Diagnostic Dilemma: Unveiled Silent Masses in Severe Aortic Stenosis

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Disclosure of Relevant Financial Relationships

- I, Kevin Kozakowski DO NOT have any financial relationships to disclose.

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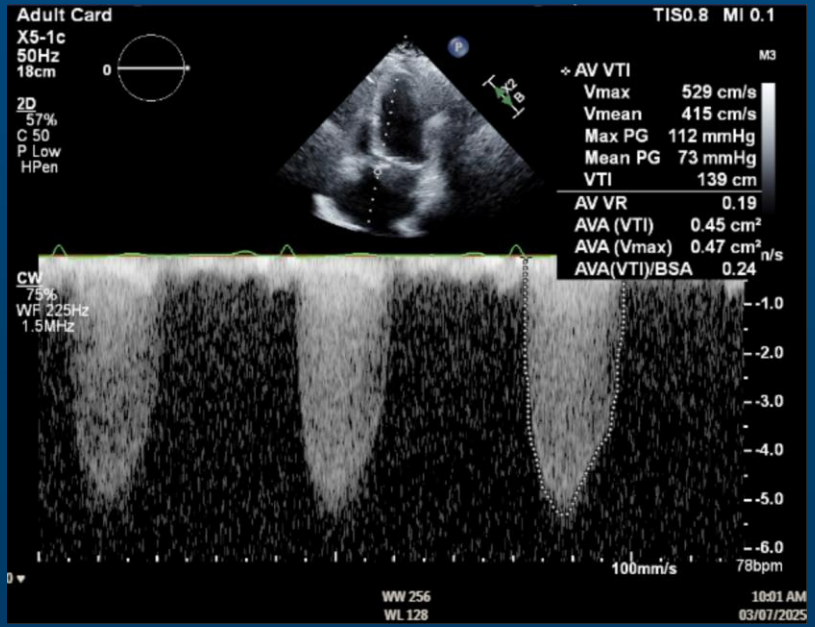
Introduction

- TAVR provides a less invasive approach and lower rates of many major surgical complications than SAVR while providing comparable benefits, at least to 5 years, in most patients
- However, TAVR is not always a treatment option in patients with complicating medical diagnoses
- This case highlights one circumstance in which the plan for a TAVR needed to be reconsidered after new diagnoses were unveiled

Forrest J et al. JACC. 2025 Apr, 85 (15) 1523–1532.

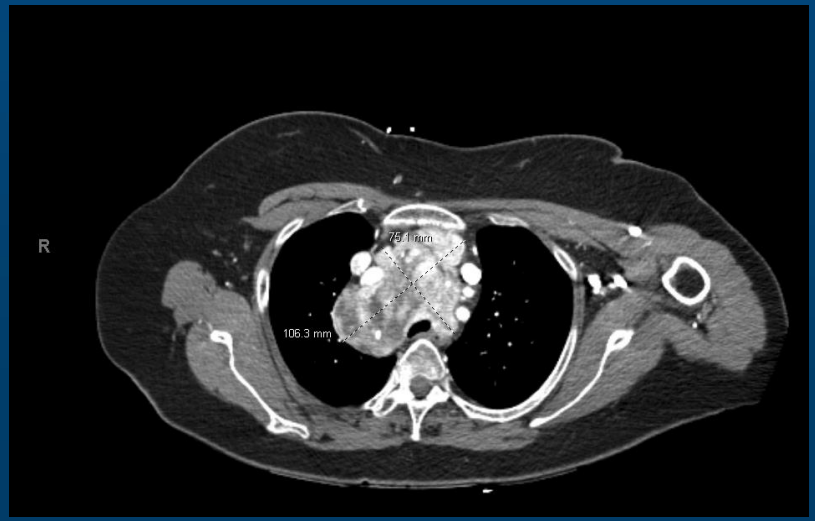
History

- 75-year-old female with hypertension and hyperlipidemia developed worsening dyspnea on exertion and was found to have very severe aortic stenosis (AS) by transthoracic echocardiogram (TTE). She was referred to interventional cardiology for TAVR consultation.



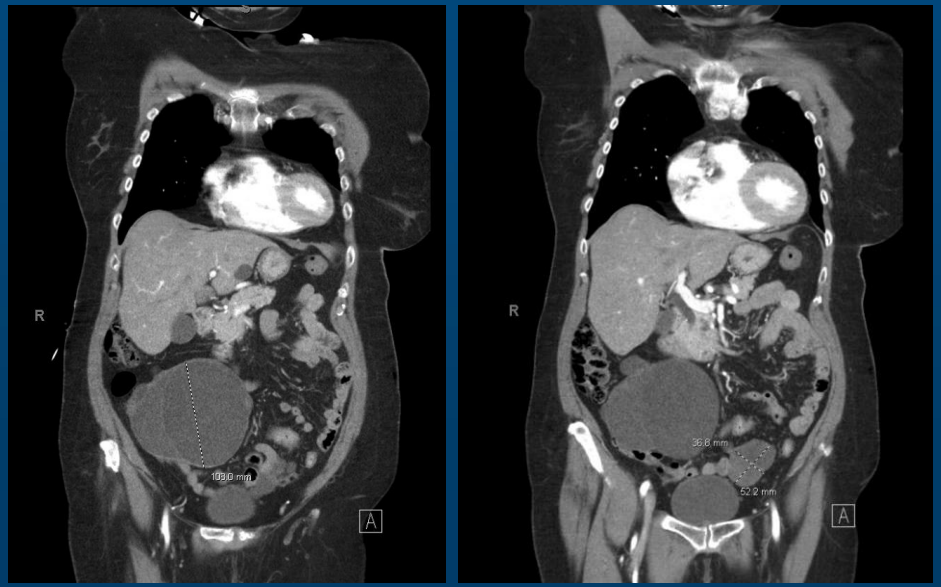
Workup

- This patient was evaluated initially for TAVR, but was found to have a heterogeneously enhancing anterior/superior *mediastinal mass* measuring 10.8 x 7.5 x 10.6cm.
- Other than her presenting complaint of dyspnea on exertion the patient did not report any additional symptoms.



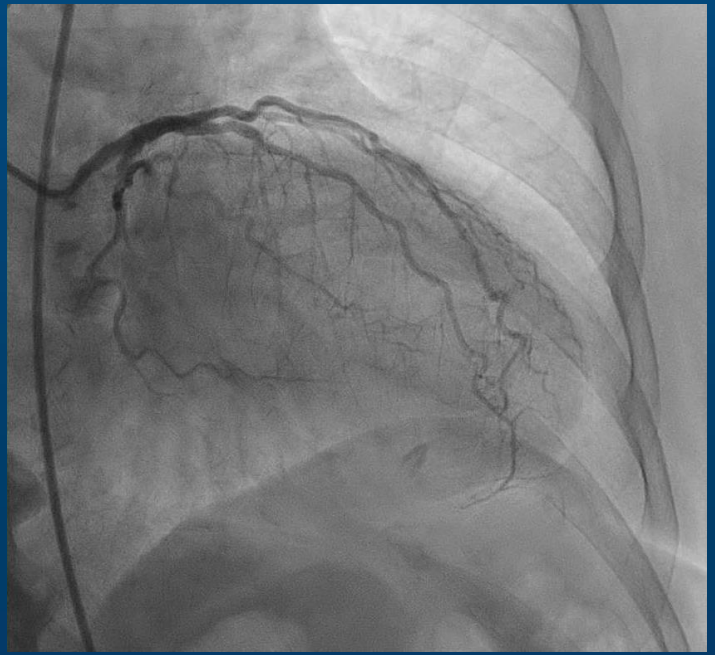
Workup

- The patient was also incidentally found to have *bilateral adnexal cystic lesions* measuring up to 11.8 cm.
- Gyn-Onc were consulted and after further workup with CA-125 and pelvic ultrasound determined that these masses were of low suspicion for malignancy and that aortic valve replacement should be addressed prior to further gynecologic evaluation or eventual treatment.



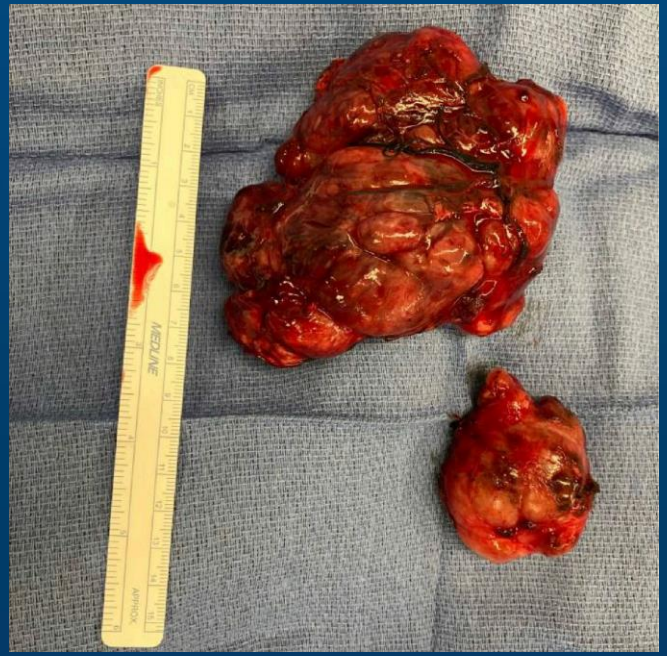
Workup

- Cardiac catheterization was significant only for minimal non-obstructive disease of the right coronary artery though, due to severe AS, the AV was not crossed into the left ventricle.



Procedure

- After multidisciplinary discussion, consensus was for open resection of the mass with SAVR.
- ENT excised the *mediastinal mass* which was sent to pathology for further characterization.
- CT surgery replaced a functionally bicuspid aortic valve with heavy leaflet and annular calcium with a 23mm bioprosthetic valve.
- It functioned well without perivalvular leak and had a mean LVOT gradient of 3mmHg on postpump echo



Conclusion

- Pathology report of the patient's mediastinal mass stated, "multinodular goiter with degenerative changes including fibrosis and dystrophic calcification, negative for malignancy".
- The patient was discharged with plan for eventual resection of adnexal masses
- This case emphasizes the importance of multidisciplinary discussion and consideration of other treatment modalities when faced with unexpected discoveries during workup for aortic valve replacement