

# Valve-in-Valve TAVR with Paravalvular Leak Closure in Patient with Aortic Dissection

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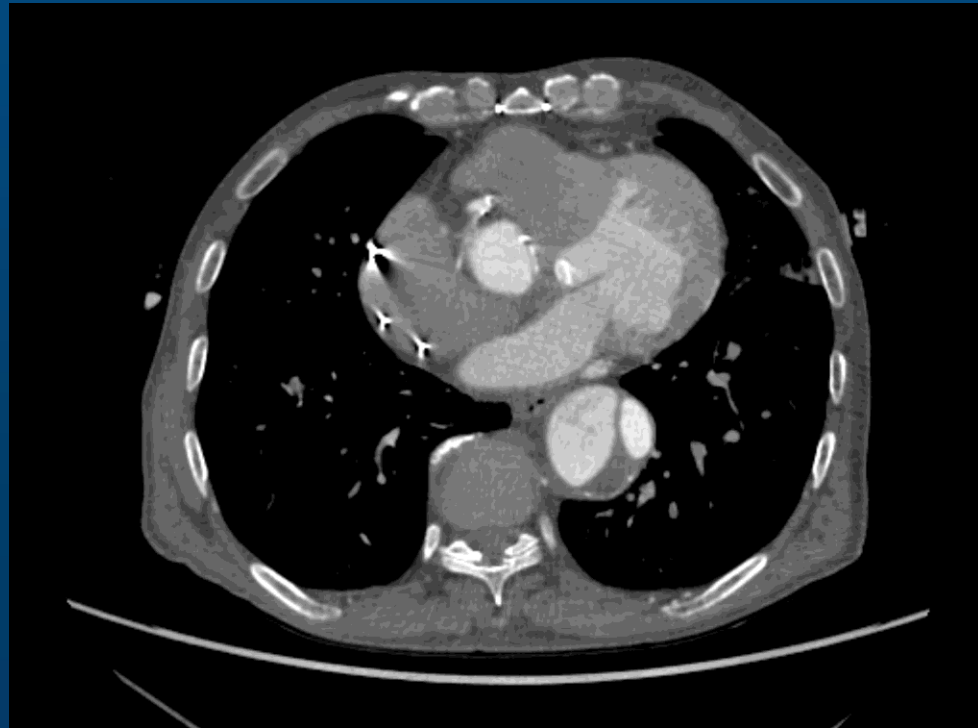
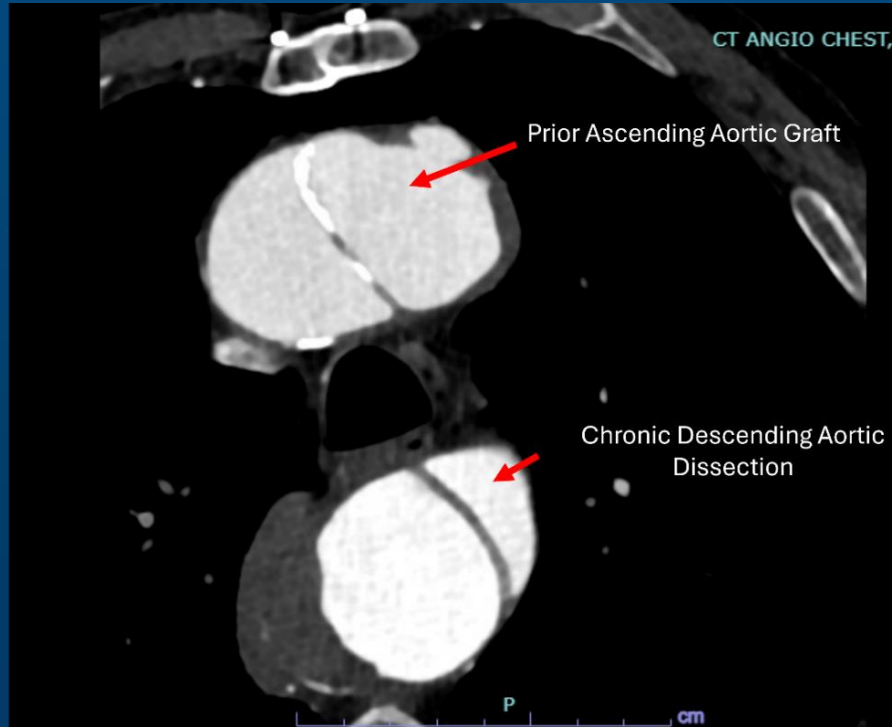
# Disclosure of Relevant Financial Relationships

I, Benjamin Klein, DO NOT have any financial relationships to disclose.

# History

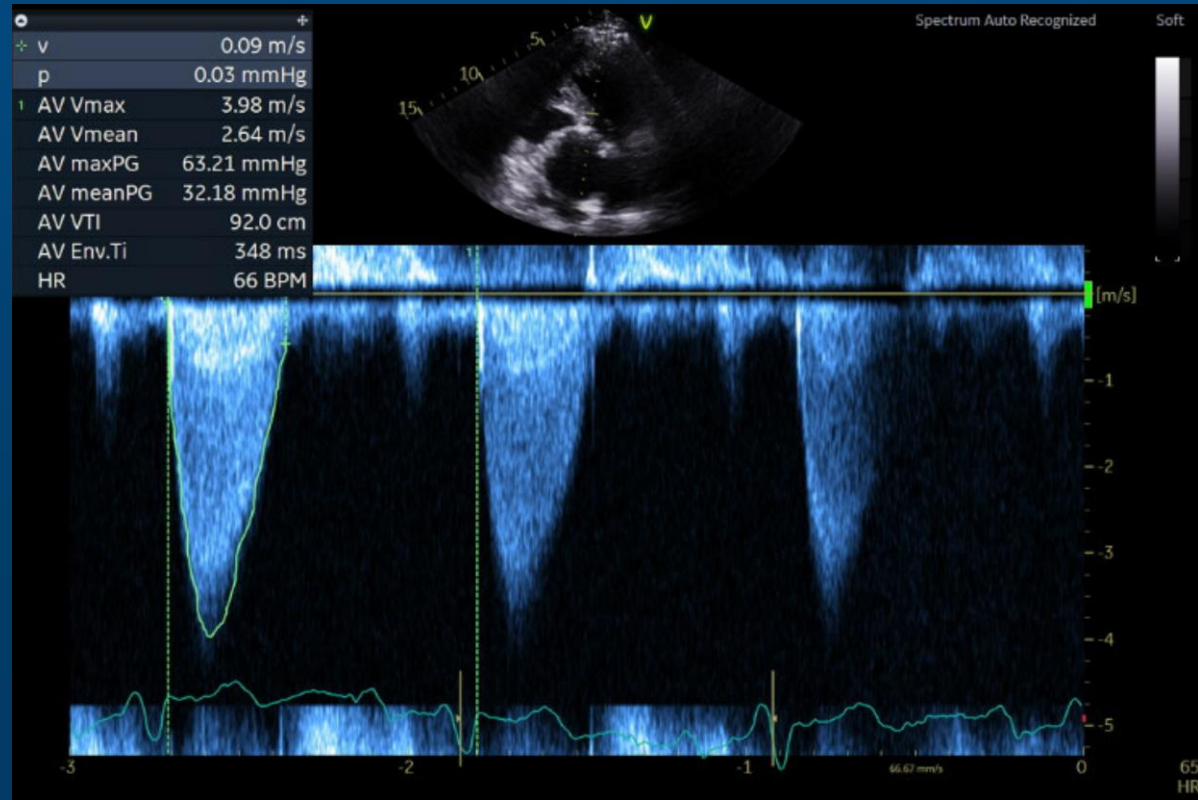
78-year-old male with history of ascending aortic dissection in 2012 s/p emergent ascending and hemi arch graft repair with prosthetic aortic valve (St Jude Epic 21mm) with chronic descending aortic aneurysm with dissection and severe COPD who presents with shortness of breath.

# Diagnostic Testing



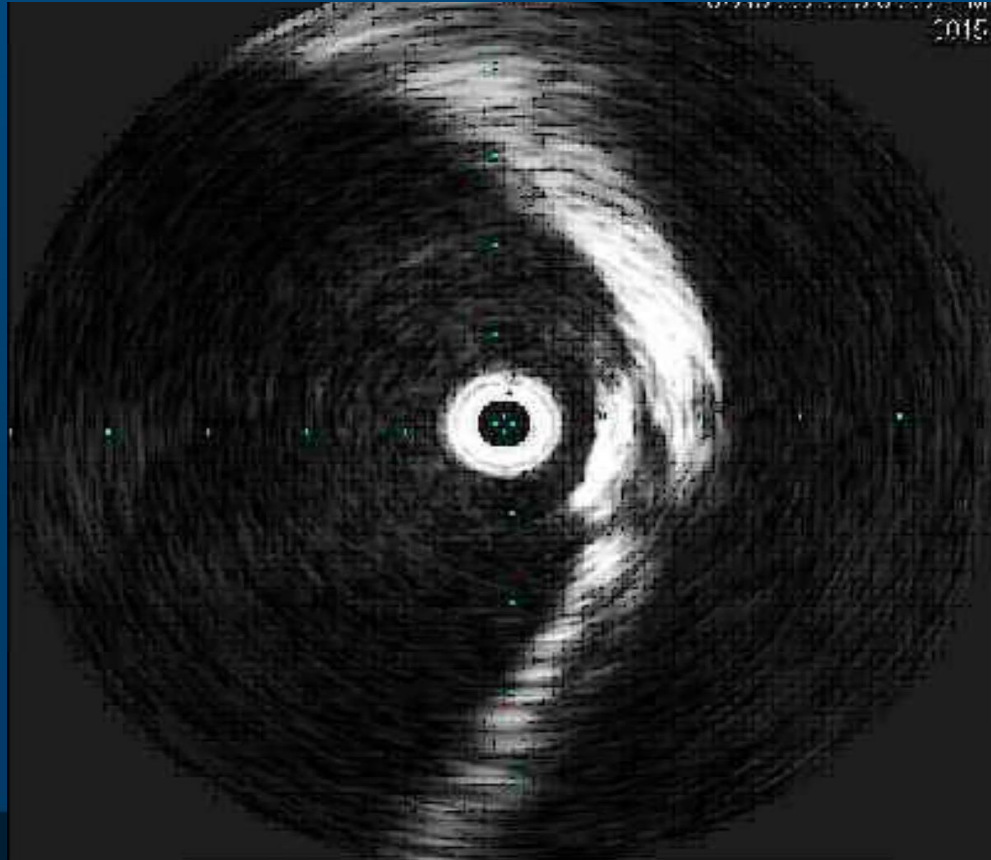
# Diagnostic Testing

- **Echocardiography:** prosthetic aortic valve obstruction with peak/mean gradients of 63/32 mm and  $V_{max} \sim 4$  m/s and EOA of 0.9 cm<sup>2</sup>



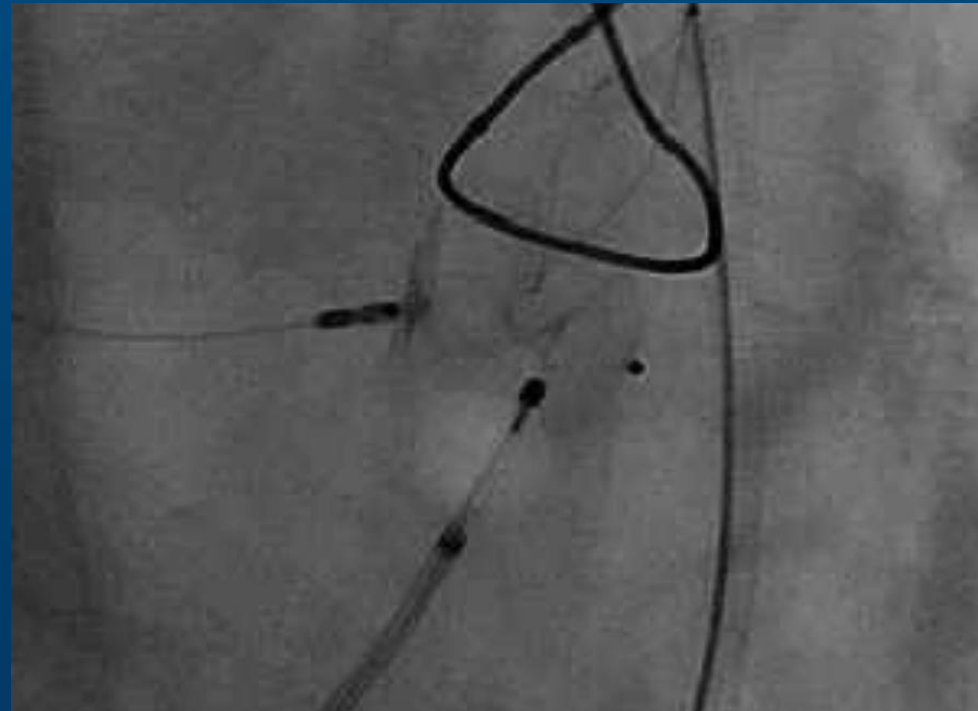
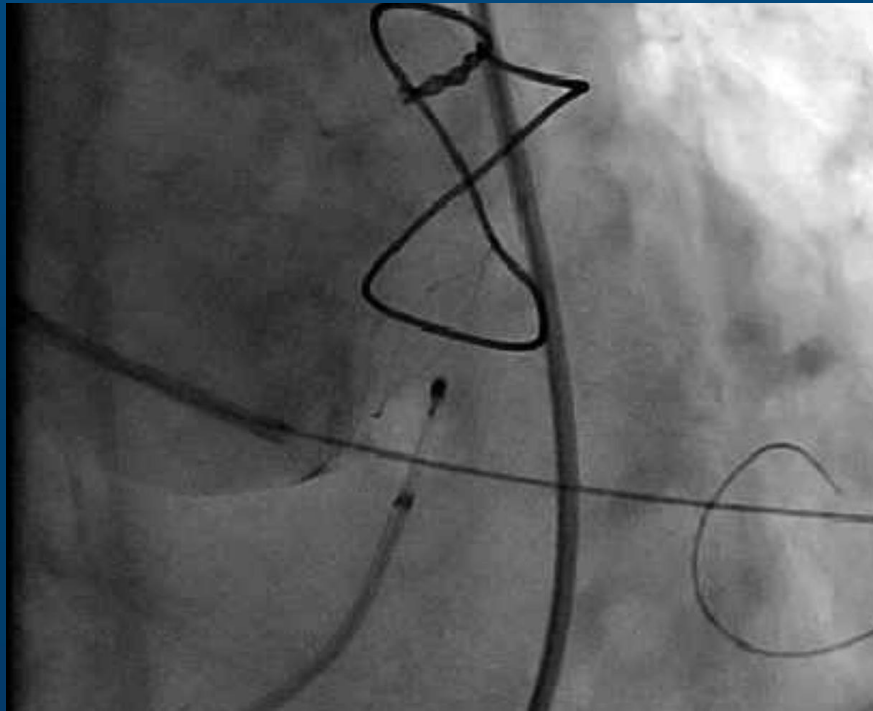
# Procedure

IVUS imaging of  
aortic dissection



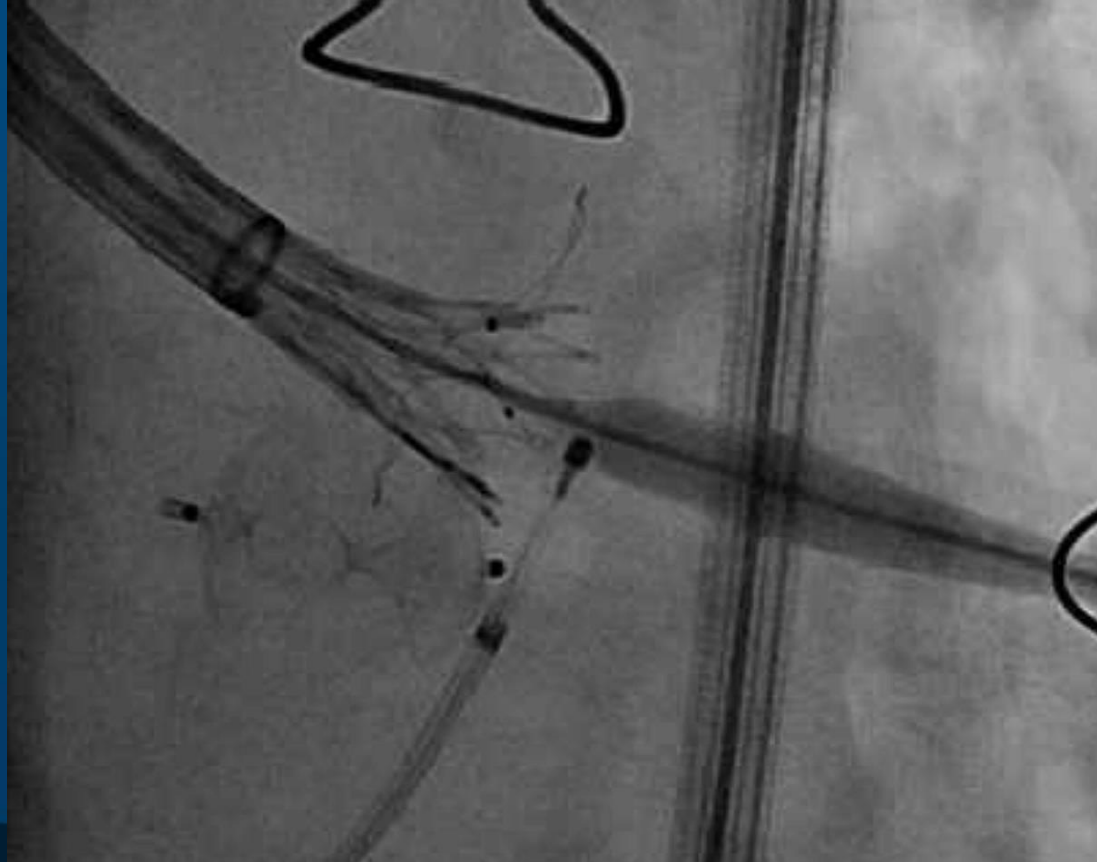


# Procedure



# Procedure

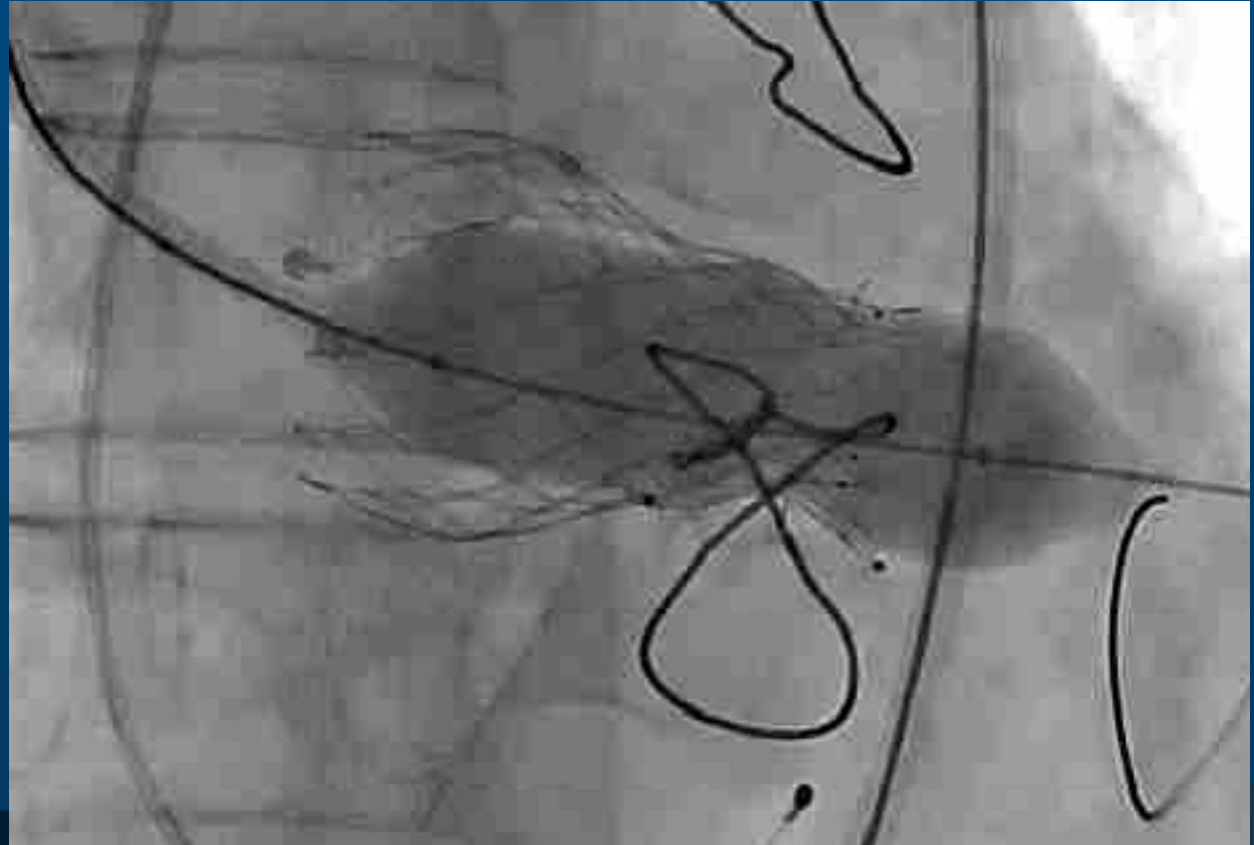
Deployment of  
Medtronic  
Corevalve  
Evolute-Fx 23mm





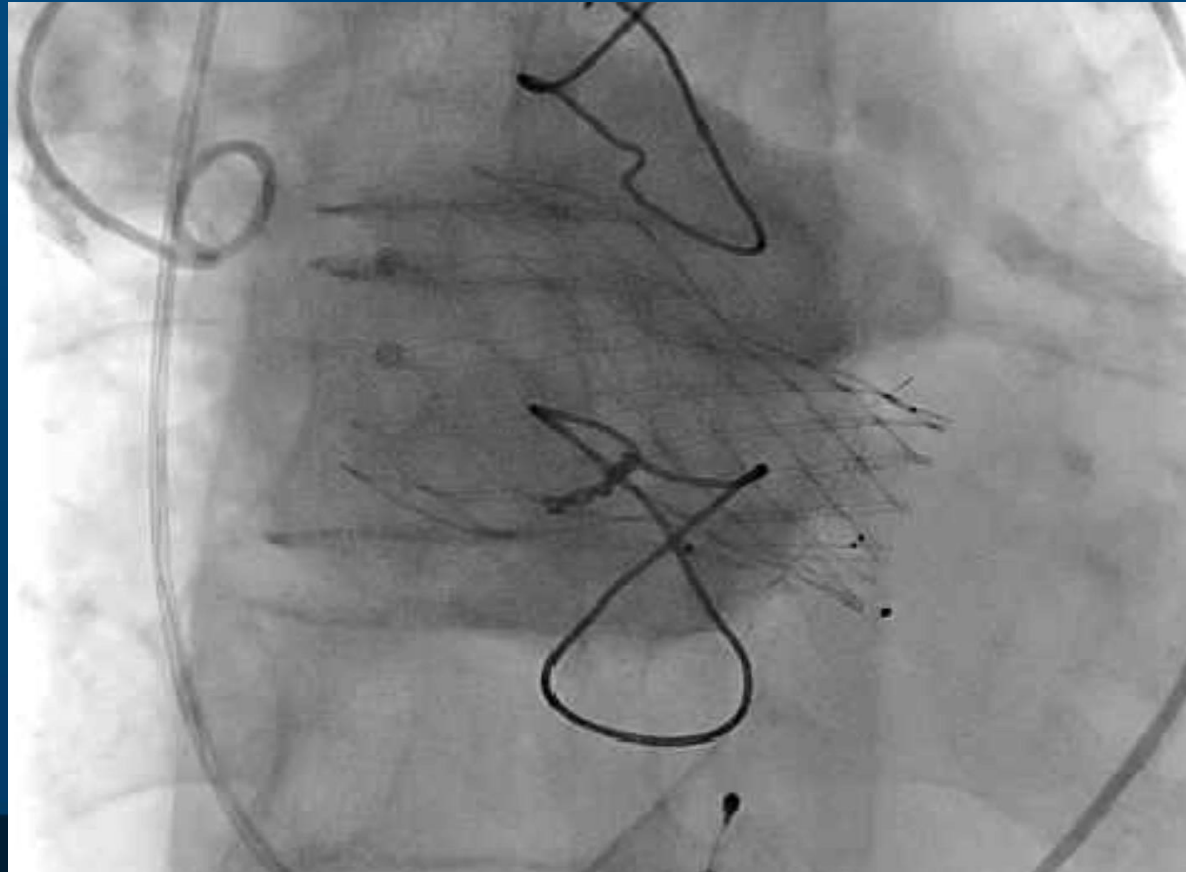
# Procedure

Fracking with  
20 mm True  
Balloon



# Procedure

Final result.  
No procedural  
complications.



# Follow up and Final Thoughts

- Patient continues to do well
- **Echocardiogram** four months post-procedure. Peak/mean gradients of **17/11 mm** (from 63/22), **V max 2.1 m/s** (from 4), **EOA 1.7 cm<sup>2</sup>** (from 0.9) with **no AI or PVL**
- Challenging cases involving complex aortopathies and prosthetic valves can be overcome by careful procedural planning