

TAVR and the Left Main Challenge: Risk Stratification and Bailout Strategy

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TRANSCATHETER
CARDIOVASCULAR
THERAPEUTICS®



Disclosure of Relevant Financial Relationships

I, [Enhua Wang] DO NOT have any financial relationships to disclose.

Case Presentation: 79-year-old Male

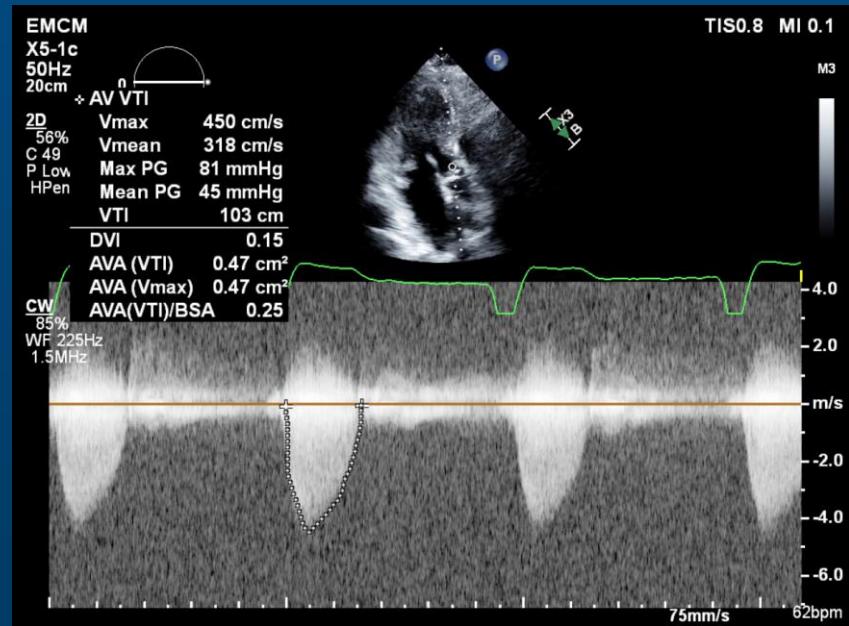
Reason for Admission:

- Worsening dyspnea on exertion x 2 weeks

Past Medical History:

- Non-obstructive CAD
- Paroxysmal atrial fibrillation
- Complete heart block s/p permanent pacemaker
- CKD3, NIDDM, COPD, OSA
- Chronic normocytic anemia
- Carotid stenosis s/p R ICA stent in 2023
- PAD s/p LLE stent

Transthoracic Echocardiography

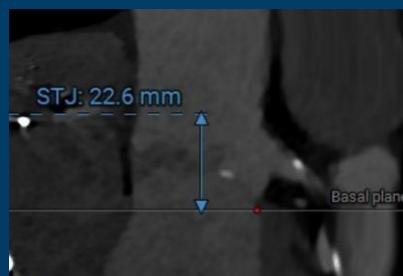
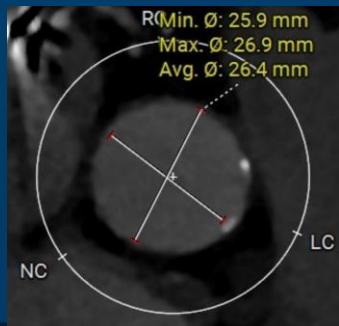
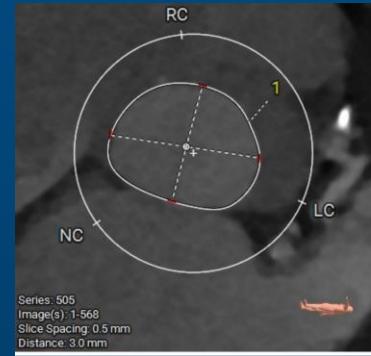
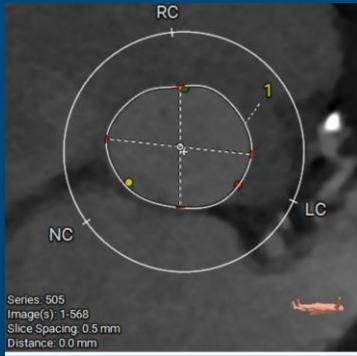
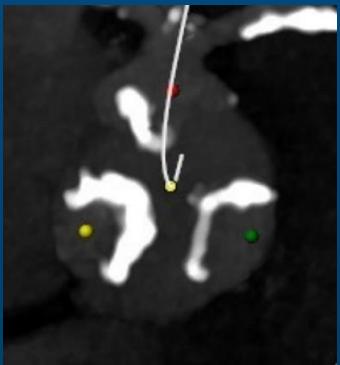


- LVEF 55%
- Peak Velocity: 4.5 m/s

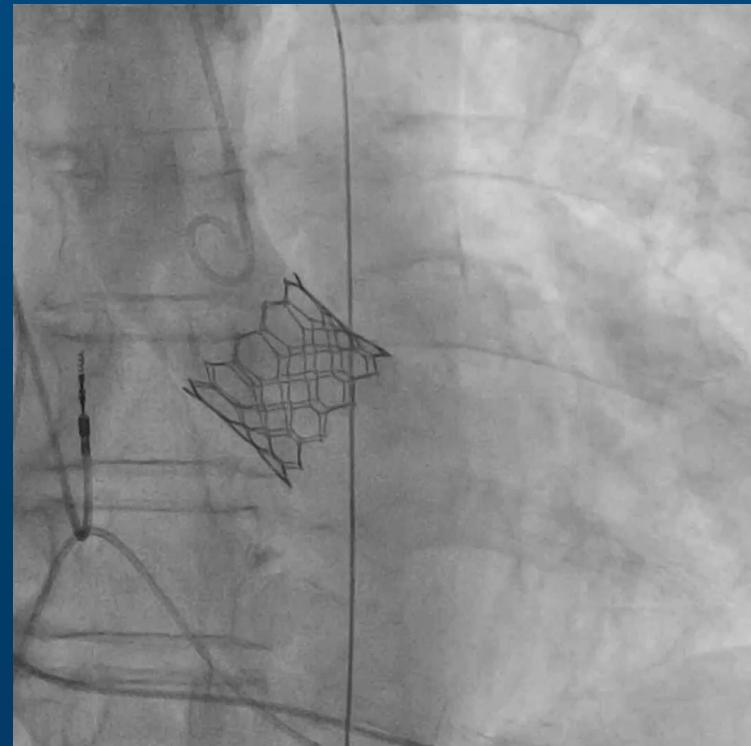
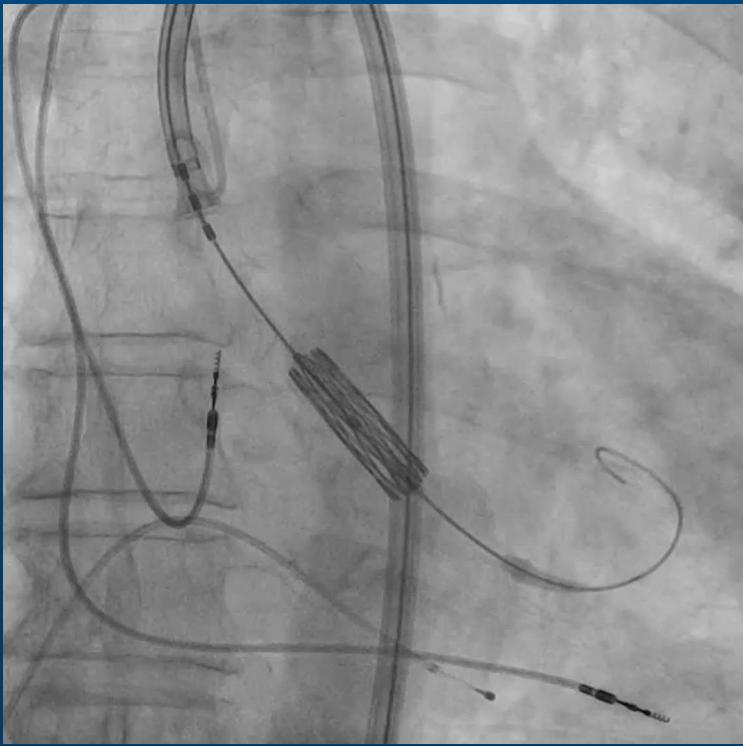
- Mean gradient: 45 mmHg
- Calculated AVA: 0.47 cm²

STS Score: 9%

ECG-Gated Cardiac CT

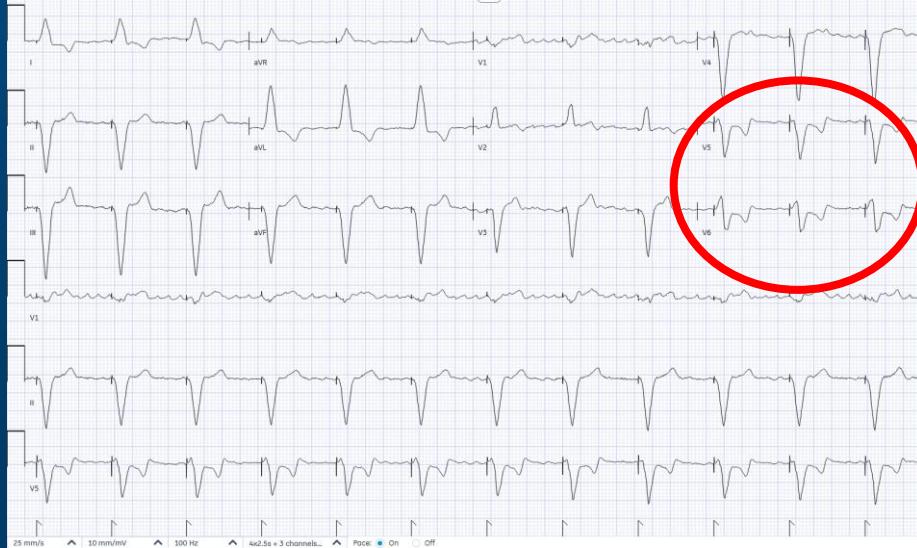


TAVR Implantation

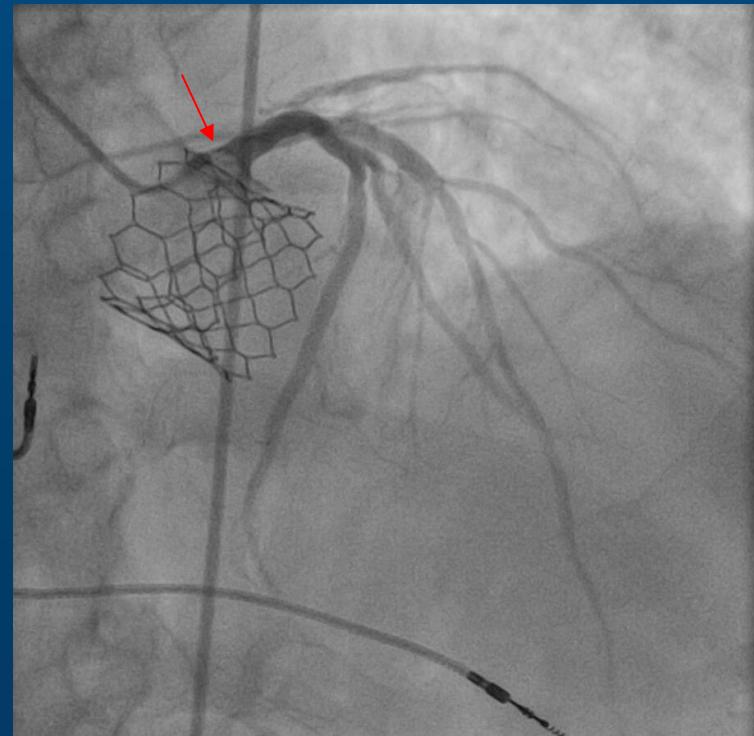
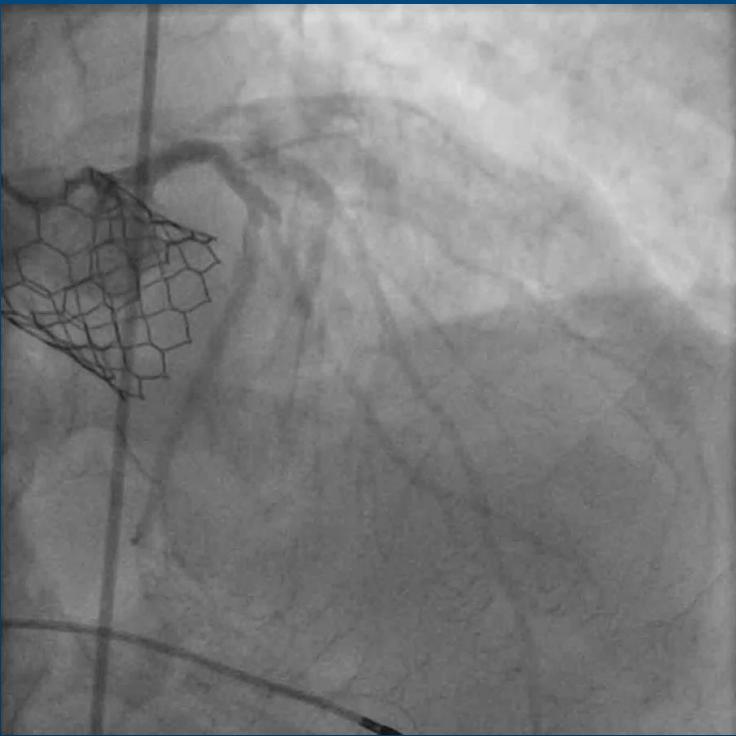


Post-TAVR Event

- Intermittent chest pain
 - High sensitivity Troponin I **23,359 >> 24714 >> 32,113 ng/L** in 6 hours

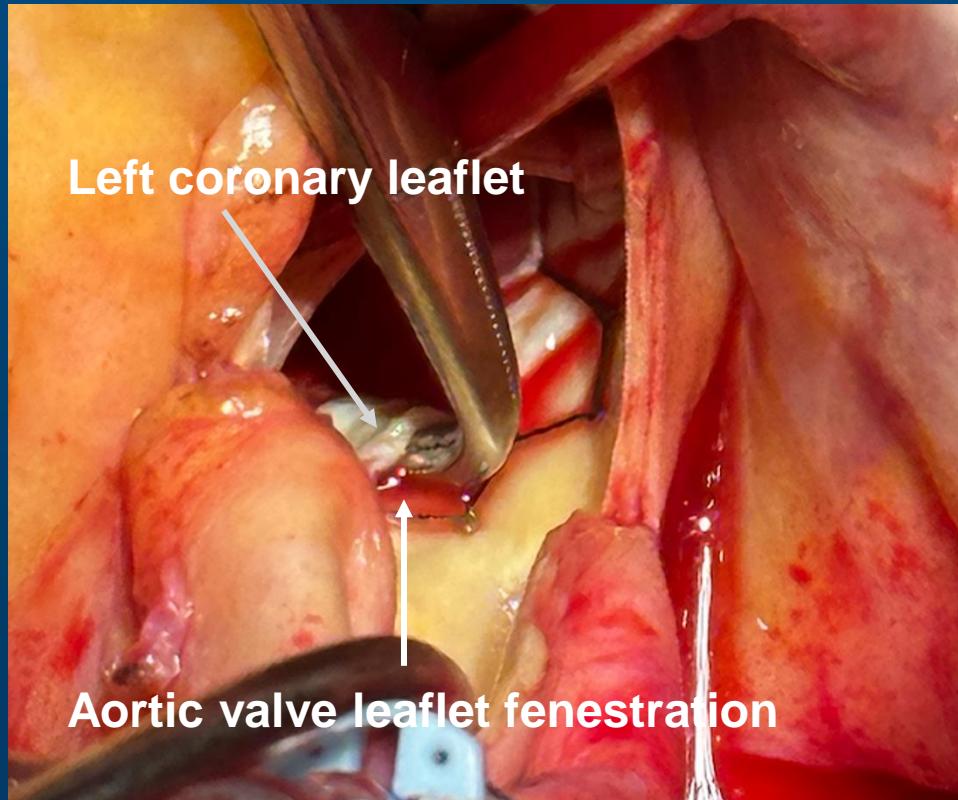


Coronary Angiography



Emergent SAVR

- Native aortic leaflets occluding left main coronary orifice. Flow only through a small portion of the leaflet from the fenestration at the commissure
- Emergent TAVR explantation
- SAVR was performed with 25 mm INSPIRIS valve
- Physio Tricuspid Annuloplasty Ring (for severe TR from ICE)



Take-home Message

- Prevention of coronary artery obstruction during TAVR is critical and depends on meticulous pre-procedural CT assessment.
- Prophylactic strategies such as the BASILICA procedure or coronary protection techniques may be employed.
- Early recognition and prompt intervention are essential for optimal outcomes.