



Atrial Septal Defect Closure Balloon Assisted Technique

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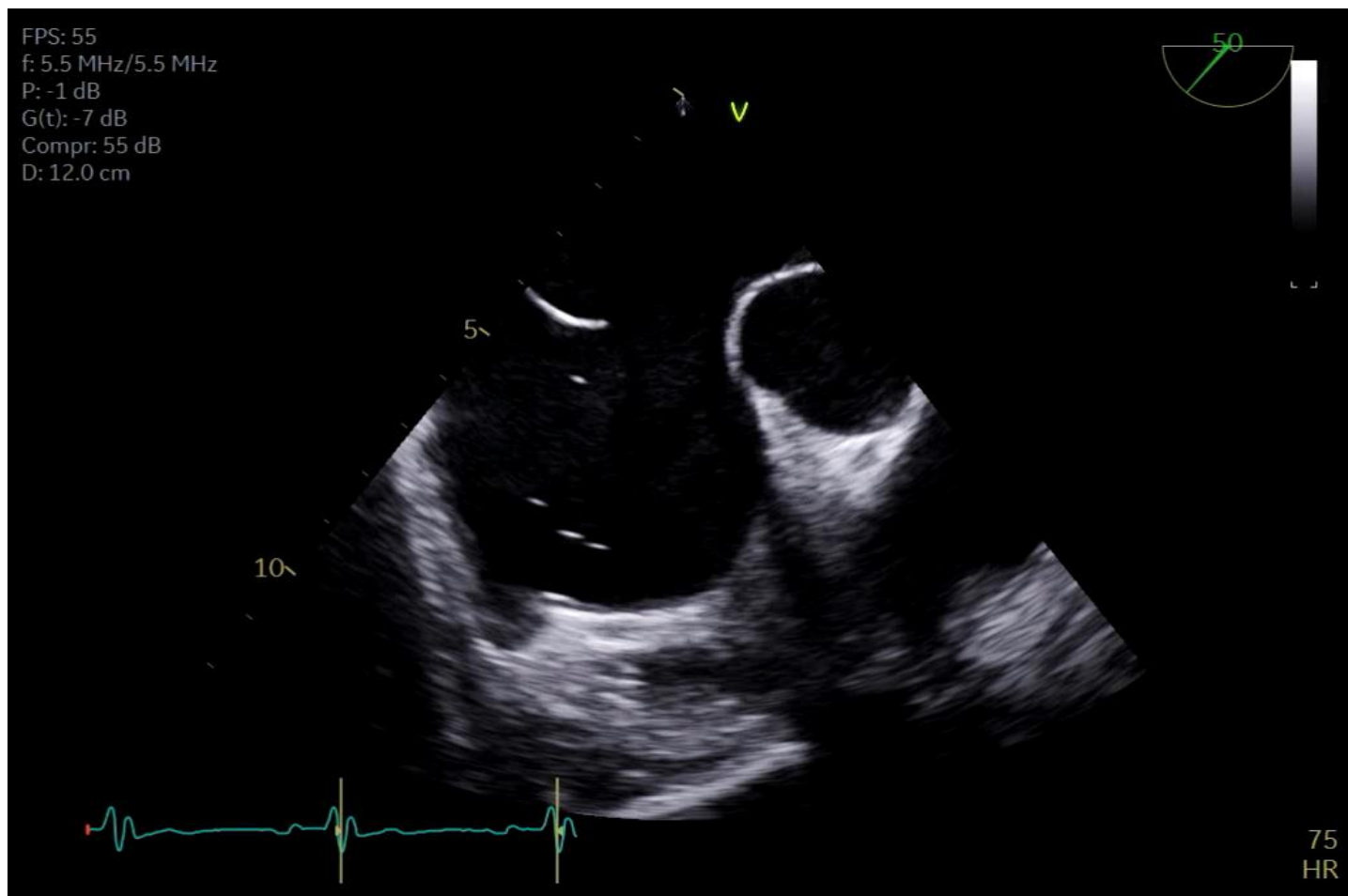
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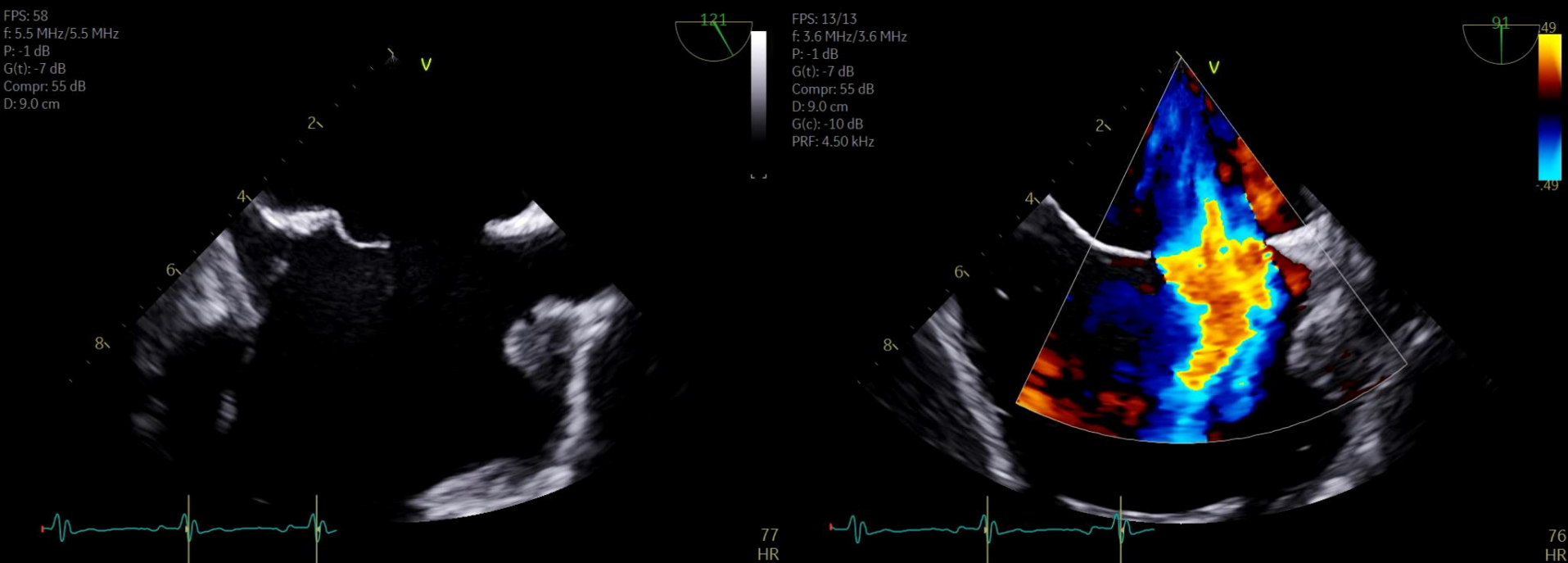
Beirut, Lebanon

29 year old patient known to have

- Secundum type atrial septal defect measuring 2.6 cm in maximal diameter
- Severe right ventricle dilatation
- Systolic Pulmonary artery pressure (sPAP) 25 mmHg
- Significant Left to Right shunt
- Q_p/Q_s : 2.6
- Pre-op TEE: Absent aortic rim and adequate rims otherwise



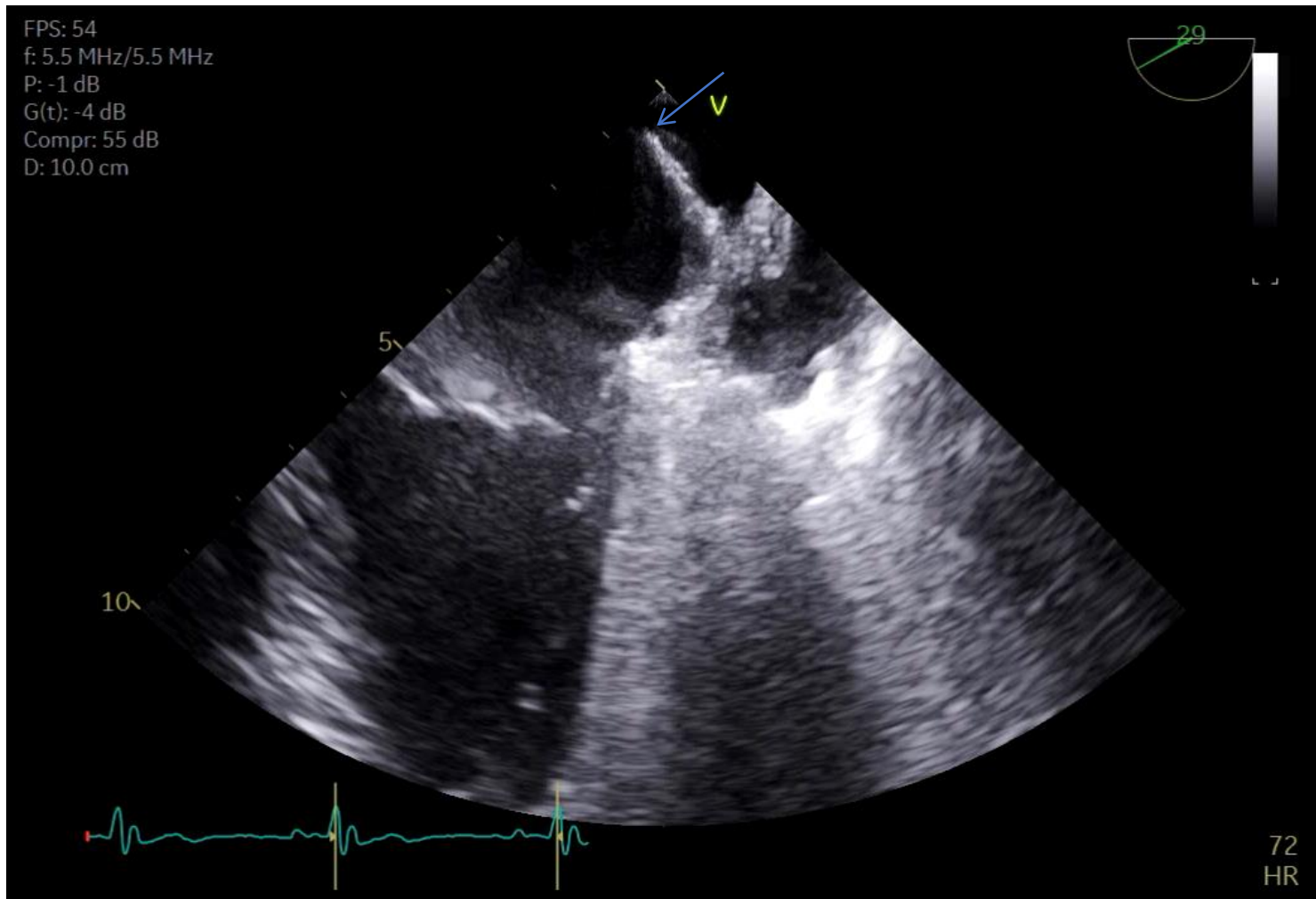
Absent aortic rim and floppy posterior rim



In SVC/IVC view largest defect measured at 2.8-2.9 cm
 Floppy Inferior Rim

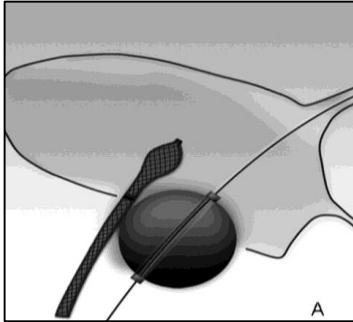
- Due to lack of aortic rim, the amplazter ASD 36mm device was repeatedly falling to the right atrium.
- Attempt to deploy in Left pulmonary vein failed due to high Coumadin ridge
- Right pulmonary vein deployed failed to correct the co-axiality issue and also prolapsed into the right atrium.
- A balloon assisted technique was then attempted.

High Coumadin Ridge

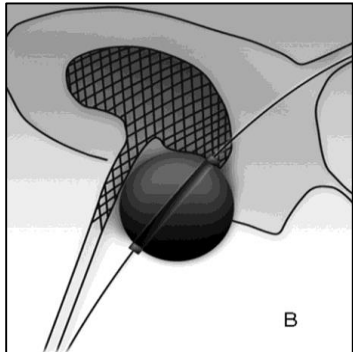


Failure to access to Left pulmonary vein due to very high coumadin ridge

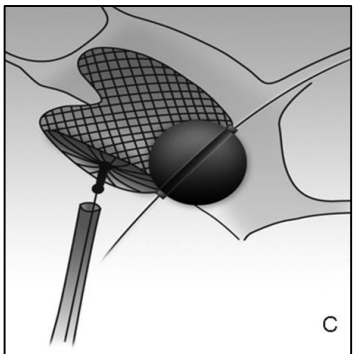
Balloon Assisted Technique



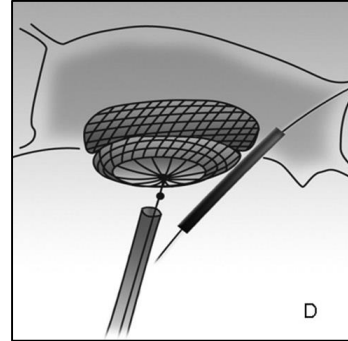
The device is undeployed, the balloon is inflated in the left atrium



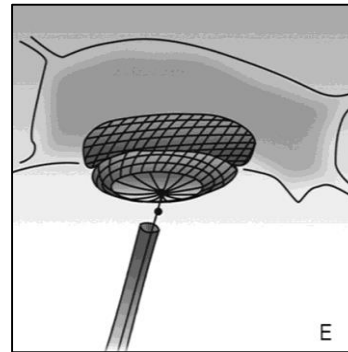
The left atrial disk is deployed using the balloon as a support



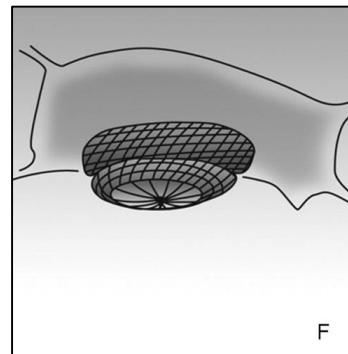
The waist and right atrial disk are deployed



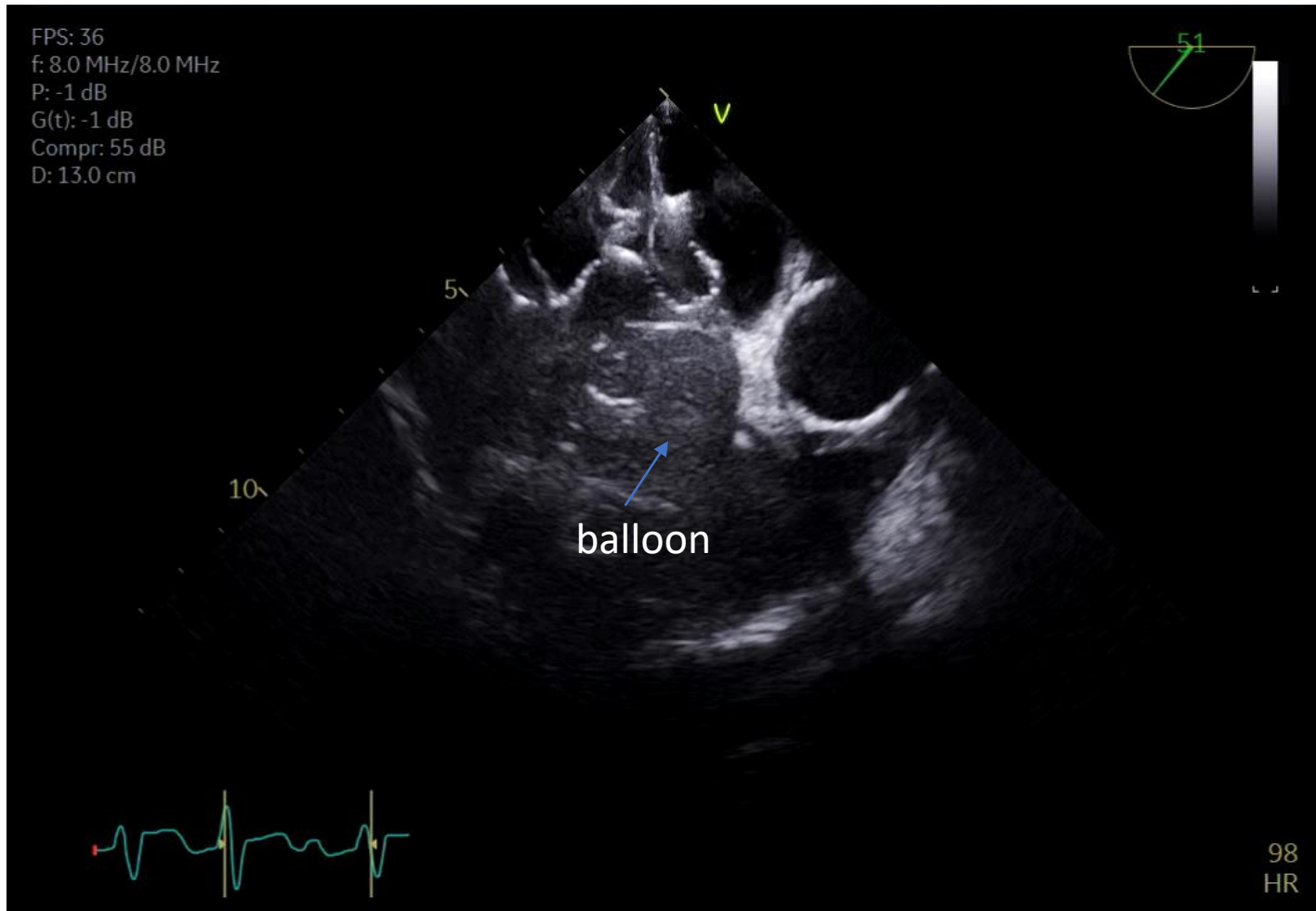
The waist and right atrial disk are deployed



The balloon and the guide are completely removed into the right atrium

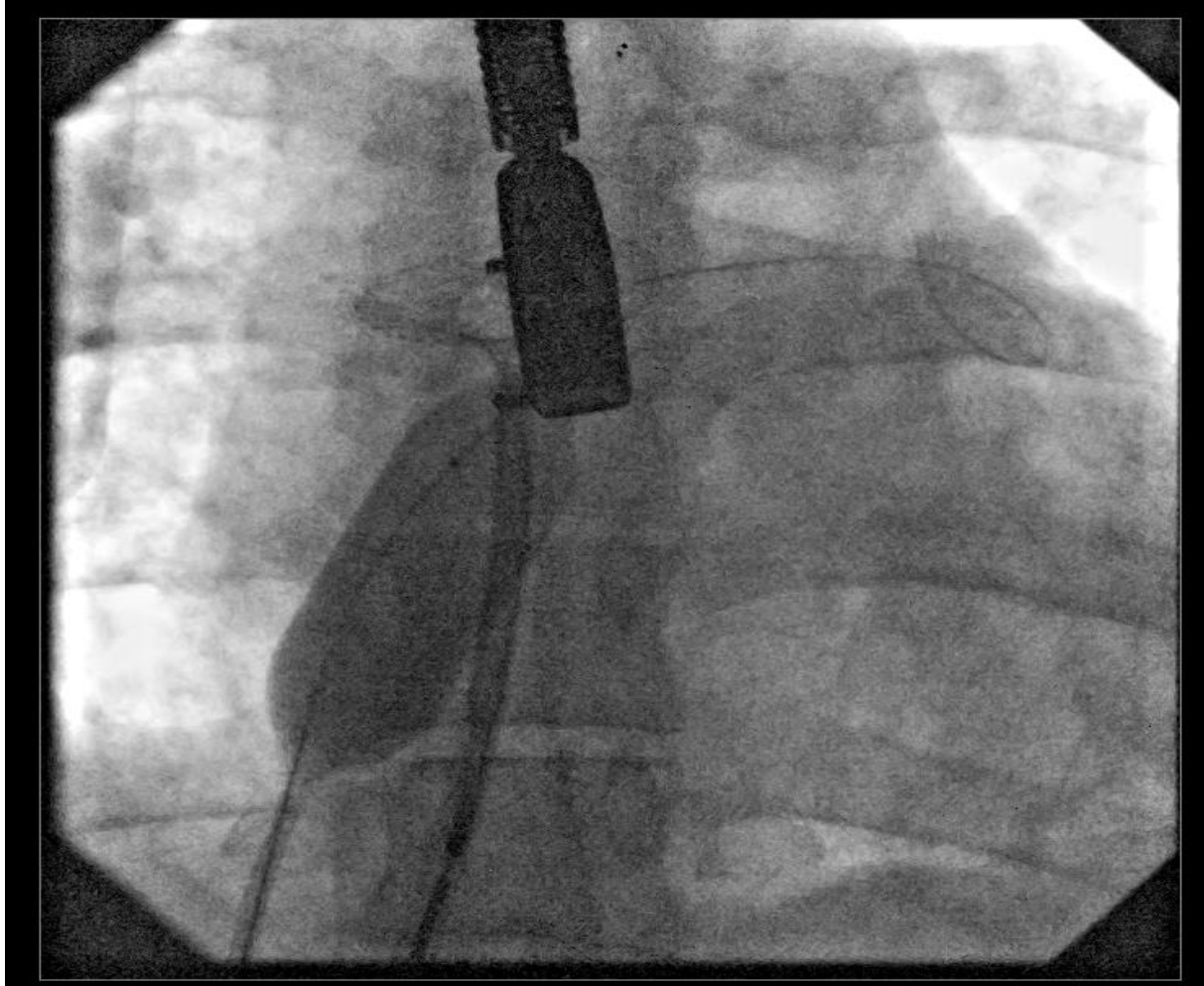


Balloon Assisted Technique



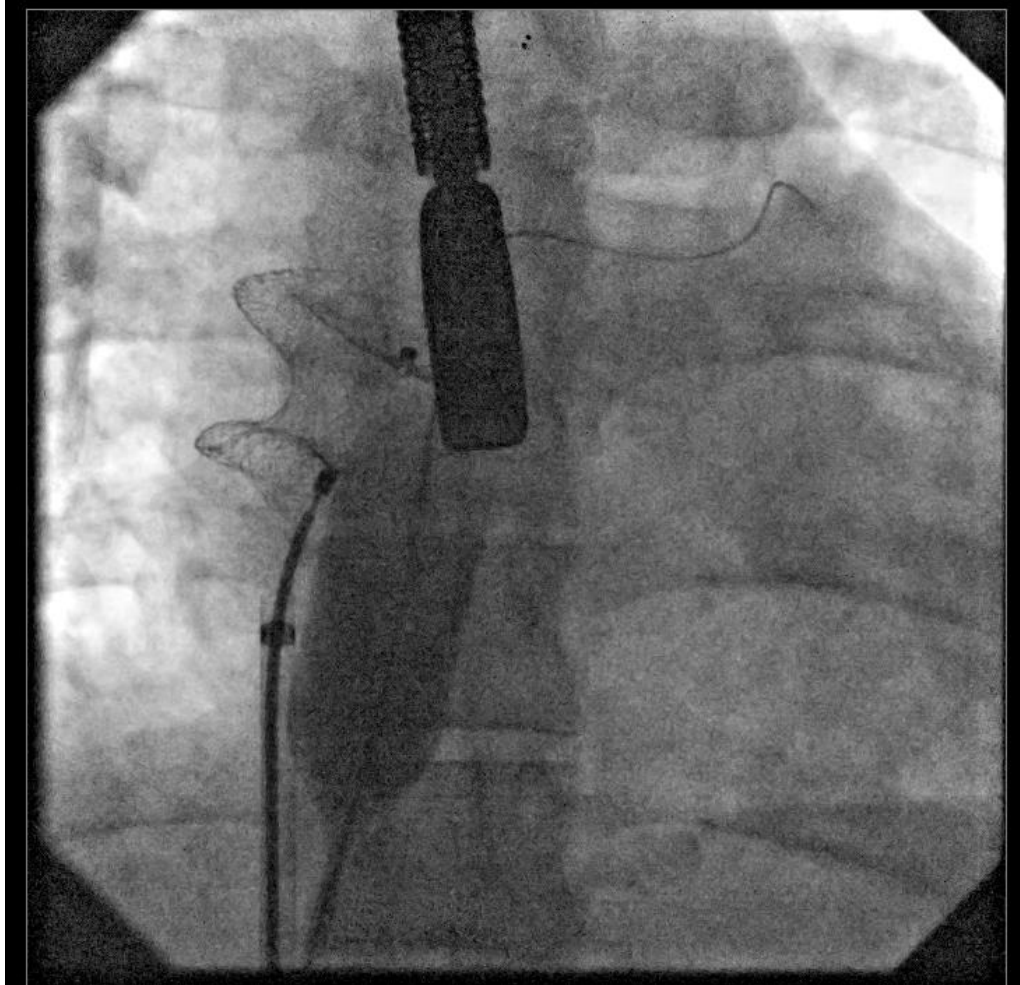
A 25 mm Edwards balloon was used to stabilize the left side disk and successfully deployed the device. The balloon was then slowly deflated with good anchoring of the device on the aorta

Balloon Assisted Technique



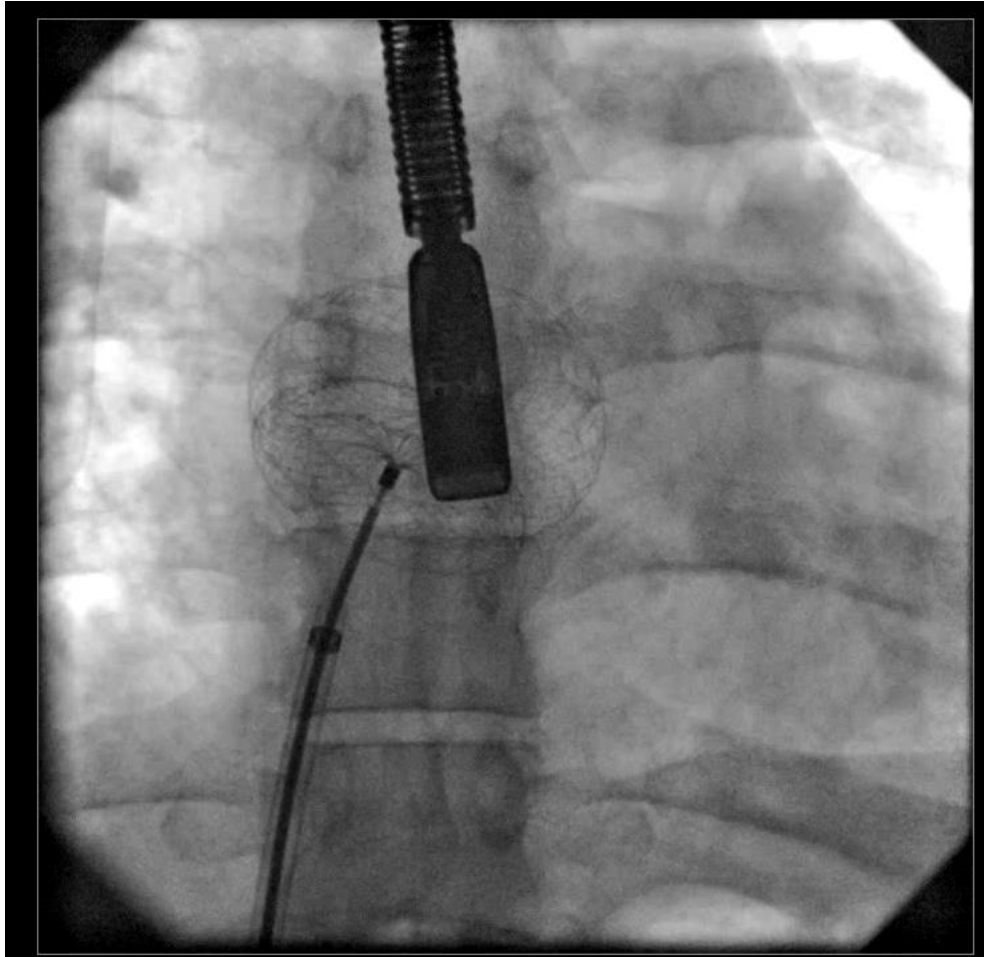
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Balloon Assisted Technique



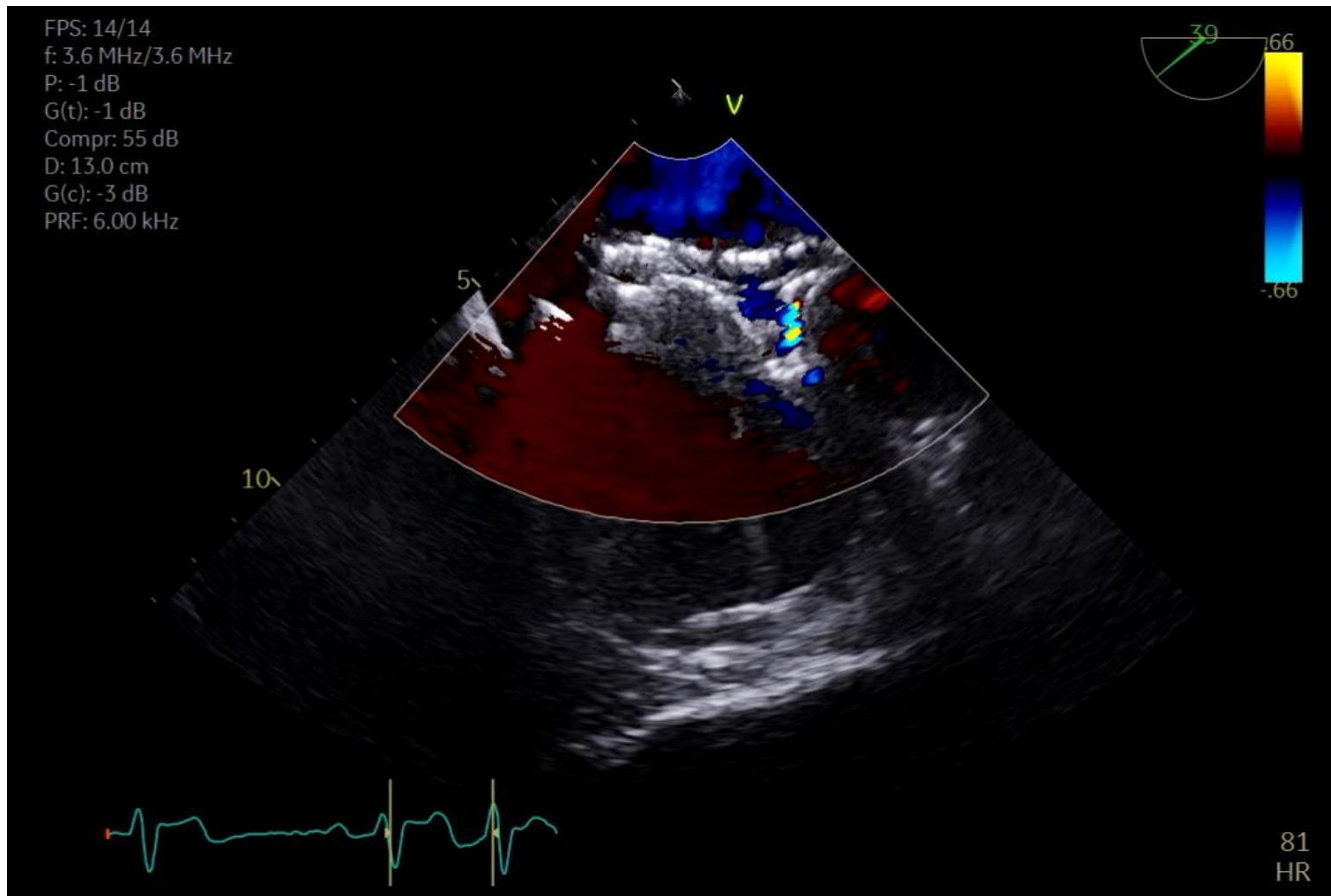
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Balloon Assisted Technique



The Implanter ASD device 36 mm well anchored in a proper orientation

Balloon Assisted Technique



Complete resolution of ASD shunt

- The vast majority of ASDs are amenable to transcatheter closure with a high procedural success rate. A **Balloon assisted technique** is needed to optimize device closure occasionally especially in large defects without aortic rim.