

PFO with an atrial septal aneurysm

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Interventional Cardiology

Adult Congenital Heart Disease

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Disclosure Statement of Financial Interest

I, Zachary Steinberg, DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.

62 year old woman presents with dyspnea and mild hypoxia

- 62 y/o W with a several month history of exertional fatigue
- Initially seen by her PCP and found to be mildly hypoxic (91-93% pulse oximetry)
- Normal serologic work up
- Normal pulmonary work up
- Normal sleep study

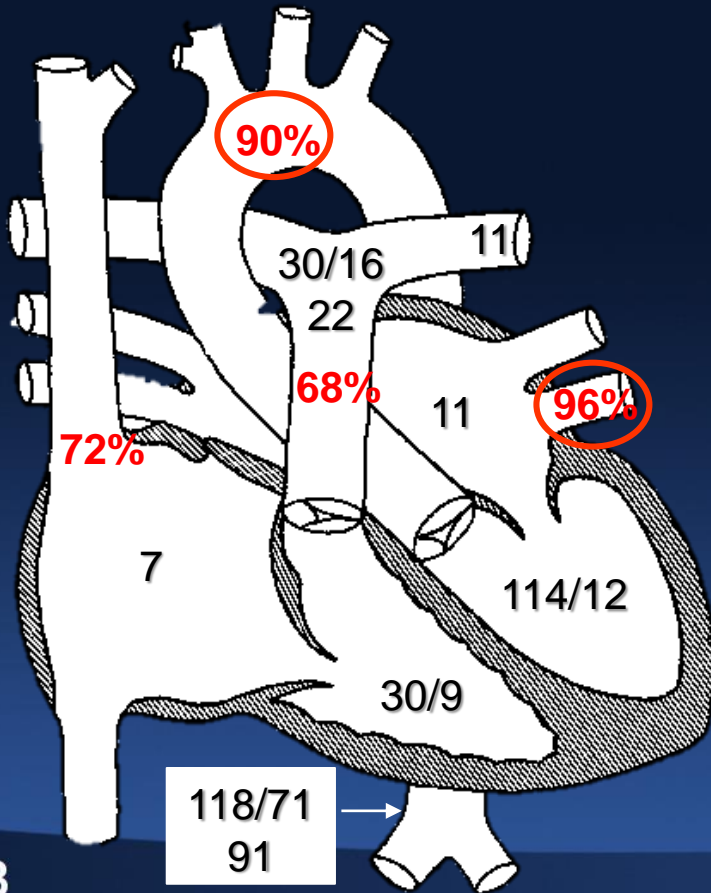
Transthoracic Echo

- **Normal biventricular size and function**
- **Mild aortic valve sclerosis**
- **Normal tricuspid, pulmonic, and mitral anatomy and function**
 - **Insufficient TR jet to estimate RVSP**
- **Atrial septal aneurysm bowing leftward with a small right to left shunt identified by color Doppler**

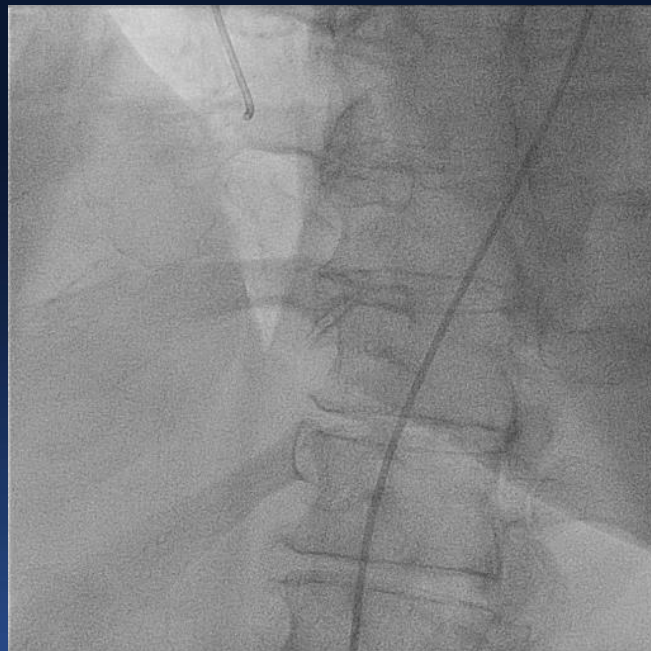
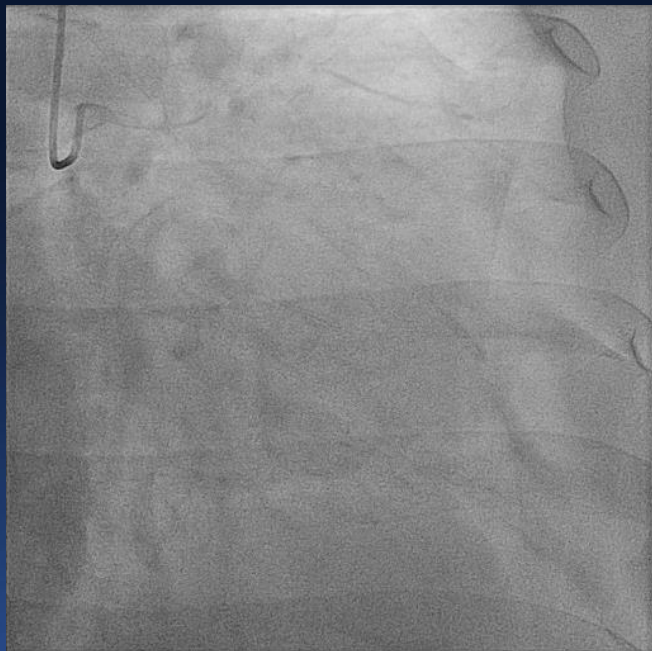
Referred to our ACHD clinic

- **Differential diagnosis**
 - **Obstructive CAD**
 - **Pulmonary hypertension**
 - **ASD/PFO with intermittent R to L shunting**
- **Referred for cardiac catheterization**
 - **Right heart catheterization**
 - **Coronary angiography**

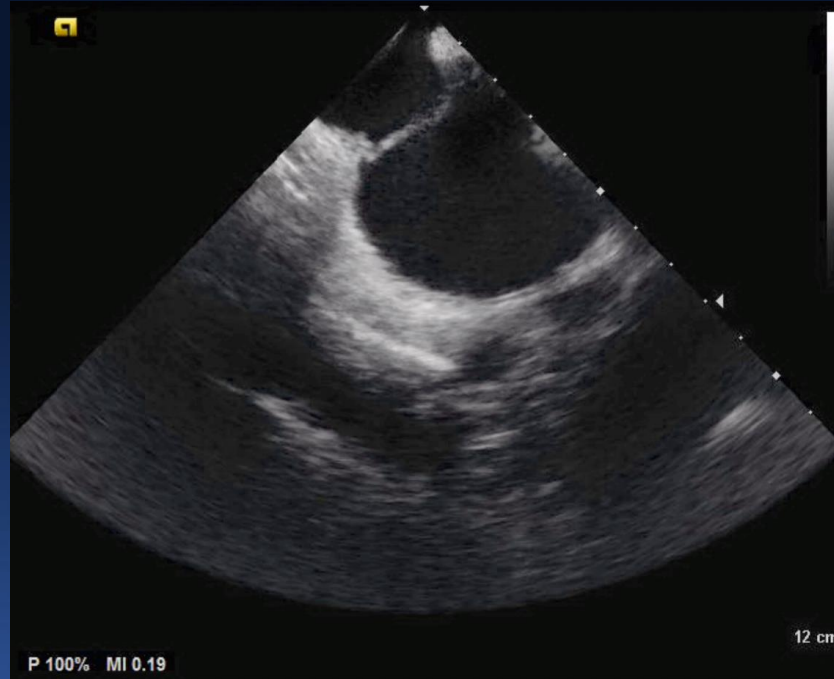
Cardiac catheterization



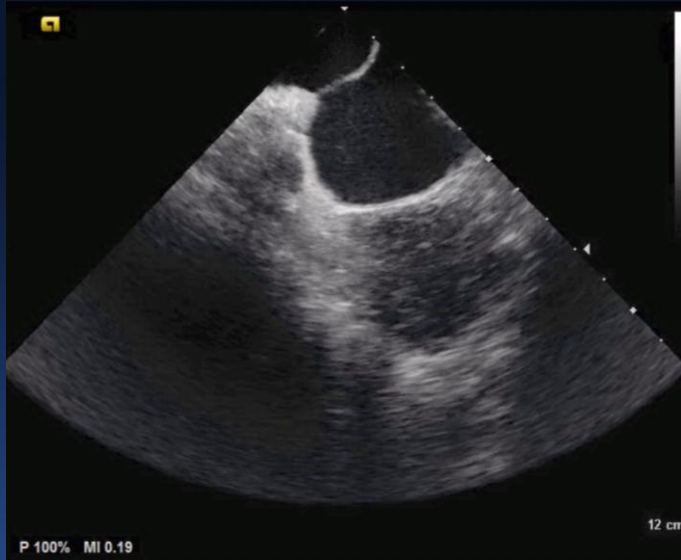
- Normal CVP
- Normal LVEDP
- Normal PA pressures
- QpQs 0.75
- Systemic CO/CI 7.3/3.6
- PVR 1.9 WU



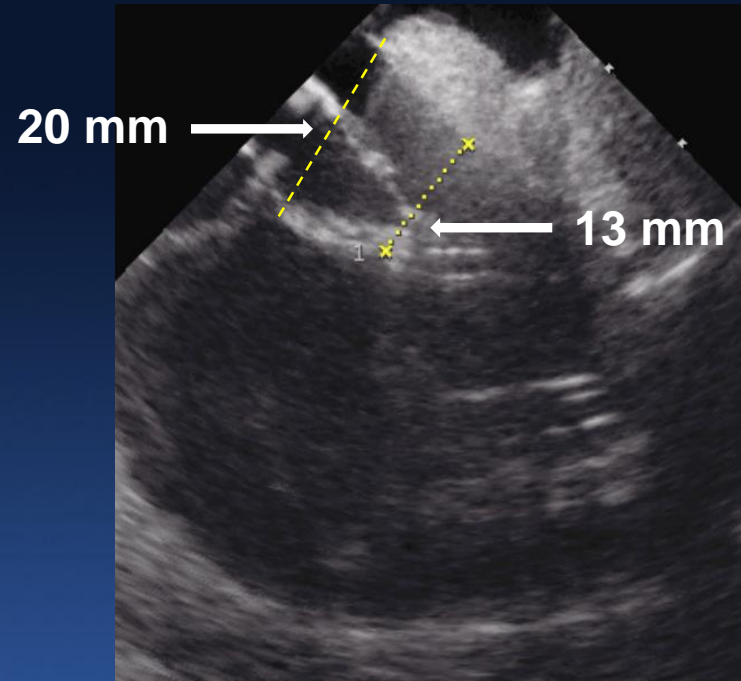
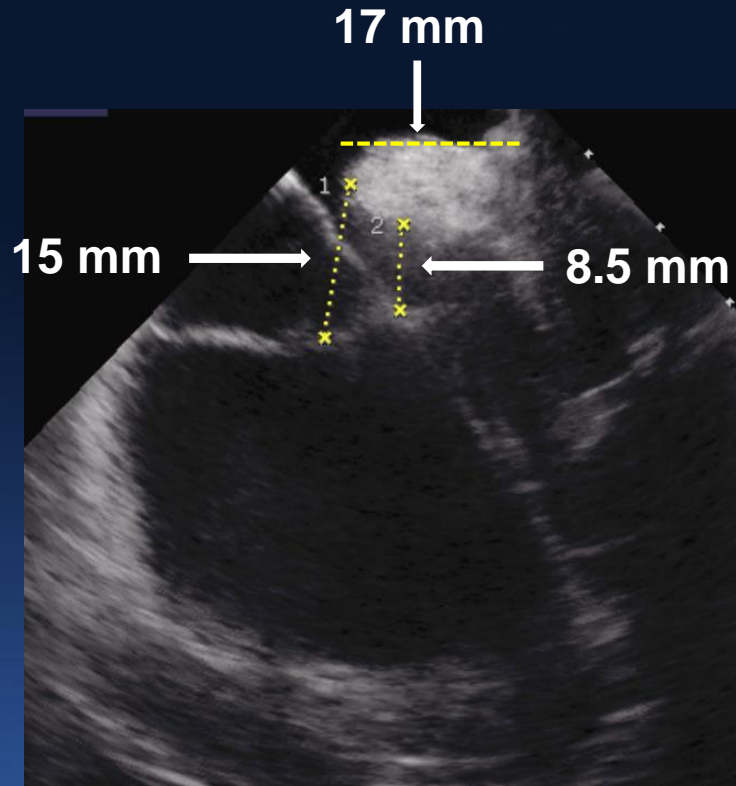
Intracardiac echocardiography



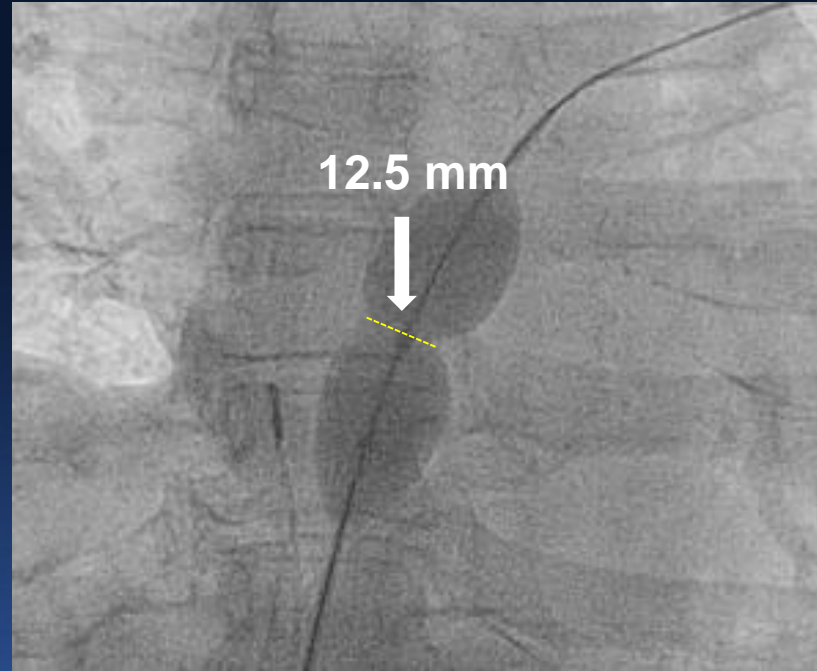
Saline study



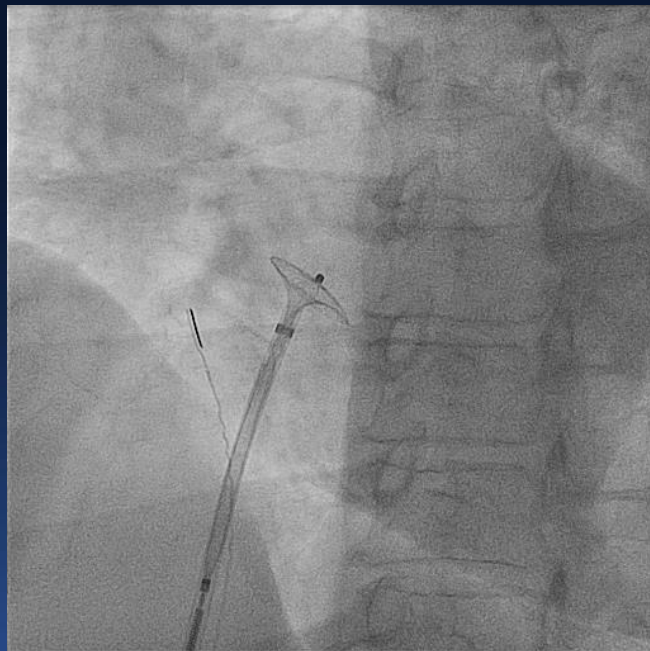
PFO dimensions

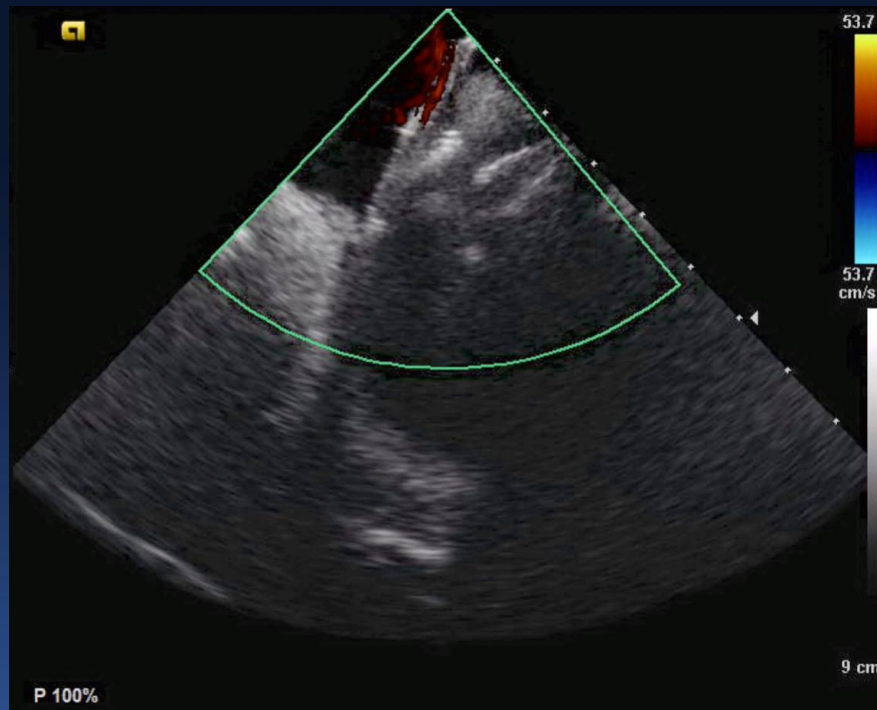


Balloon sizing

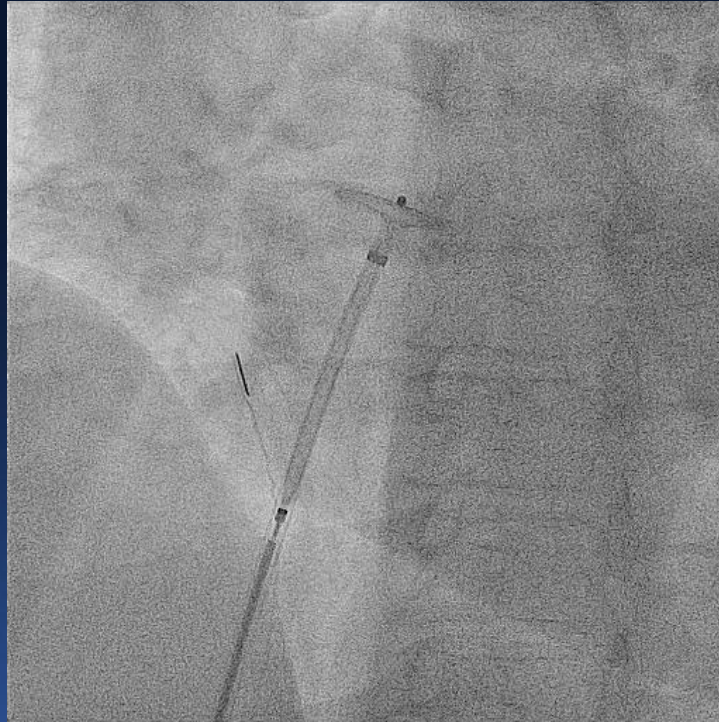


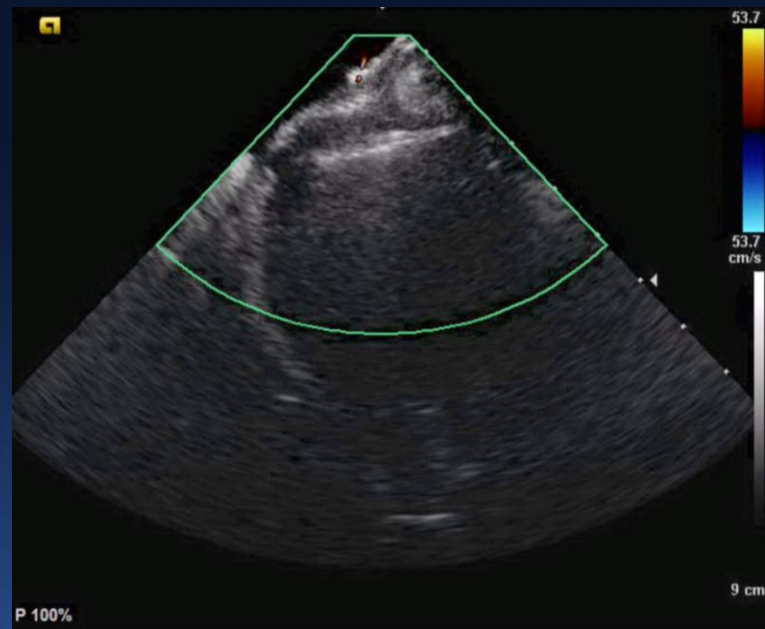
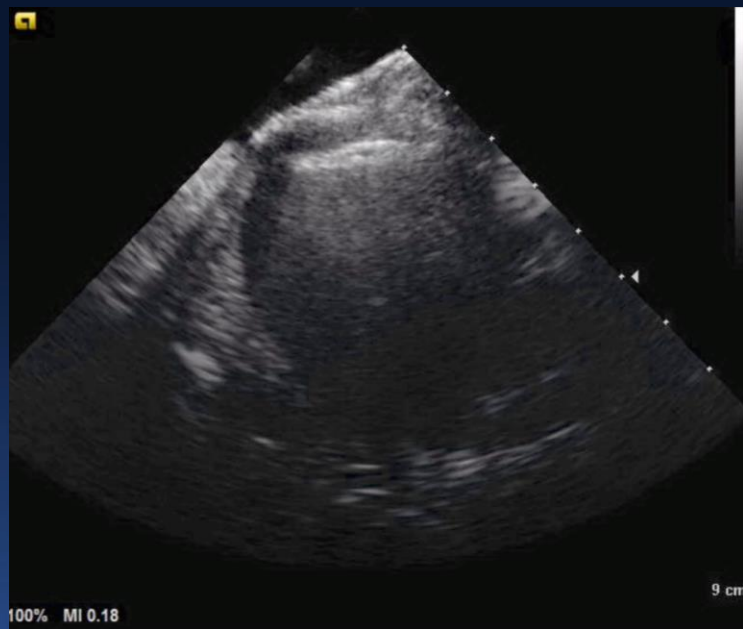
35 mm Amplatzer PFO occluder

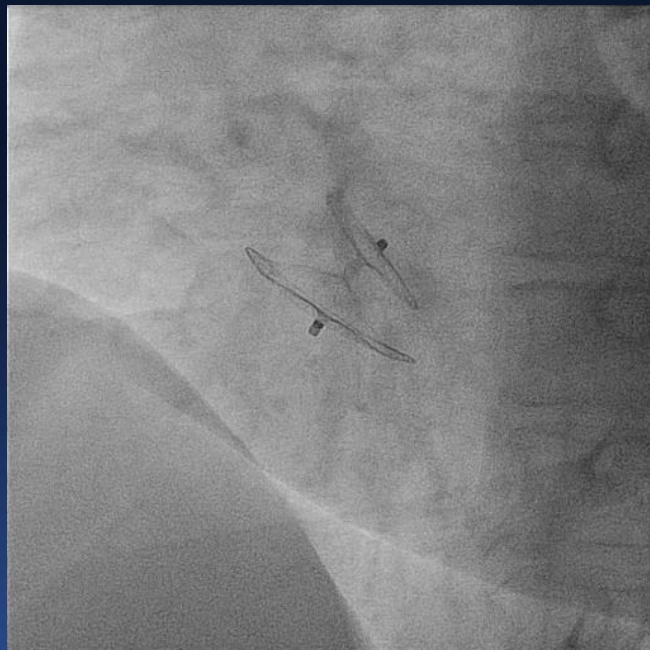




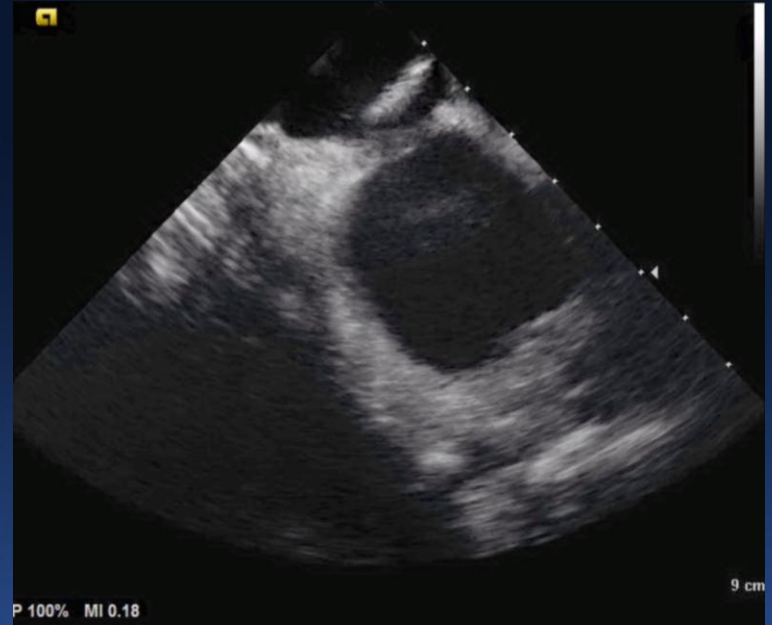
Second 35 mm Amplatzer PFO occluder







Saline study



1 month follow up

- **Patient with improvement in exertional tolerance**
- **Resting pulse oximetry 96-98%**
- **Stable device position on TTE**

PFO with atrial septal aneurysm

- I have a low threshold to perform balloon sizing
- More frequently upsize my device
 - Accompanied by a long tunnel and/or septal hypertrophy
- Consider placing an atrial septal occluder

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