

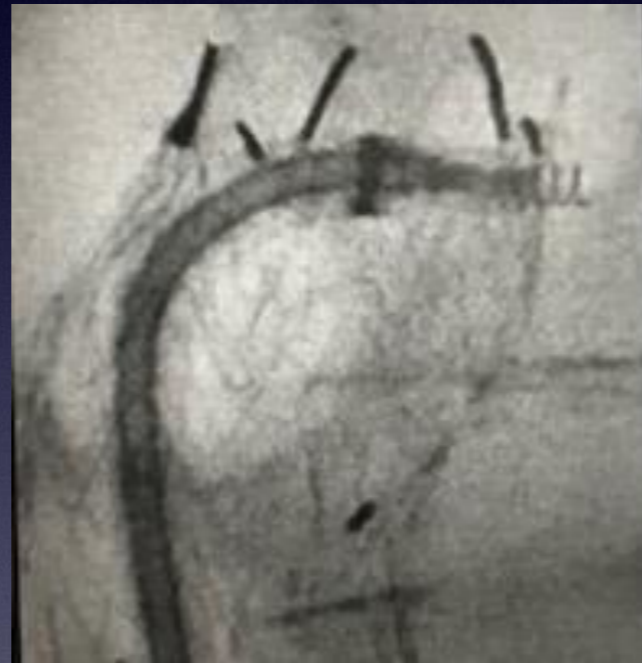
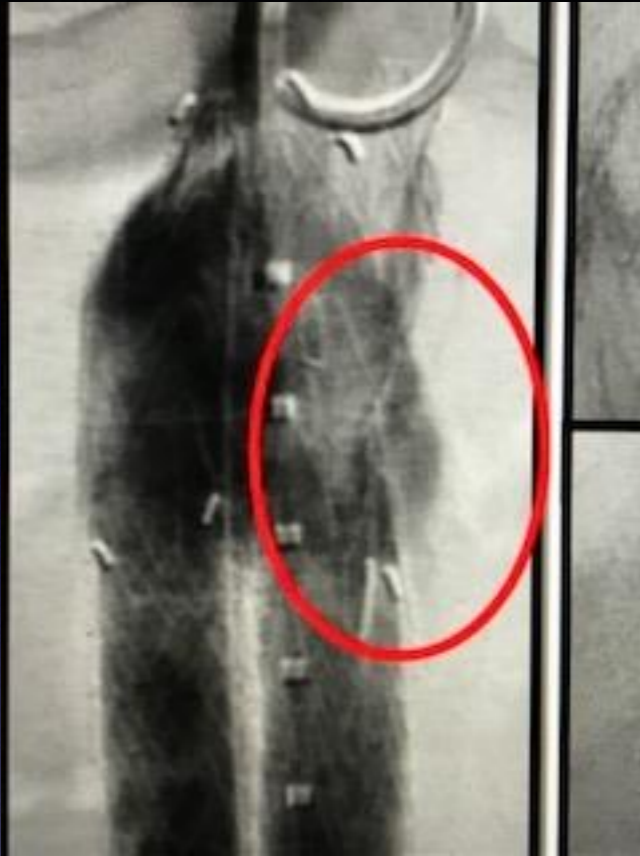
# Management of Endoleaks

Mark H Kumar MD, FACS

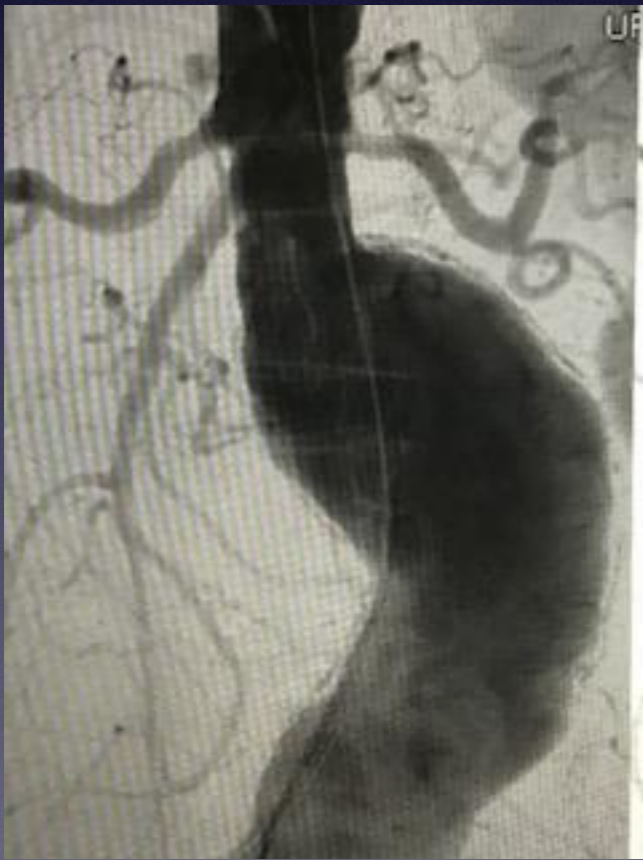
# Type I Endoleaks

- Extensions
- Increased radial force (Palmaz Stent)
- Endostapling (Aptus)
- Coiling of the Tract
- Coverage of renals with chimneys
- Open conversion.

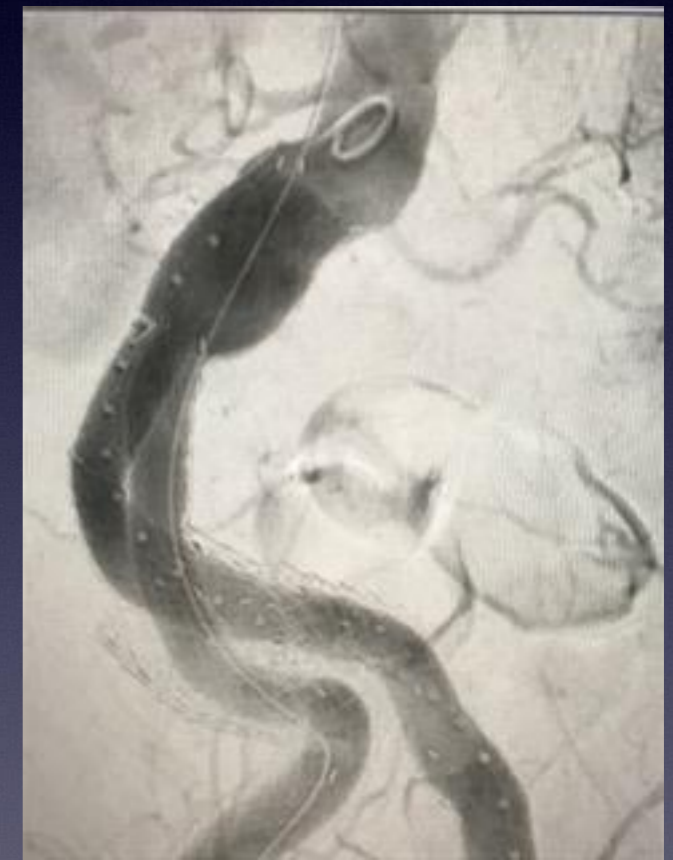
# Proximal Type I Treated with Aptus



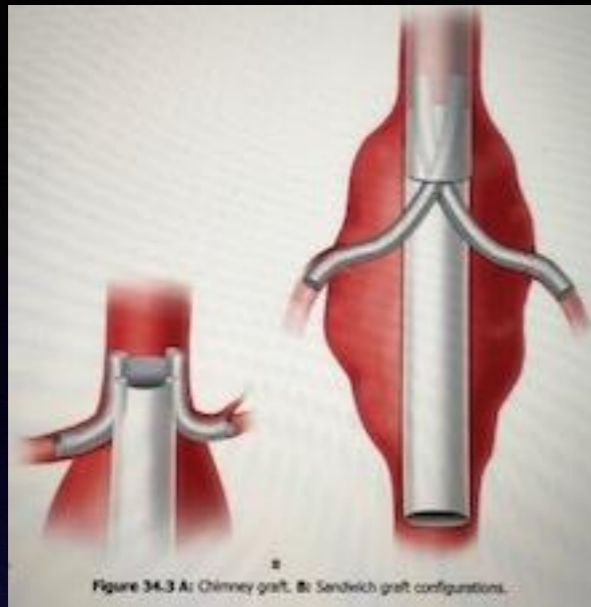
# Proximal Type I Treated with Cuff



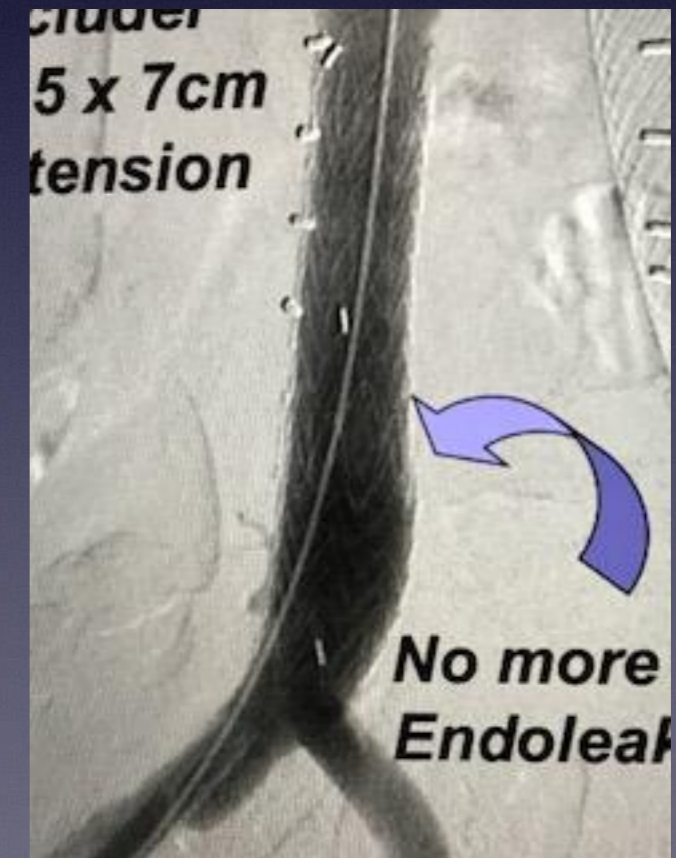
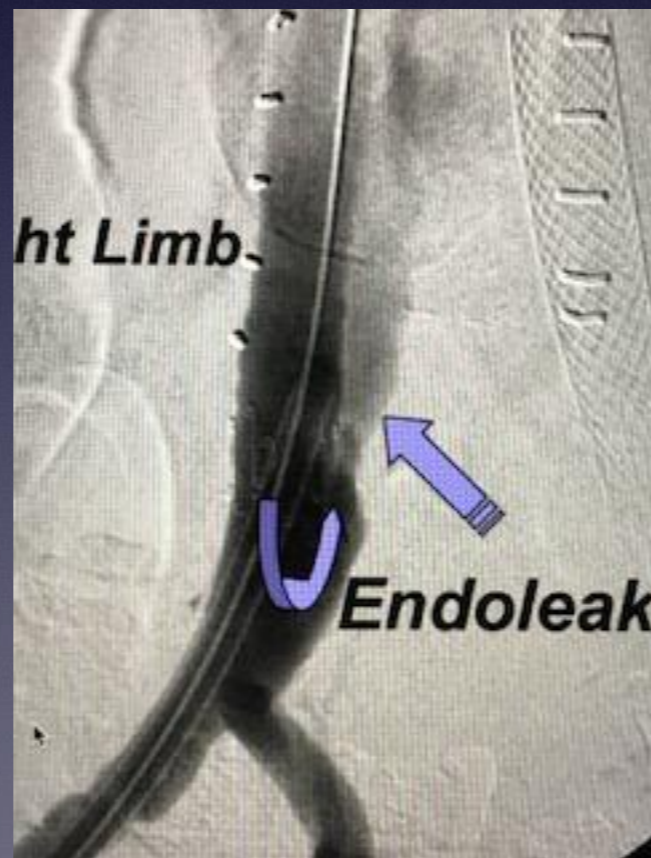
# Proximal Type I Graft Migration



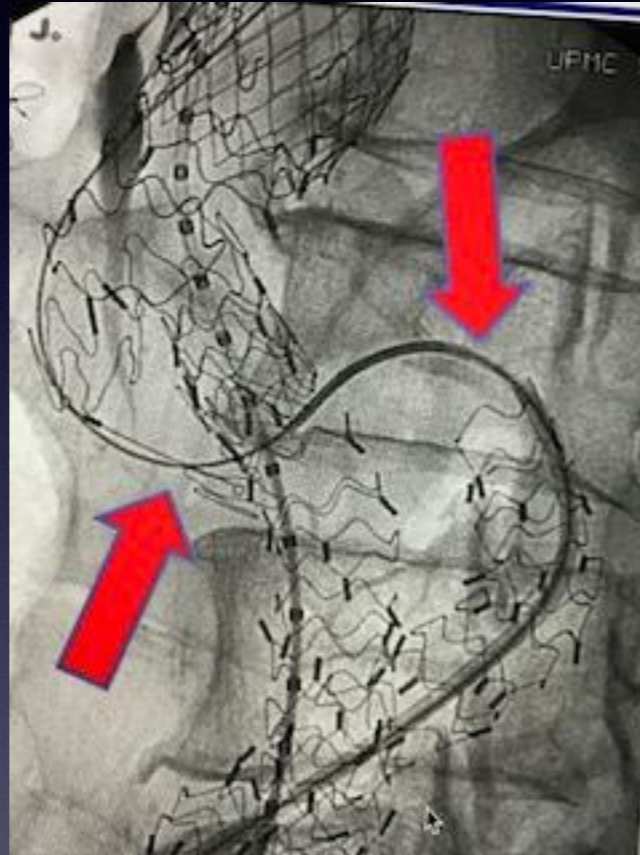
# Chimney McCaallum et al



Distal extension



# Type 3



Limb Separation

## Type 3 From Fabric Erosion





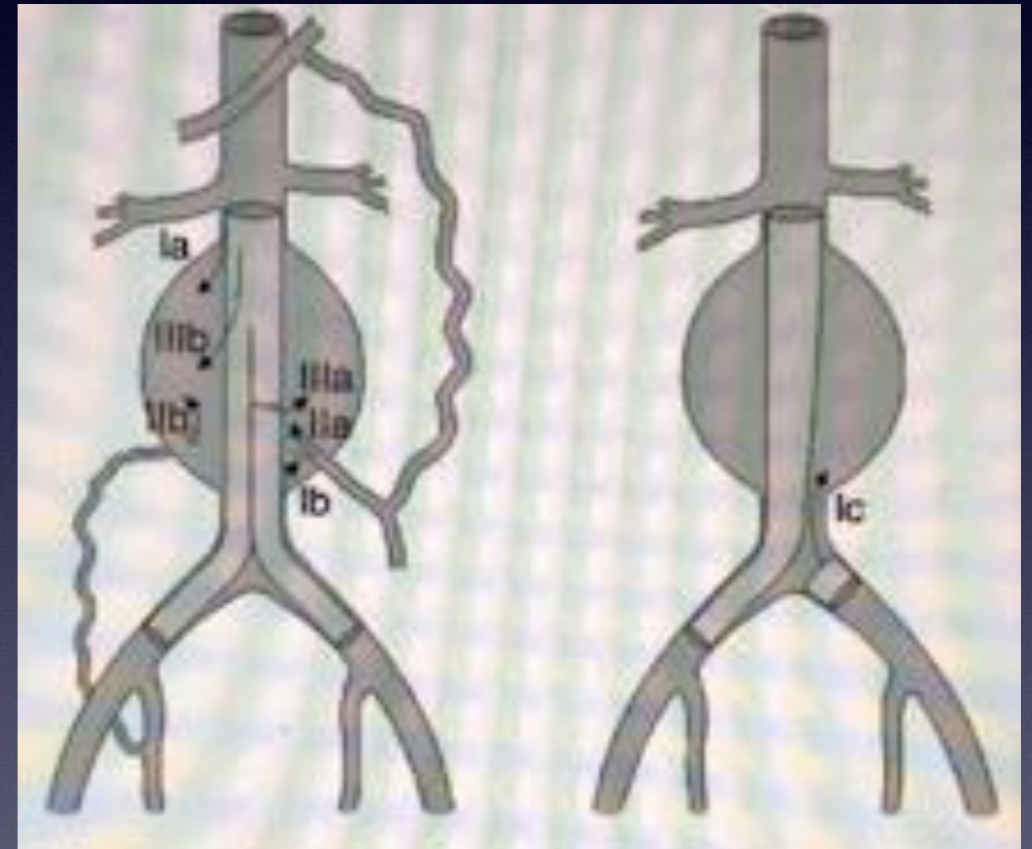
# Type 2

- Coil Emboliazation
- Cyanoacrylate Glue
- Thrombin
- Onxy
- Laproscopic or Open Ligation

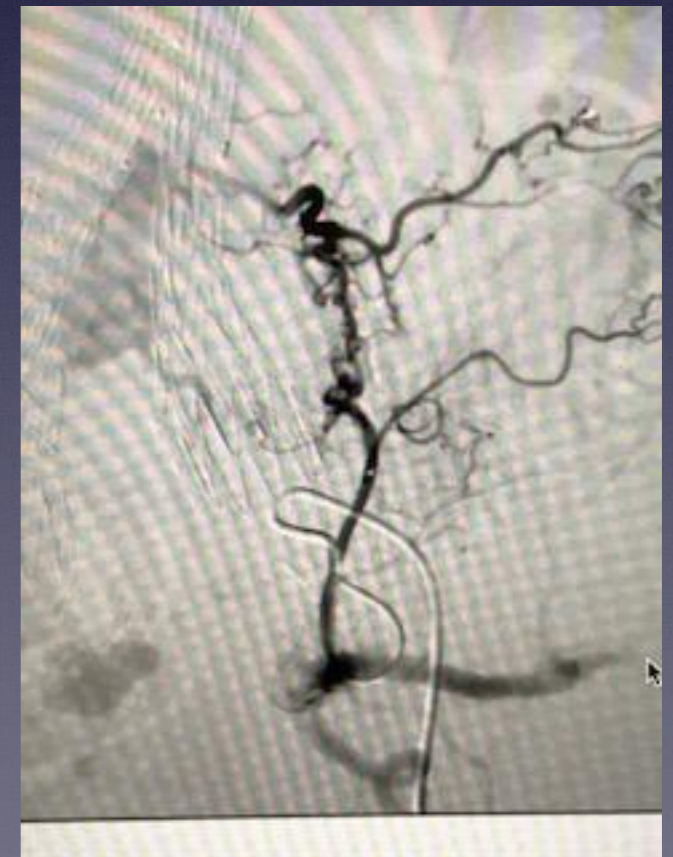
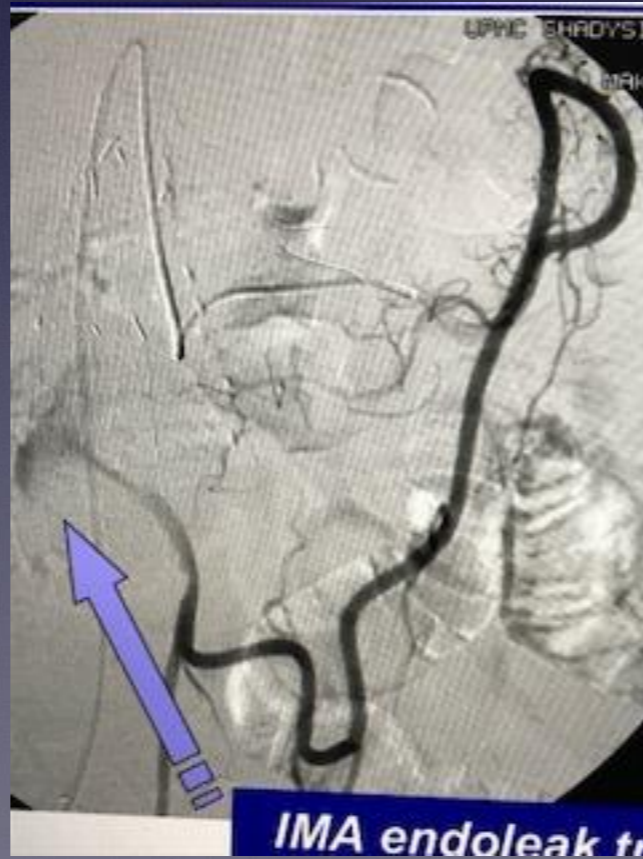


# Approach

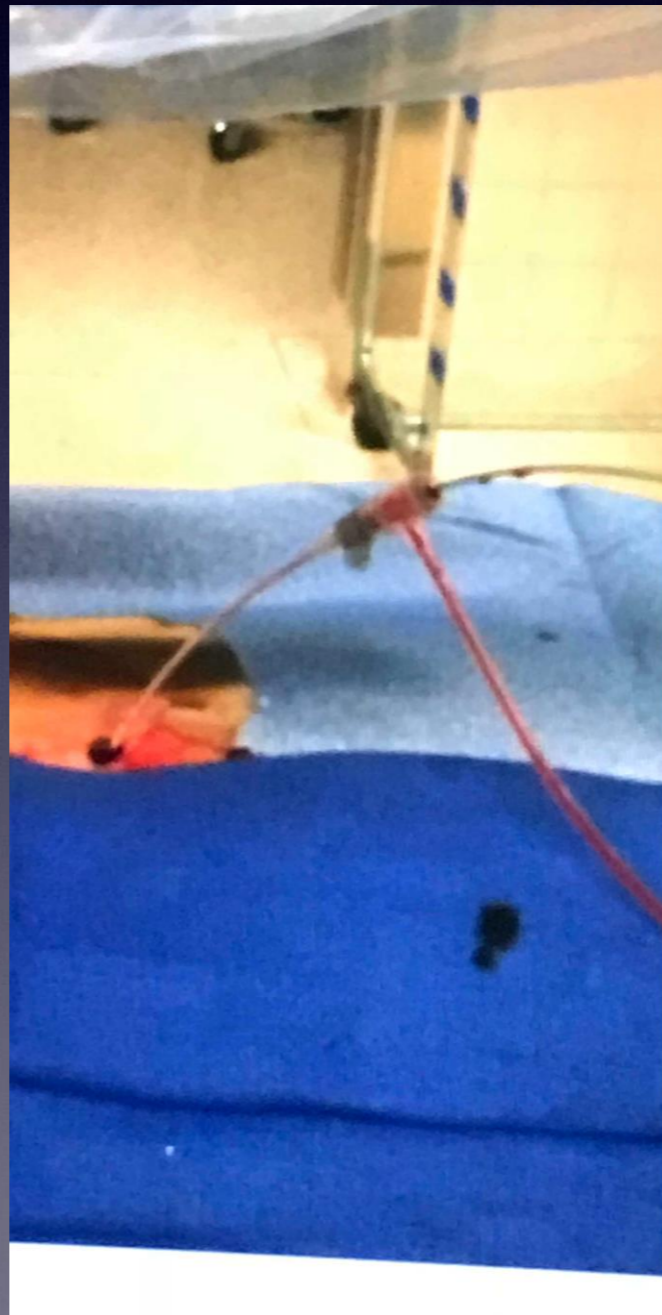
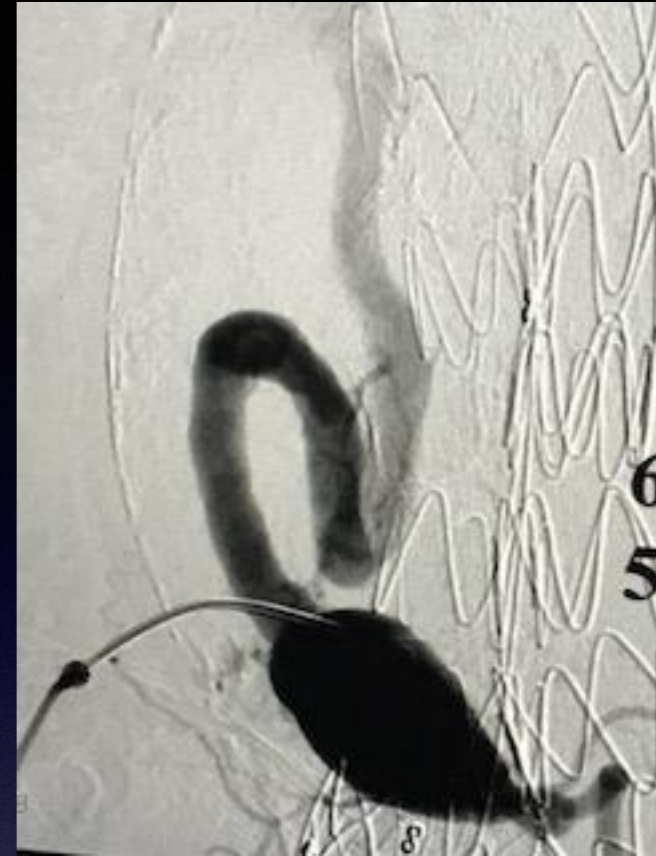
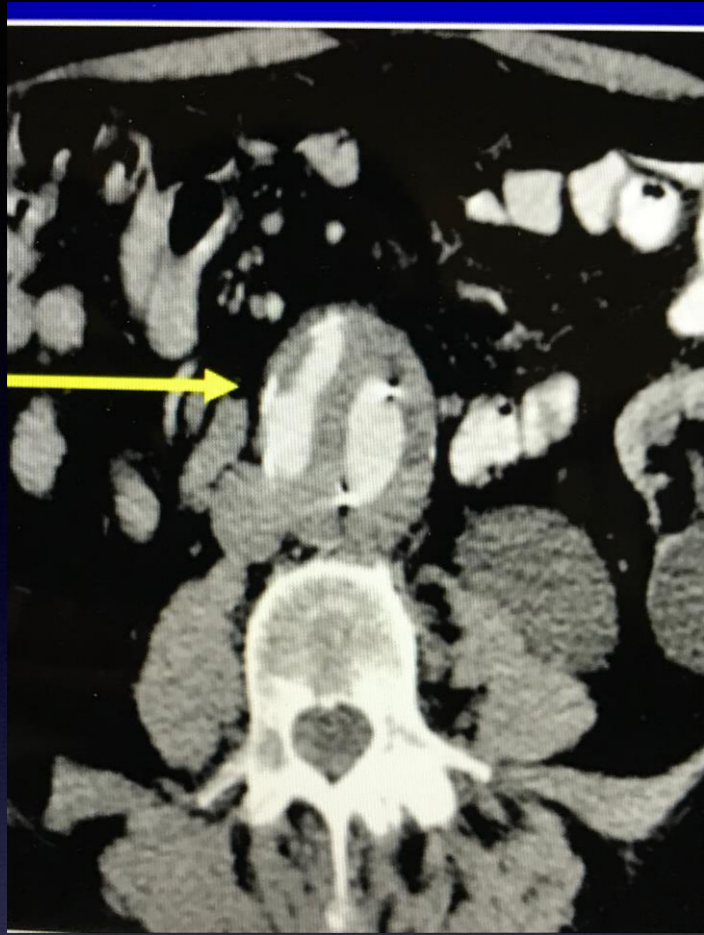
- Trans Arterial (SMA to IMA)
- Sac Puncture
  - Trans Lumbar
  - Trans Abdominal
  - Trans Caval



# SMA



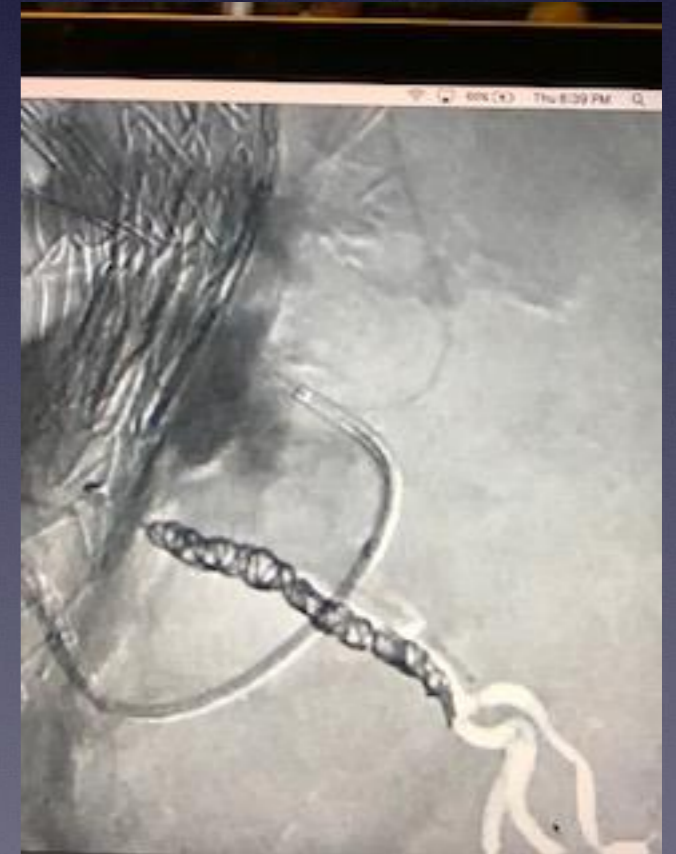
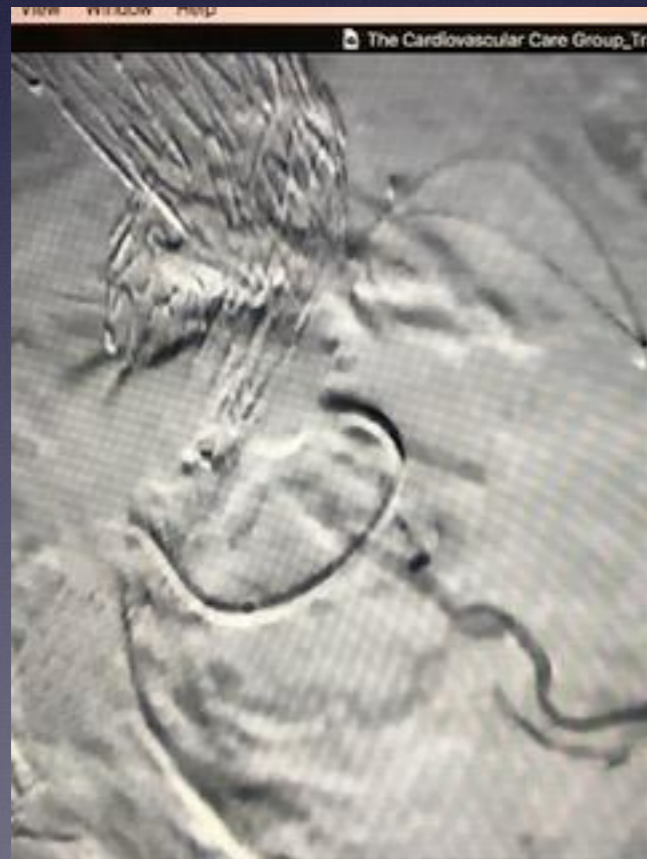
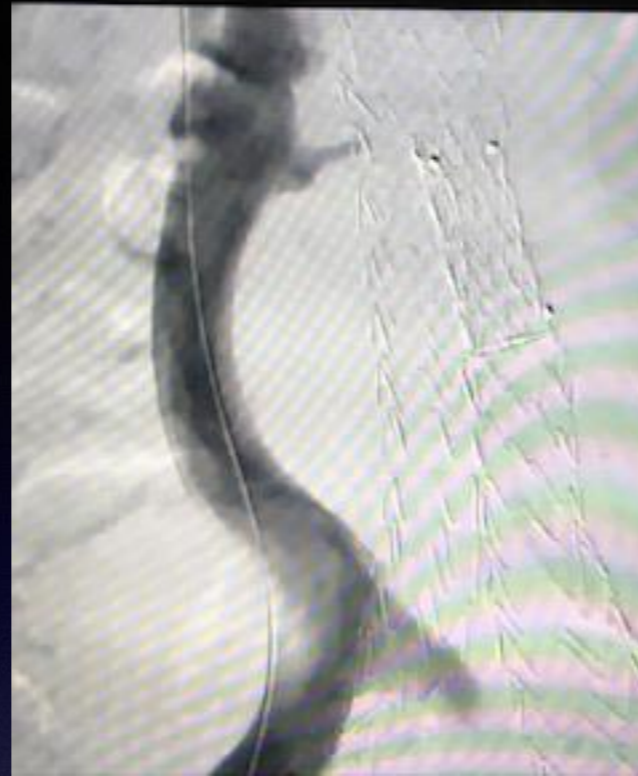
# Trans Lumbar



# Onyx Trans Abdominal



# Trans Caval



# Conclusion

- Imaging and planning are key.
- Keep it simple.
- Always more than one branch.