

TAVR Off Track: Life-saving Rescue of an embolized, inverted valve in a hostile aortic arch anatomy

A Challenging Case of a Fully Deployed Embolized TAVR Valve

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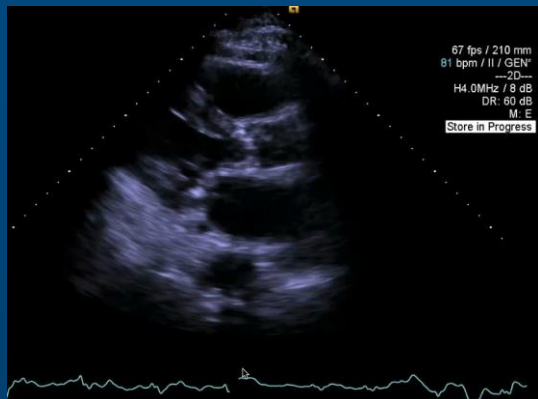
Disclosure of Relevant Financial Relationships

I, Long-Co Nguyen, DO NOT have any financial relationships to disclose.

Case Presentation

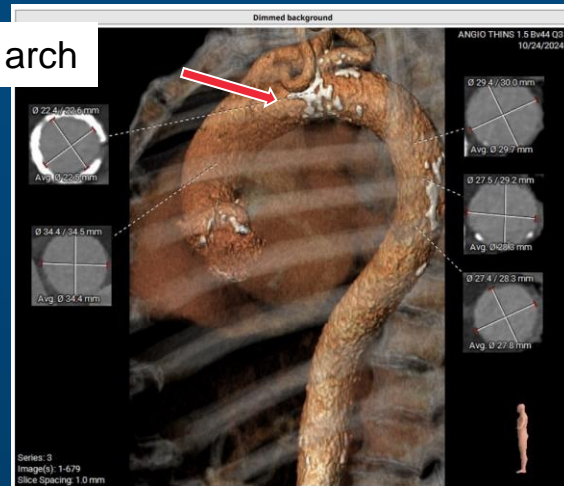
- 86 year-old male presenting to valve clinic with severe symptomatic AS.
- HPI: Progressive DOE (NYHA III) with recurrent hospitalizations for ADHF.
- Past Medical History: DM, HL, HTN, prior CVA, HFpEF, pulmonary HTN, paroxysmal atrial fibrillation, CKD stage 3a, COPD on home O2, OSA, morbid obesity (BMI 45)

Pre-procedural Imaging and Diagnostic Studies

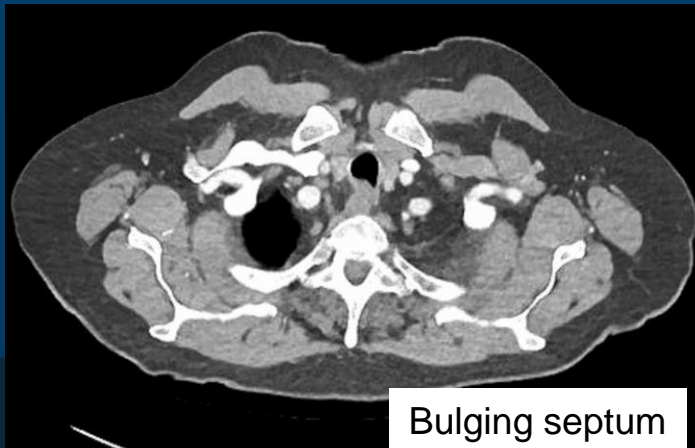
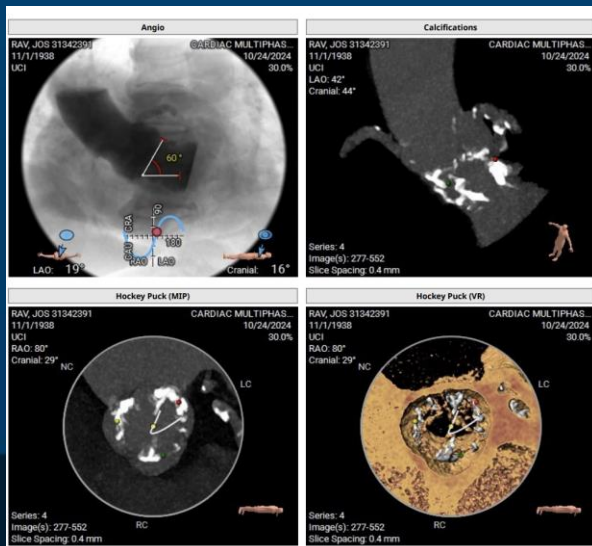


Calcified 22 mm narrowing at aortic arch

Annular area: 487 (3Mensio) by CT. Diameter = 23.4 x 26.8 Annular calcification: severe Device: SAPIEN 3 Ultra Resilia, 26 mm



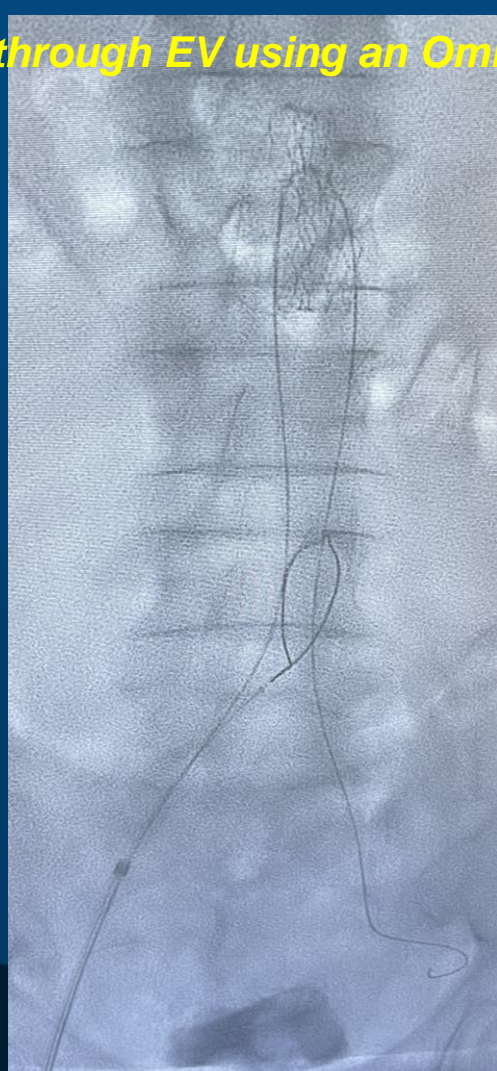
AVA index 0.48 cm²/m²,
Vmax 4.22 m/s, mean
gradient 41 mm Hg;
hyperdynamic LV, LVH,
EF > 70% Aortic valve
calcium score 3050

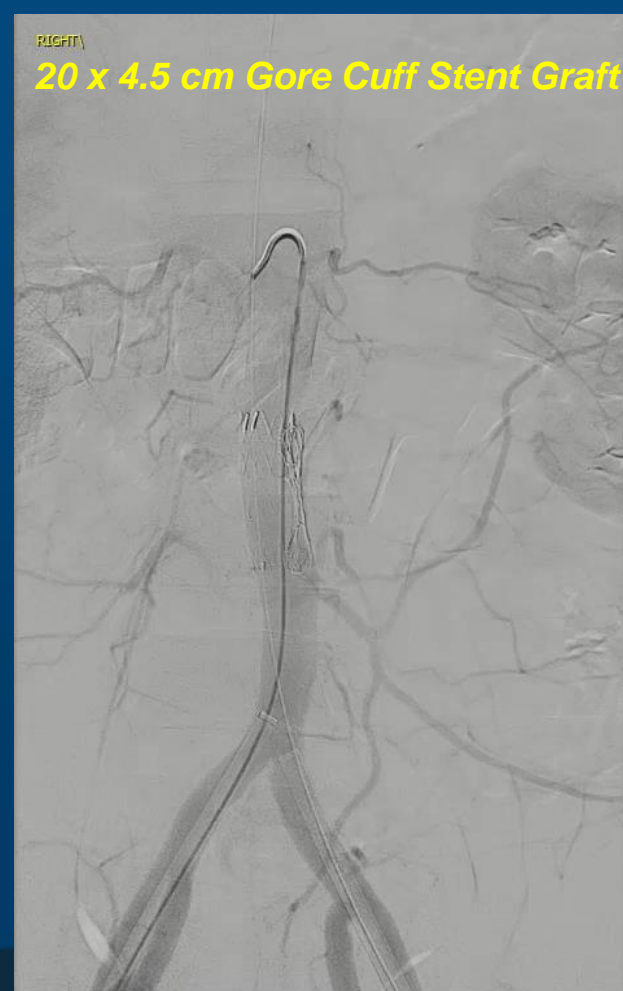
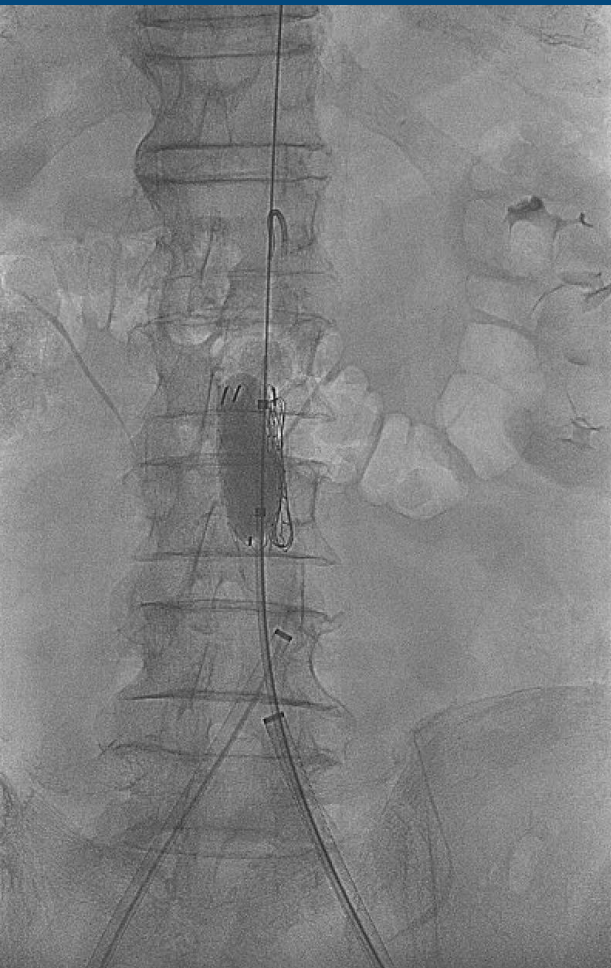


Procedure

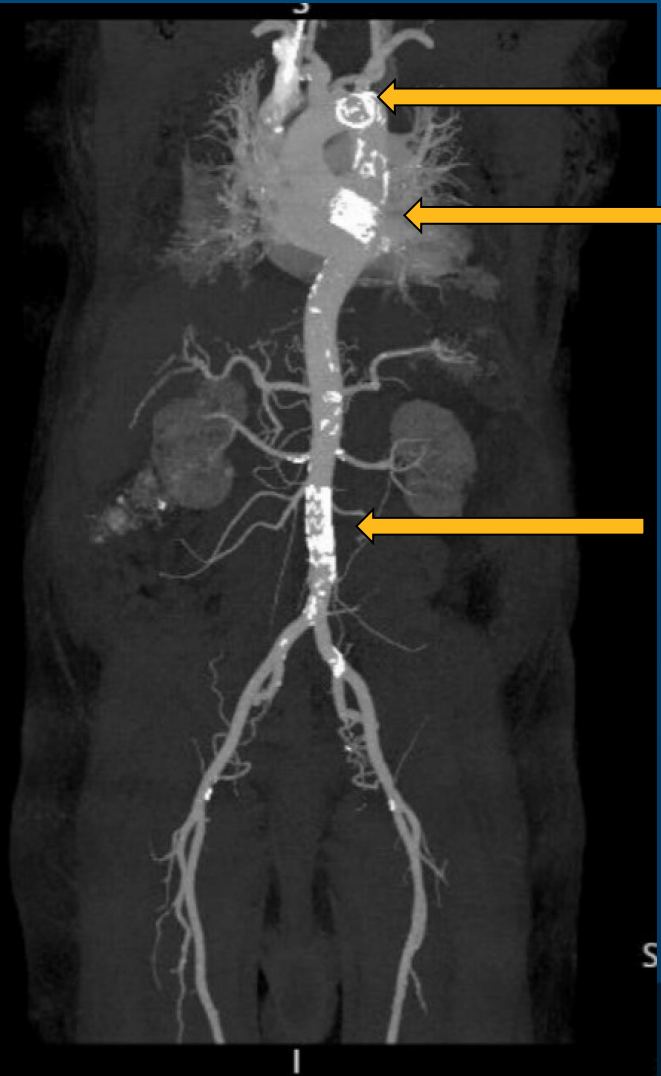


Glide wire passed through EV using an Omni Flush Catheter and snared with 6 Fr Snare





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Calcified narrowing

***26 mm SAPIEN 3 Ultra
Resilia valve***

***20 x 4.5 cm Gore Cuff
Stent Graft fully
excluding the
embolized TAVR
valve.***



Summary

- VE is a rare but devastating complication.
- Identify patient risk factors.
- Accurate guidewire positioning is crucial.
- In case of VE, can reposition and fully deploy it into ascending or descending aorta. Coaxial guidewire position must be maintained to avoid valve inversion and consequent flow obstruction.
- If valve inversion occurs, bailout strategies include balloon crushing, embolization to the abdominal aorta, and exclusion with stent grafts.

Embolized THV During TAVR

