



Falling down the rabbit hole: a rare case of cardiogenic shock after TAVR

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- I do not have any potential conflicts of interest to declare

A 90-year-old female patient known for concentric left ventricular hypertrophy and moderate aortic stenosis in follow-up from 2012

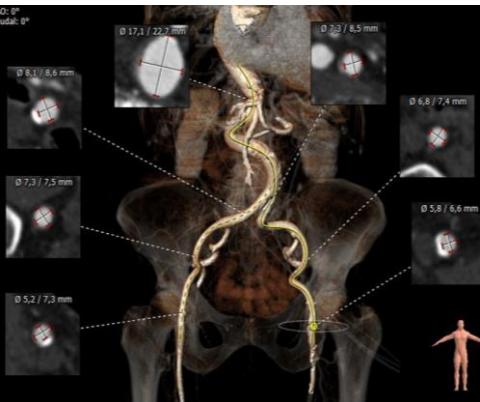
- In November 2020: atypical angina pectoris and dyspnea for mild effort

TTE

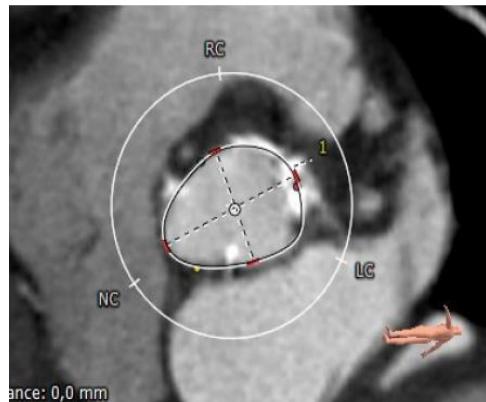


mean gradient 45 mmHg, aortic valve area 0.6 cm²

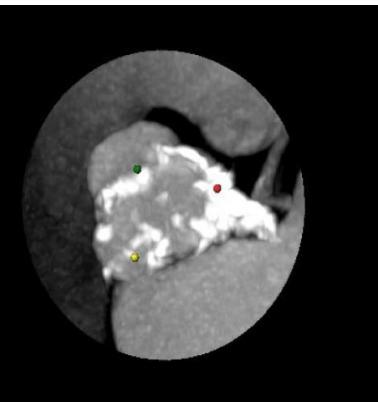
CT scan



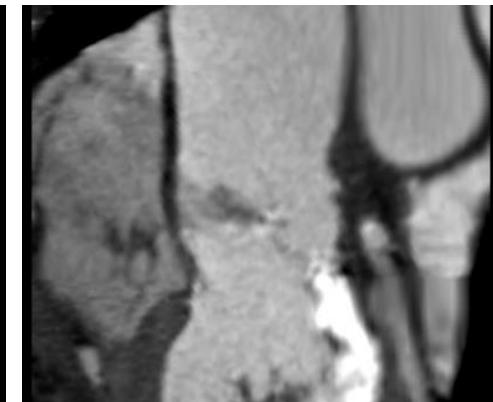
Vascular accesses



Perimeter 84 mm



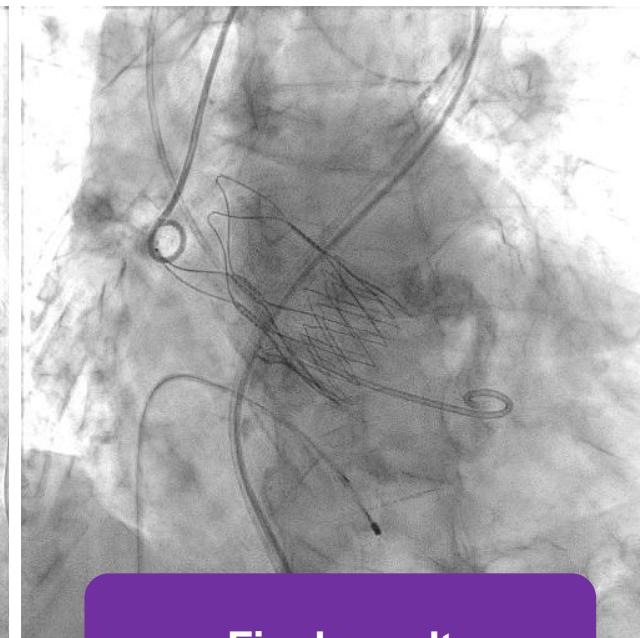
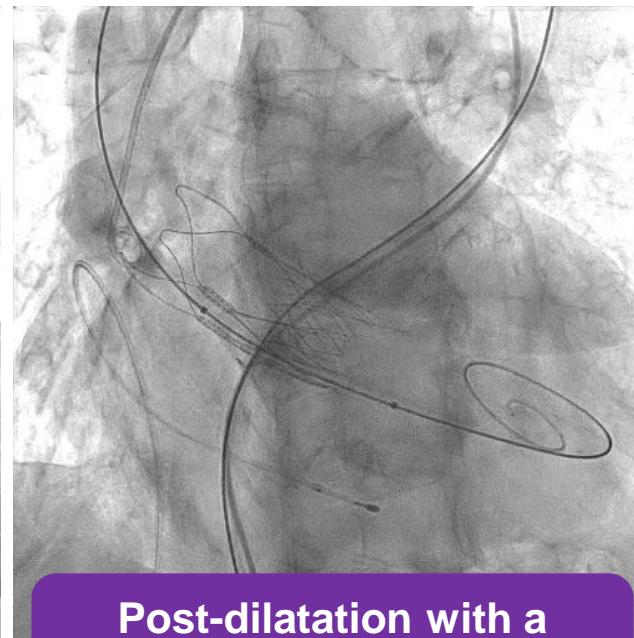
Severe annular calcification



Calcium at LVOT level

Society of Thoracic Surgeons score: 7.7%

TAVR with Acurate Neo 2 size L



Residual more than mild paravalvular leak

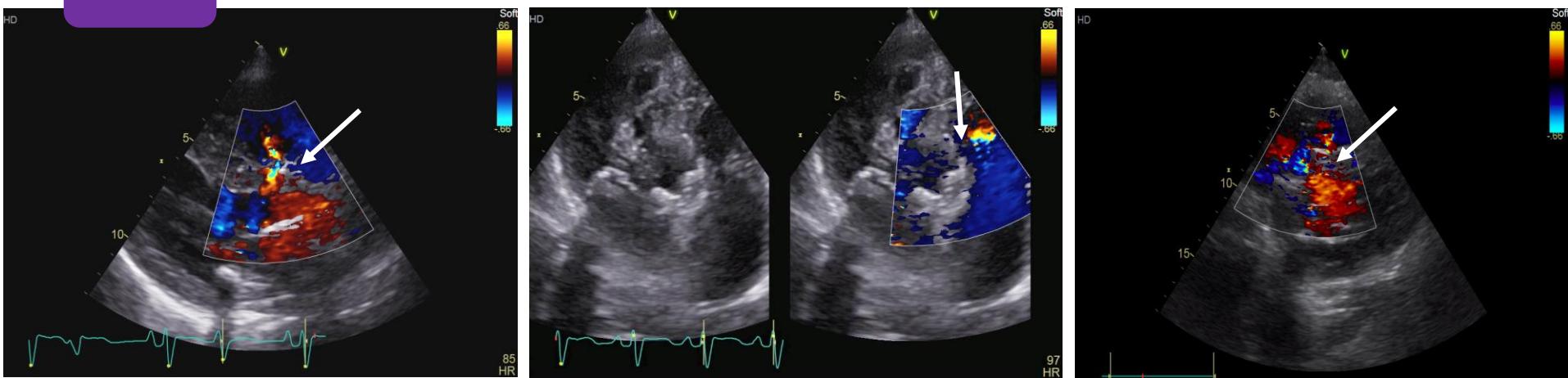
Post-dilatation with a 25 mm Valver balloon

Final result

Intensive Care Unit

Post-operative day 1: development of left bundle branch block and hemodynamic instability requiring dobutamine and norepinephrine infusions

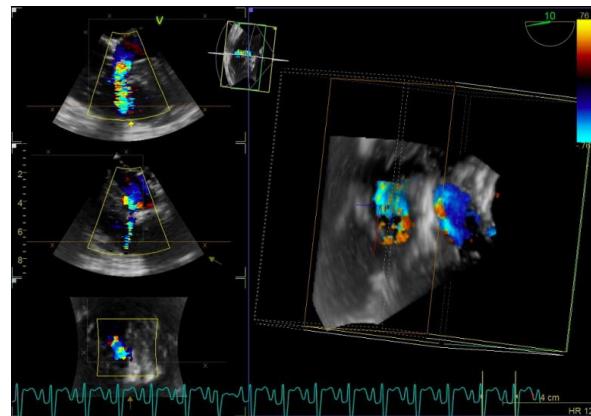
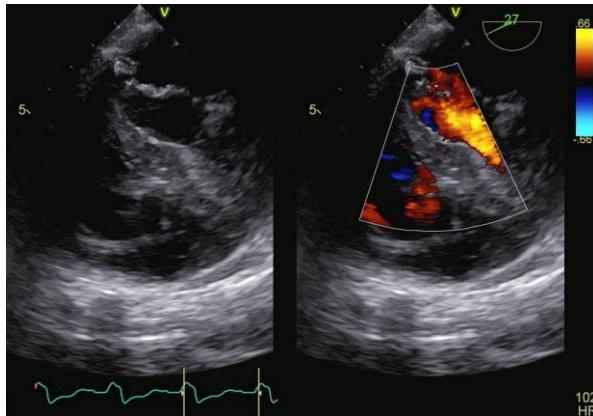
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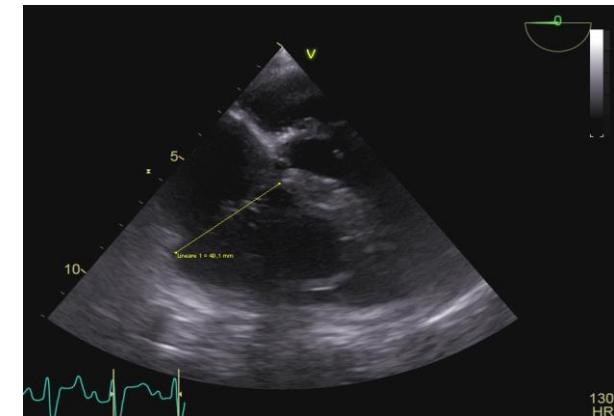
Appearance of peri-membranous VSD with left-to-right shunt

Diagnostic imaging

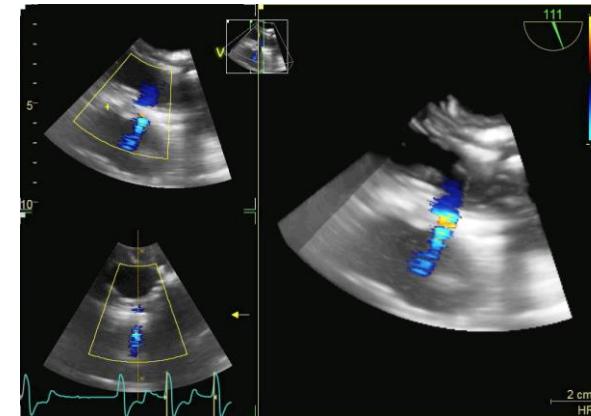
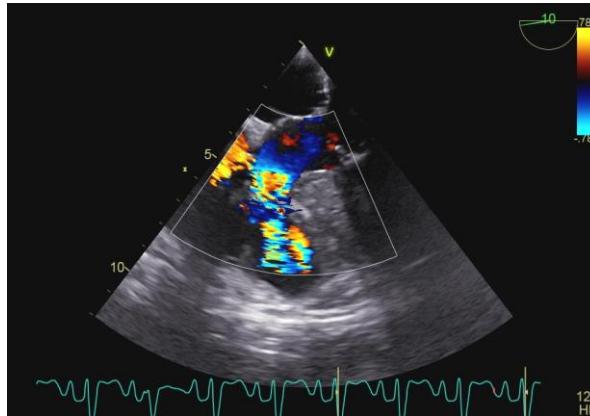
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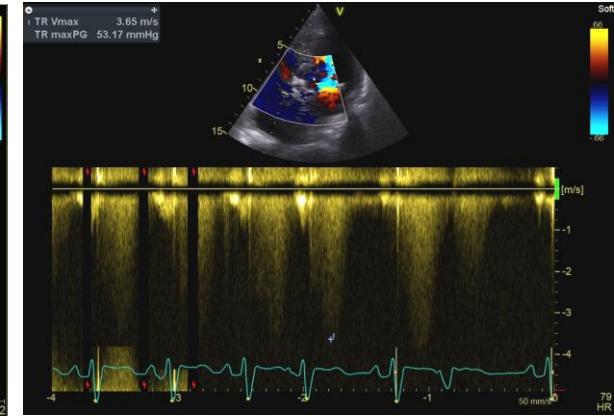
Acute right ventricle dilatation



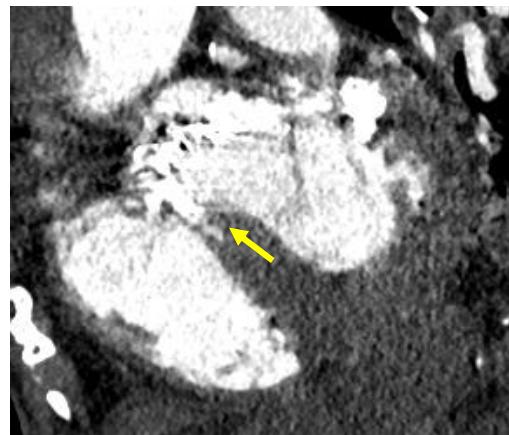
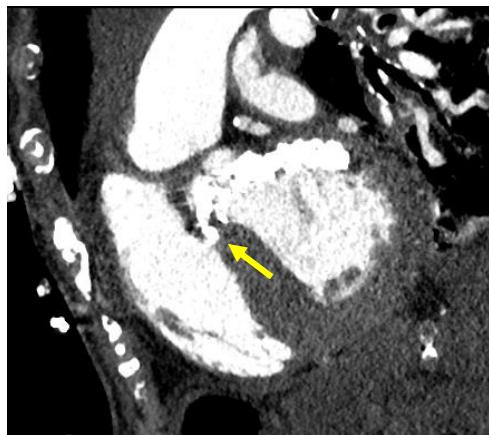
VSD-derived left-to-right shunt



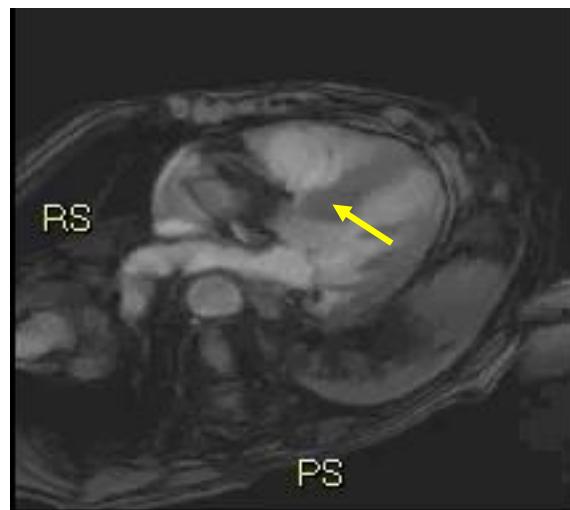
Pulmonary hypertension



CT scan and cardiac MRI confirmed the diagnosis of peri-membranous VSD

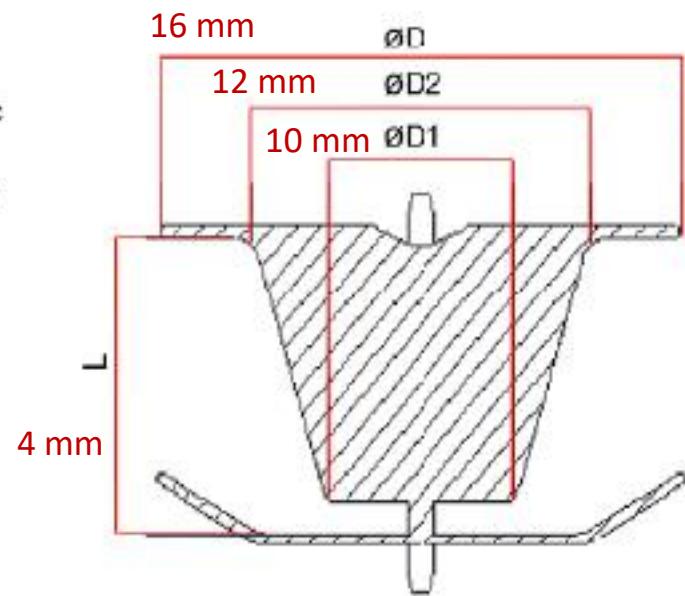
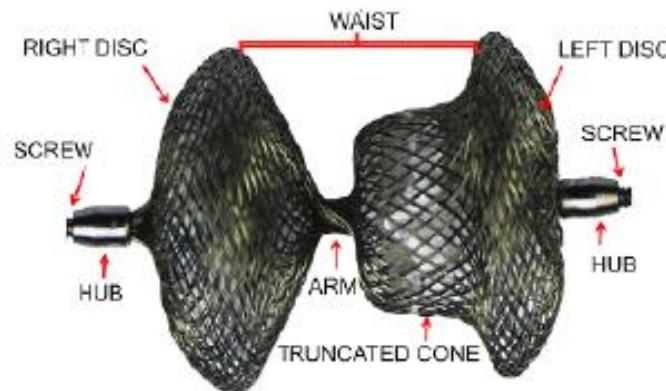


VSD dimension:
9 x 10 mm



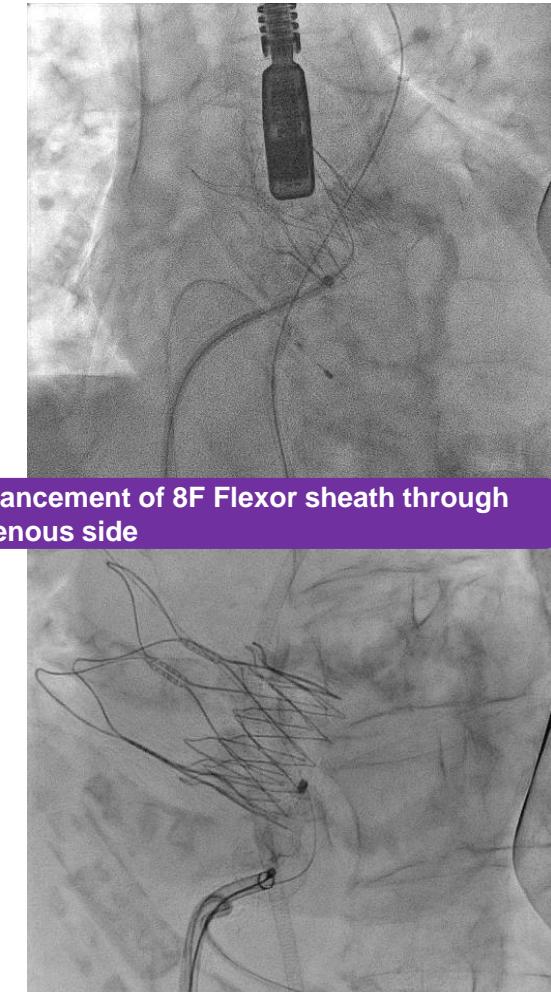
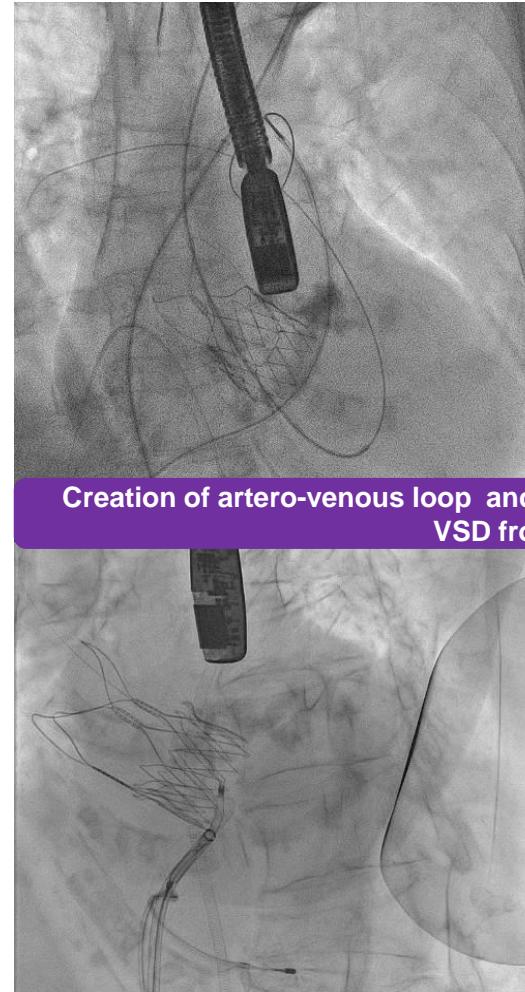
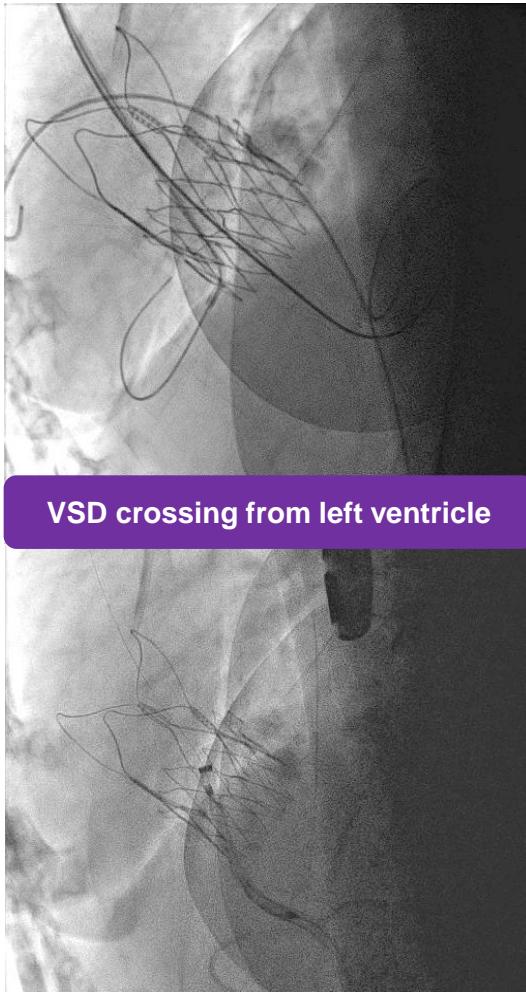
Qp:Qs 2.2

KONAR-MF occluder 12-10

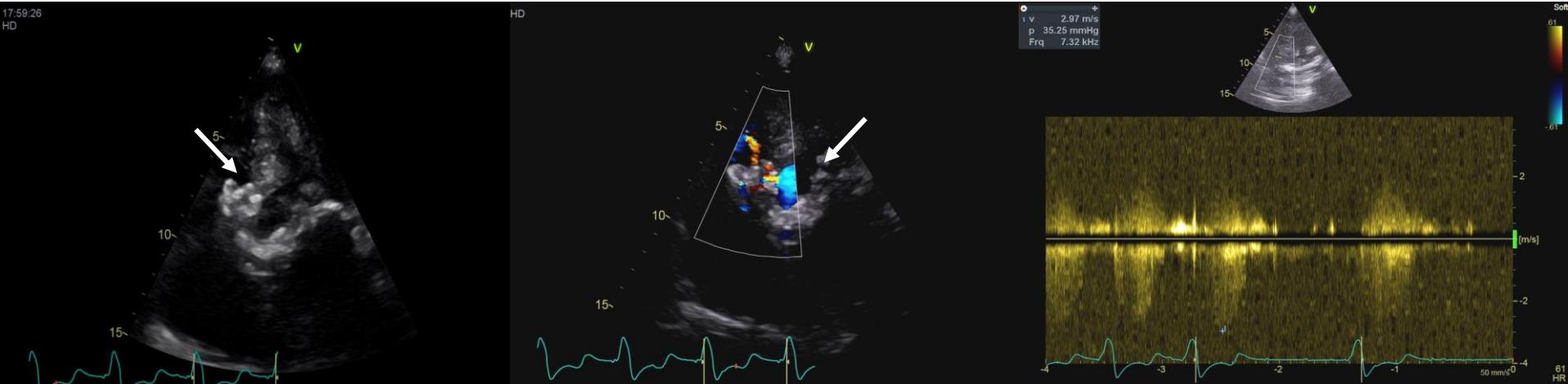


- More flexible compared to other devices
- Device design may guarantee a reduced interaction with Acurate Neo 2 inflow frame

Implantation of occluder through a transfemoral approach



Final result after percutaneous closure of iatrogenic VSD



Device correctly positioned

Mild residual shunt

Pulmonary pressure normalization

- Septum membranous rupture and VSD are rare complications of balloon post-dilatation, especially in calcified anatomies
- Percutaneous management of this complication is feasible
- Patient's clinical status and multimodality imaging are essential to evaluate VSD closure indication and to successfully close the defect
- To the best of our knowledge, this is the first reported case of Konar-MF occluder implantation in such setting