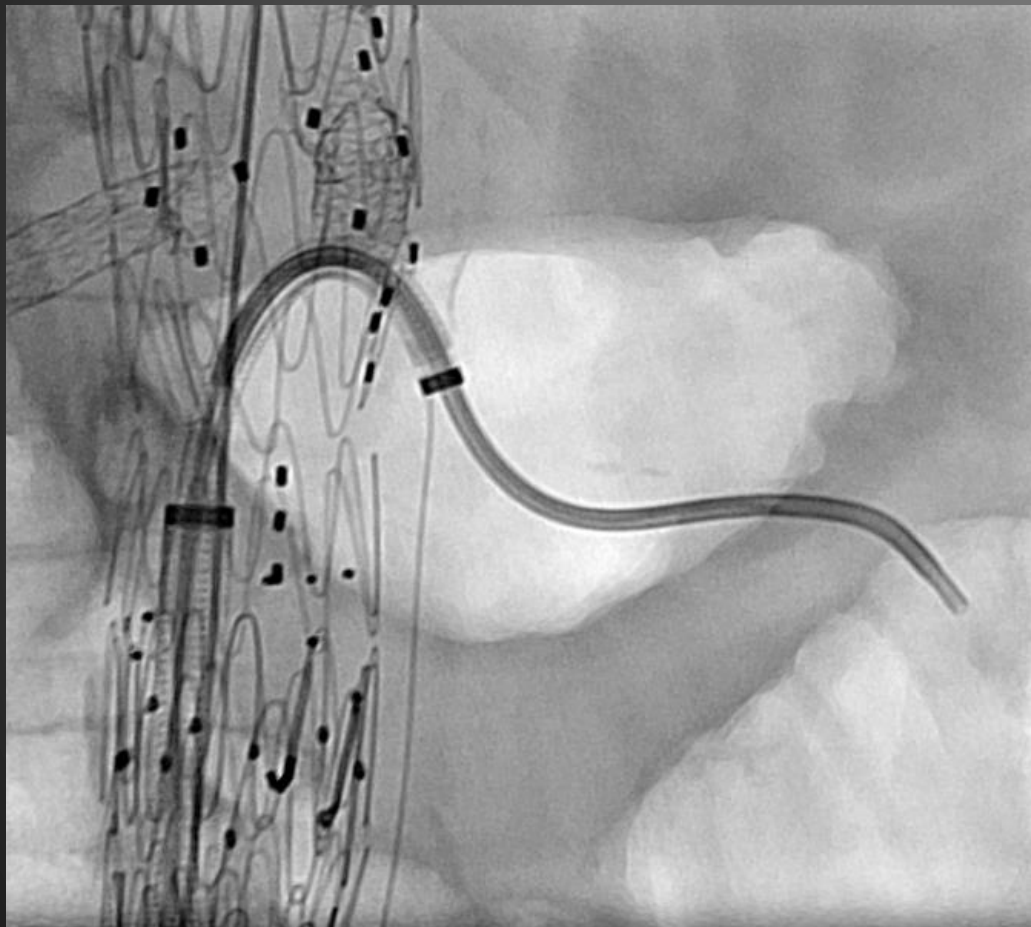
'Roof' Technique



Catheter over two V18'' Wires



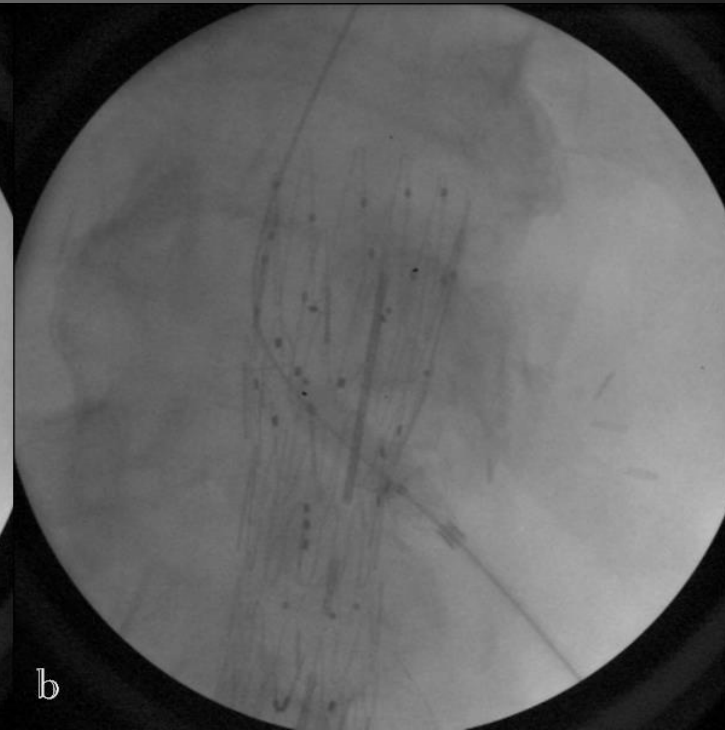
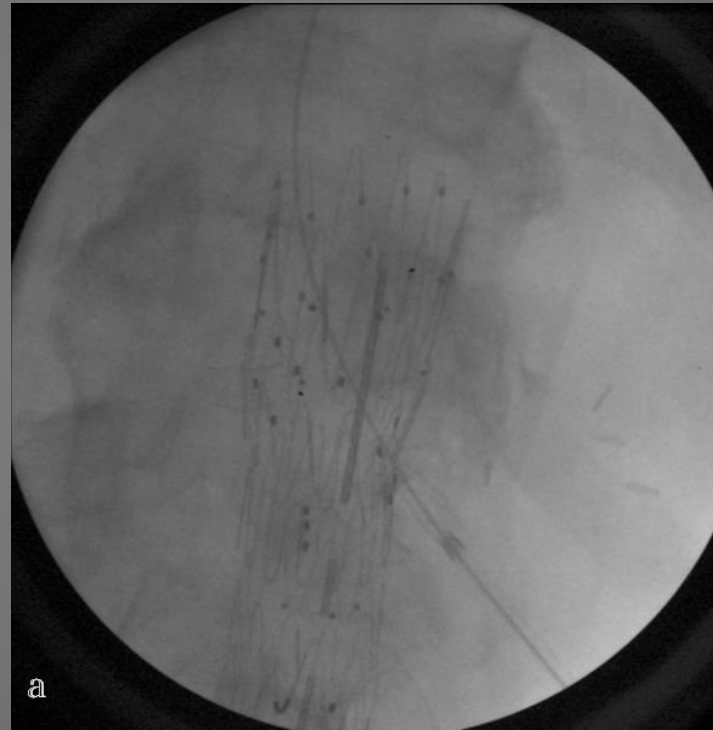
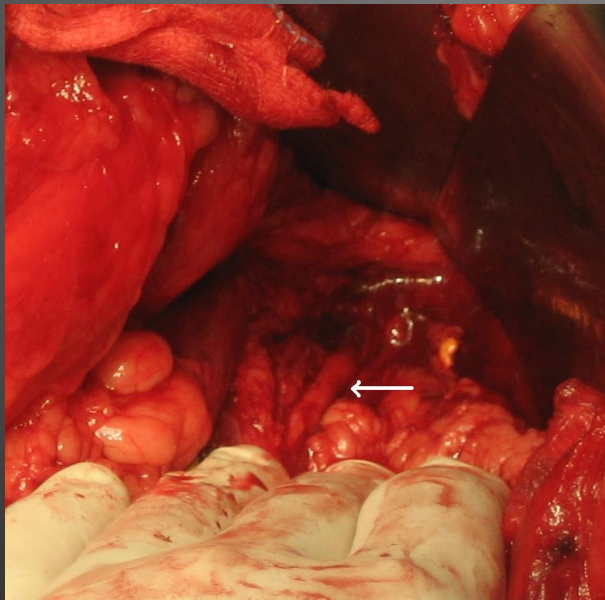
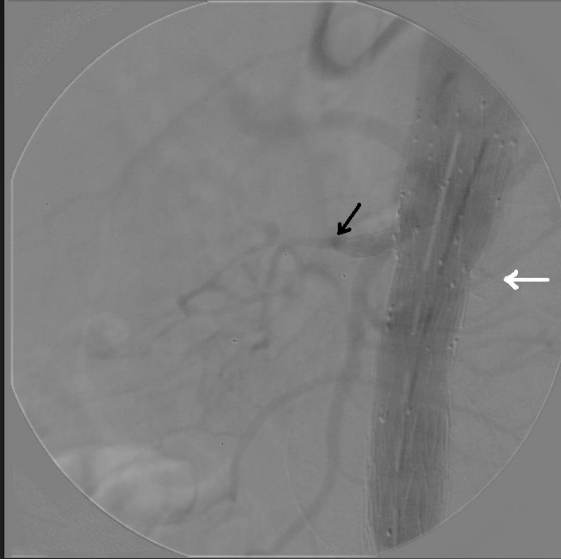
Use of a Steerable Sheath in sharp take-off



3. Bail-Out Techniques

- Retrograde open approach
- Retrograde endo approach
 - Via puncture
 - Via loop (SMA to Celiac)
- Snare-Ride technique

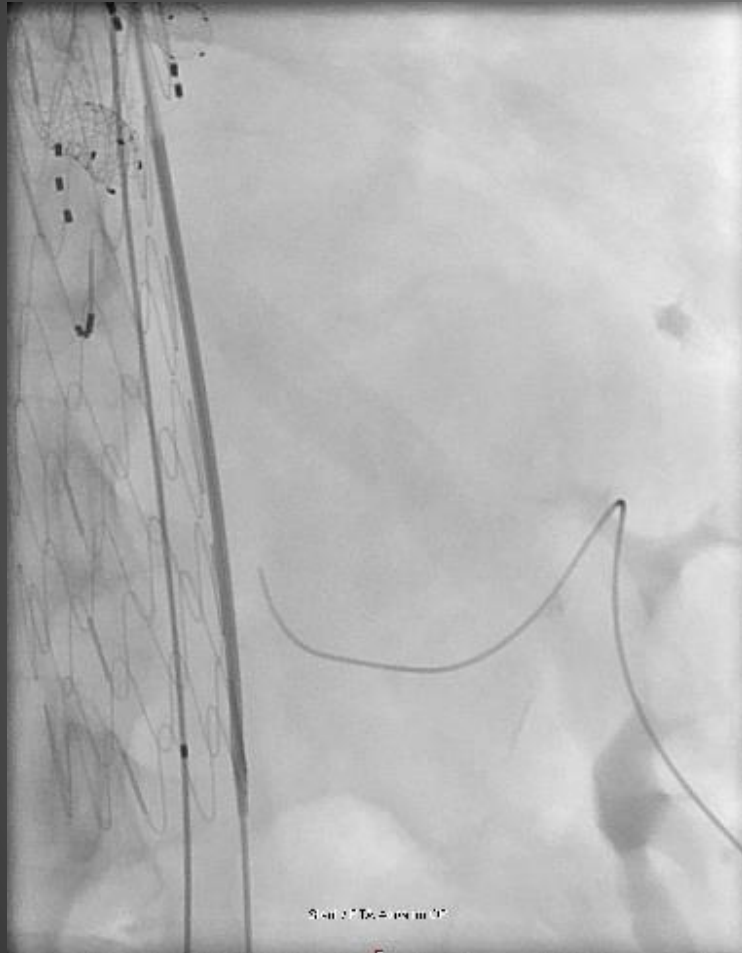
Retrograde open approach (LRA)



Retrograde open approach (Celiac)



Retrograde endo approach (LRA)



Retrograde wire via direct LRA branch puncture



Snared LRA wire through left axilla



Through-and-through wire traction

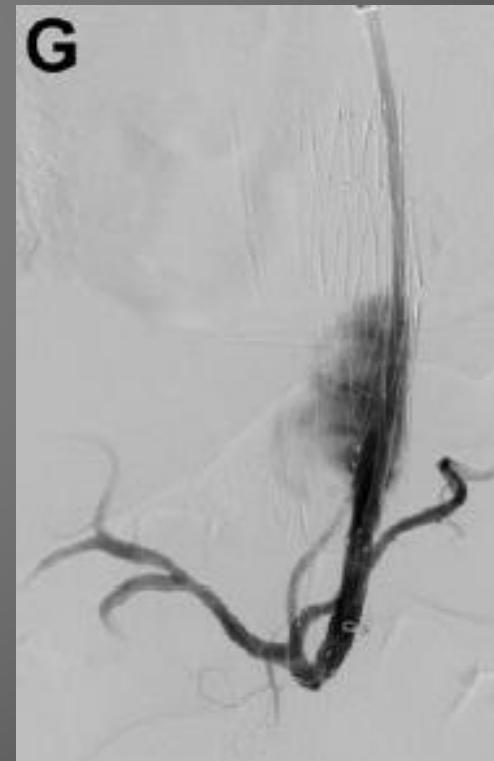
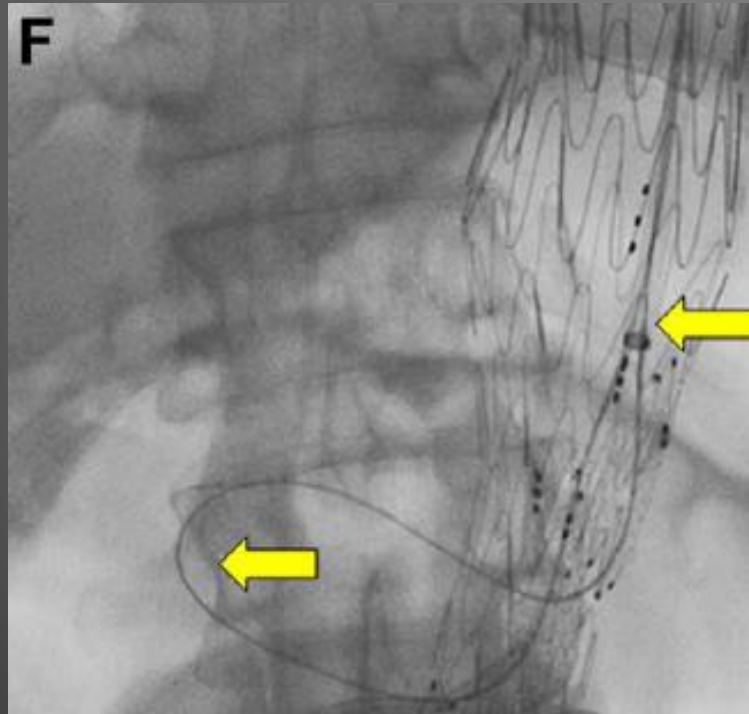


Viabahn 7x15cm

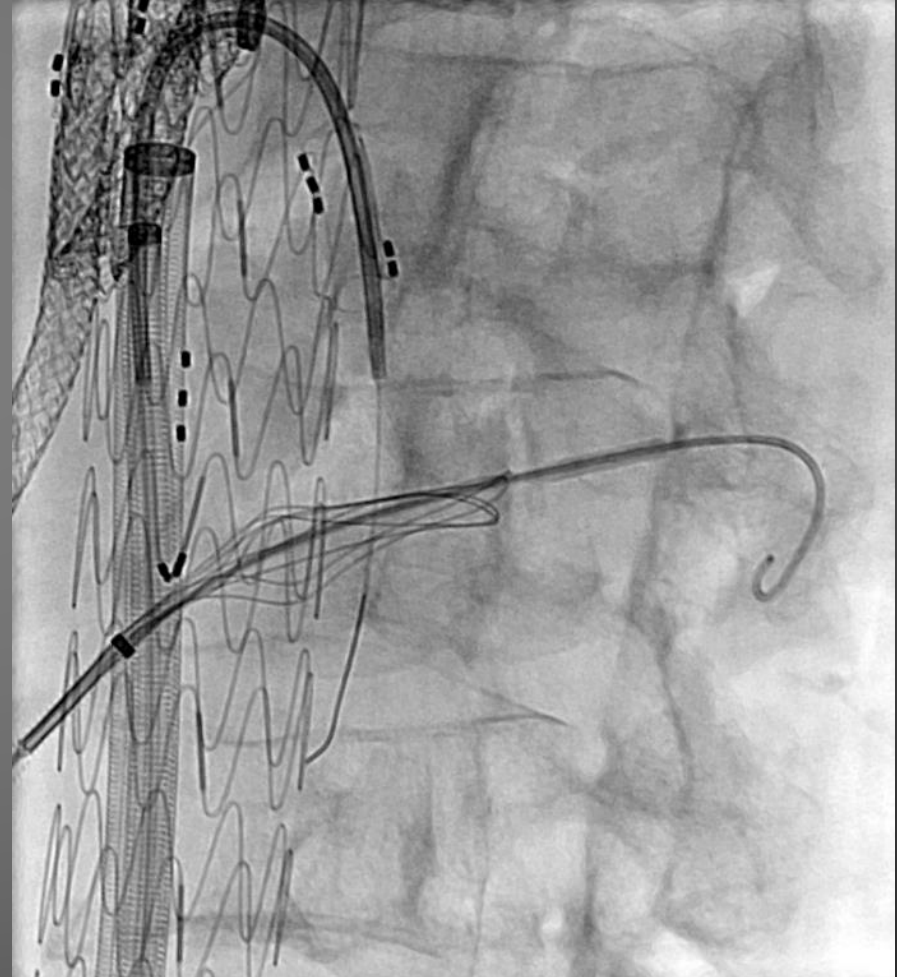
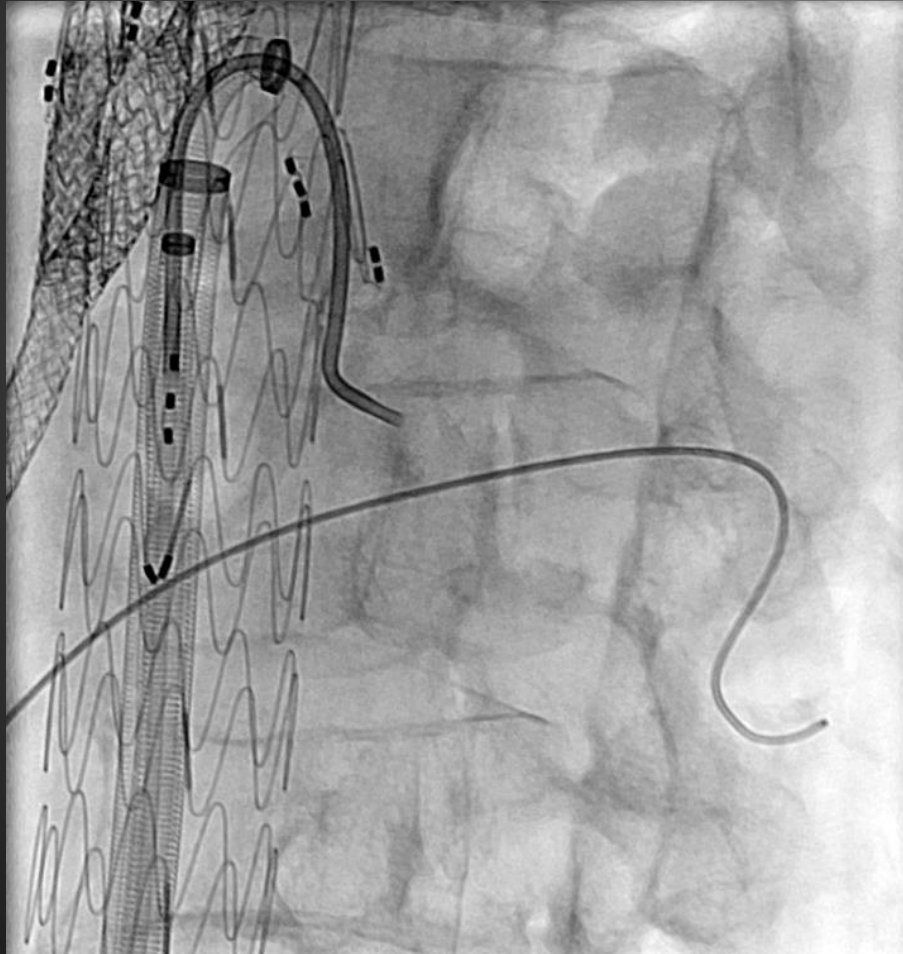
The Loop Technique: Addressing Celiac Artery Dissection in a Branched and Fenestrated Endograft for the Treatment of a Type III Thoracoabdominal Aneurysm

Young Erben, MD¹, Gustavo S. Oderich, MD², and Peter Gloviczki, MD²

Journal of Endovascular Therapy
2016, Vol. 23(4) 614-617



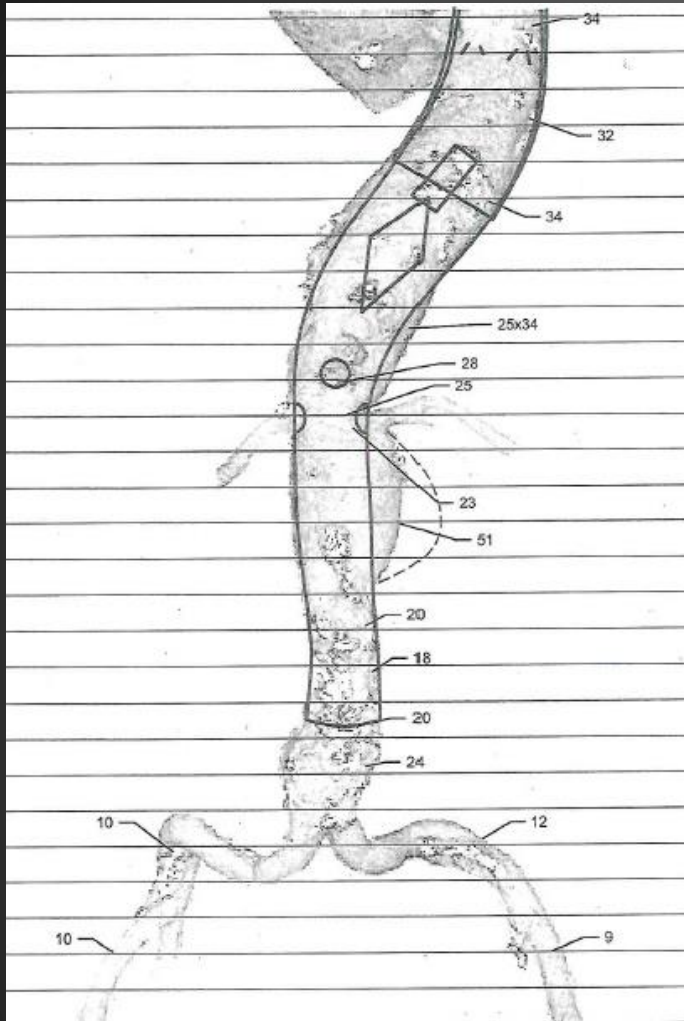
Snare-Ride Technique (Marcelo Ferreira)



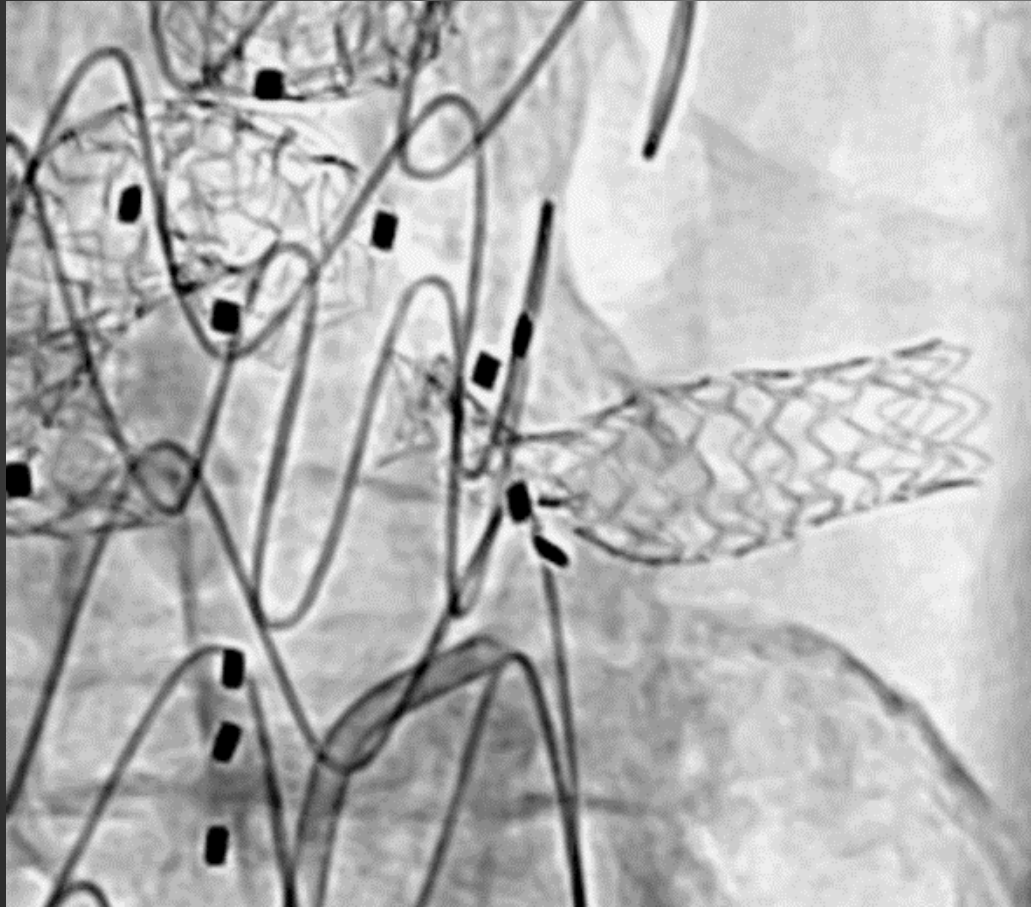
Insertion Indy Snare & Ride (from the right CFA)



4. Catheterization of Crushed Bridging Stents



Occlusion LRA



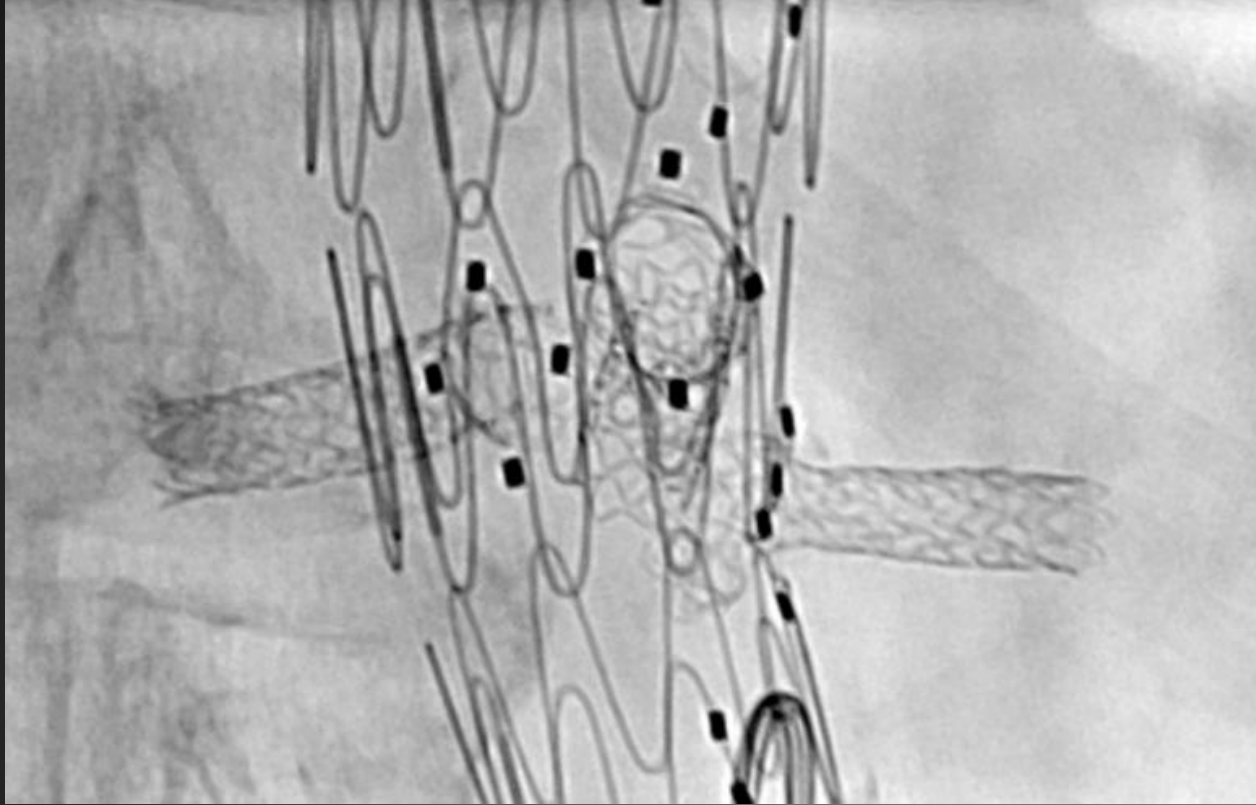
Stent crushed
due to manipulation of steerable sheath



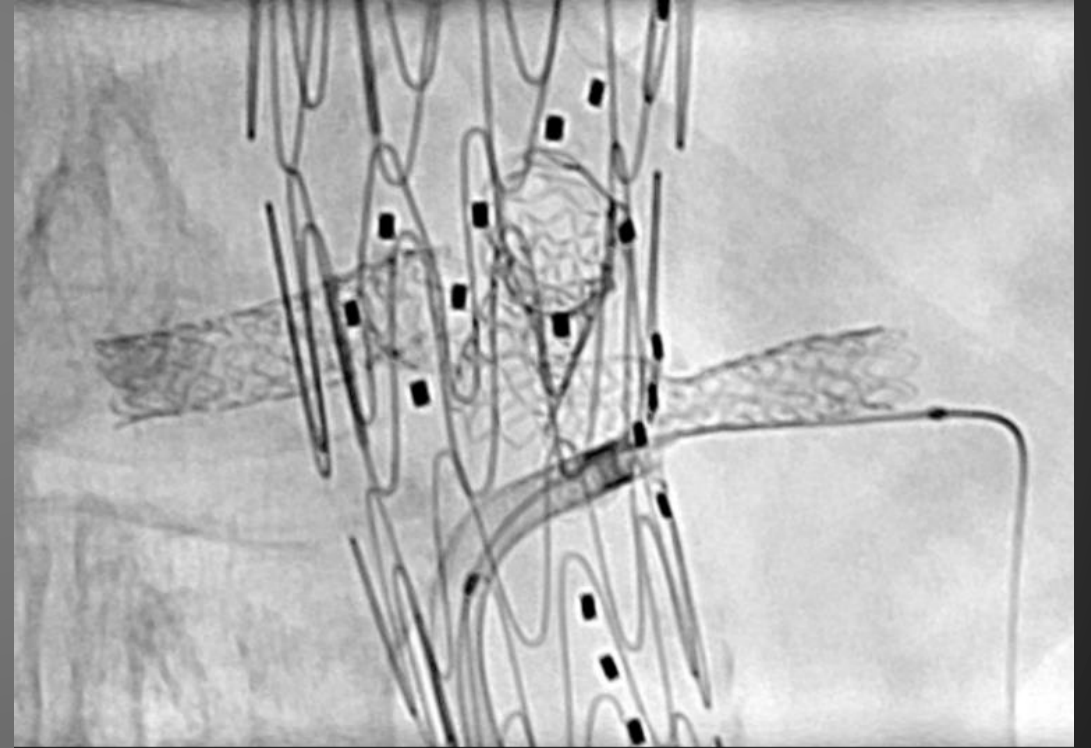




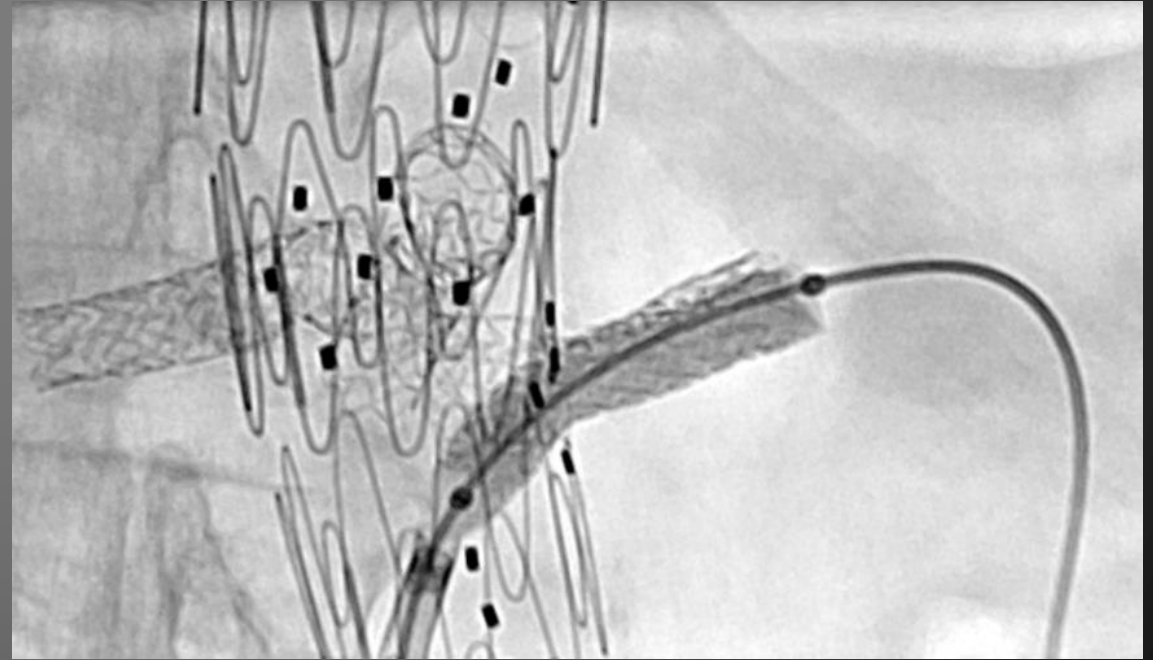
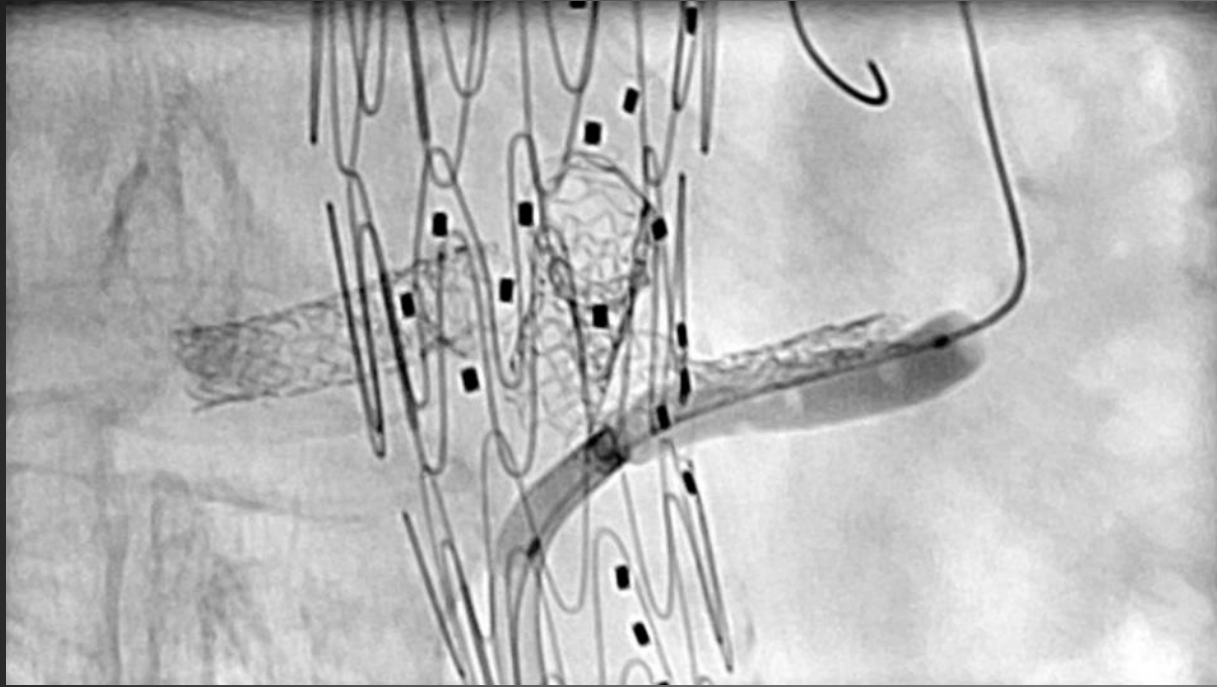
Occluded LRA!

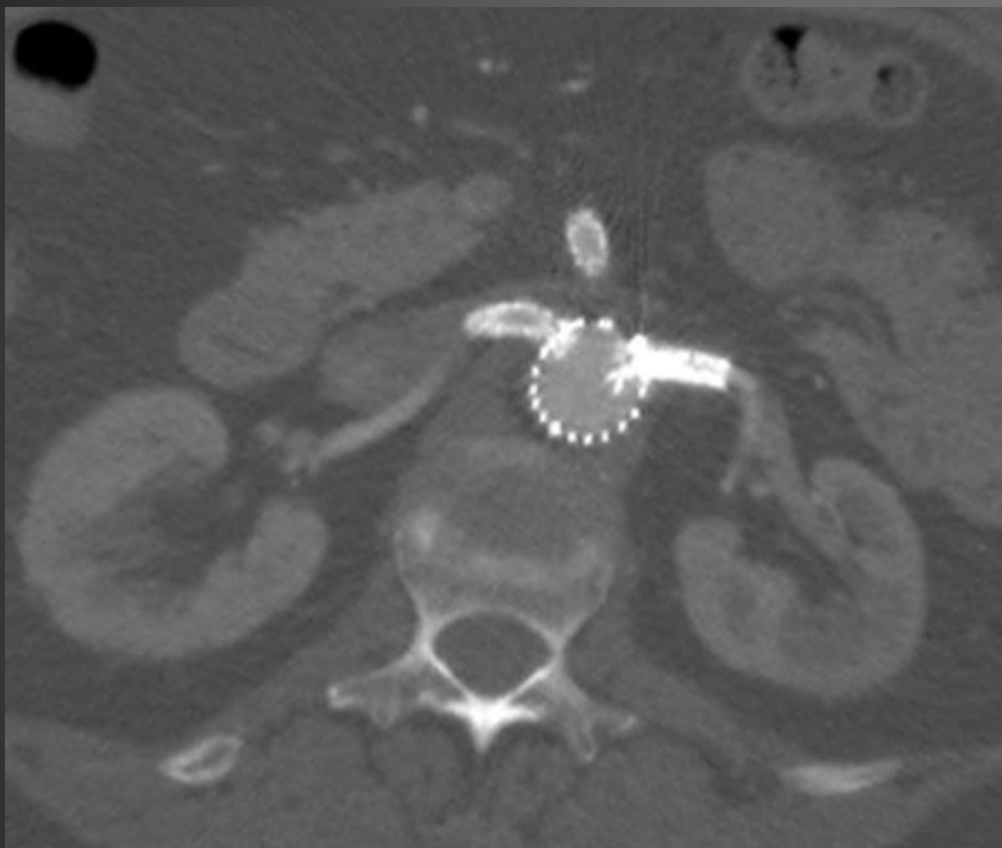


Re-Catheterization not possible



Recovery: 0.018 Wire passage outside LRA Stent

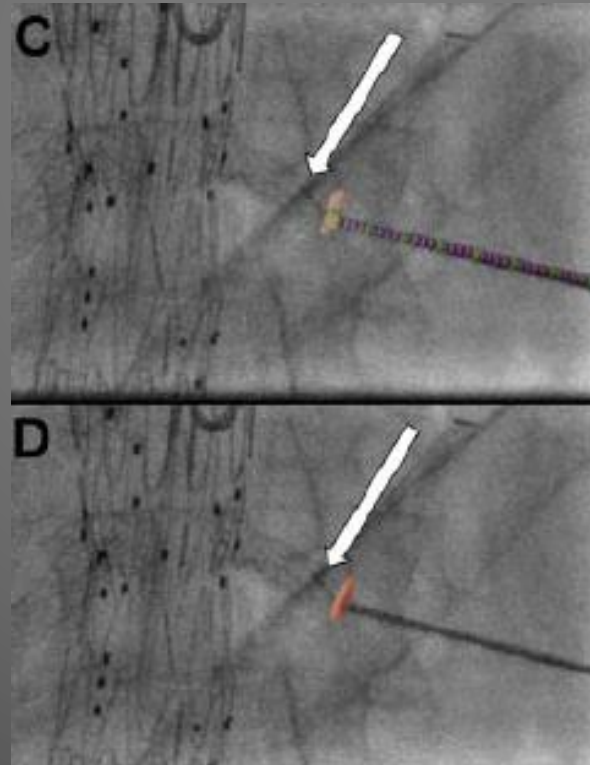
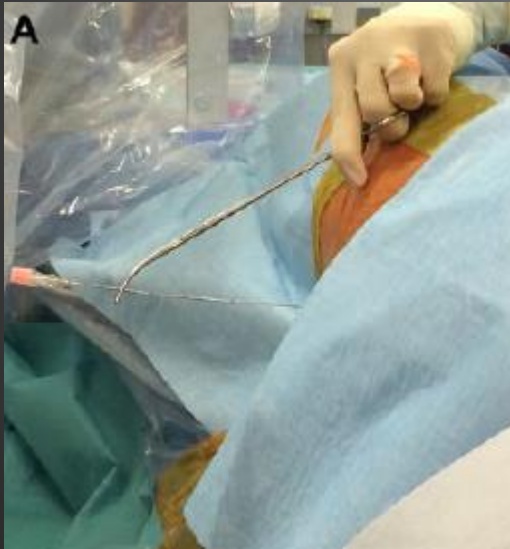




Translumbal Puncture for Retrograde Catheterization of a Kinked Left Renal Stent After Fenestrated Endograft Repair

Adrien Hertault, MD¹, Rachel E. Clough, MD, PhD¹,
Teresa Martin-Gonzalez, MD, PhD¹, Rafaele Spear, MD, PhD¹,
Richard Azzaoui, MD¹, Jonathan Sobocinski, MD, PhD¹,
and Stéphan Haulon, MD, PhD¹

Journal of Endovascular Therapy
2016, Vol. 23(6) 976–981



Conclusion

1. Avoid mistakes
2. Use Adjunctive techniques/materials
3. Know the Bail-out techniques