

Transcatheter Retrieval of Embolized ASD Occluder Device by Waist Capture Technique

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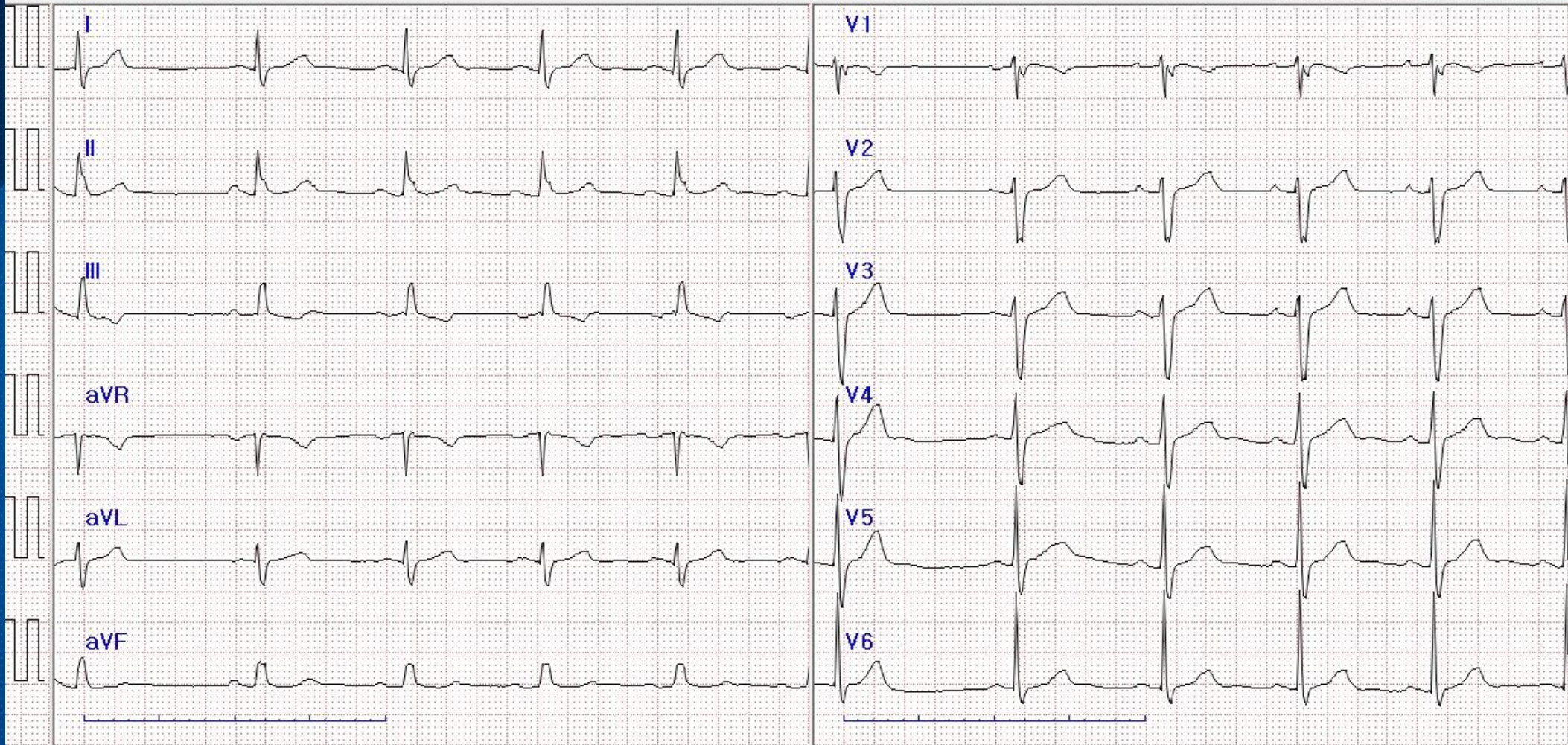
Case Presentation

- 51-year-old man
- Dyspnea on exertion,
(functional class grade II of New York Heart Association)
- Fixed split 2nd heartsound & 2/6 systolic ejection murmur
at the left upper sternal border

Initial ECG

10.00 mm/mV 25.0 mm/s 100 Hz Synchronized (6chx2)

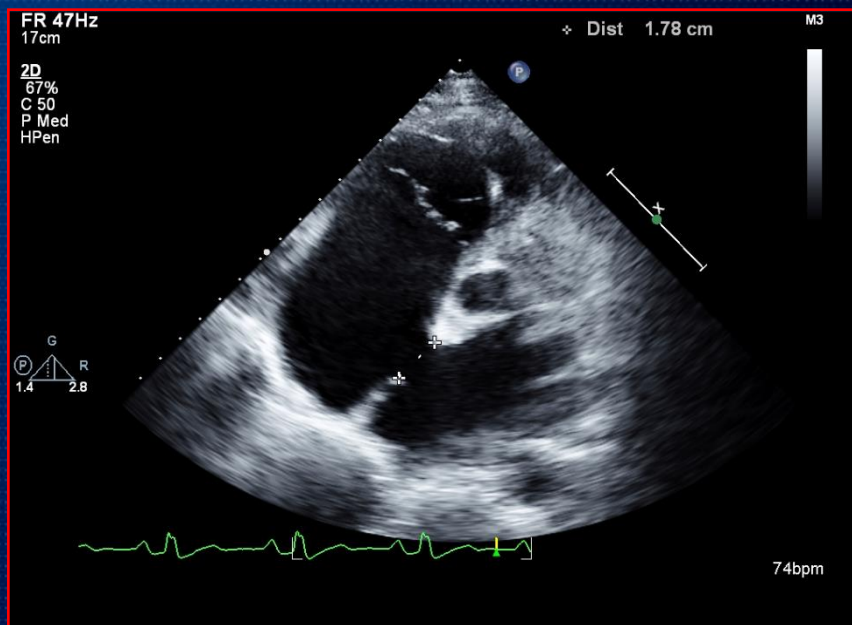
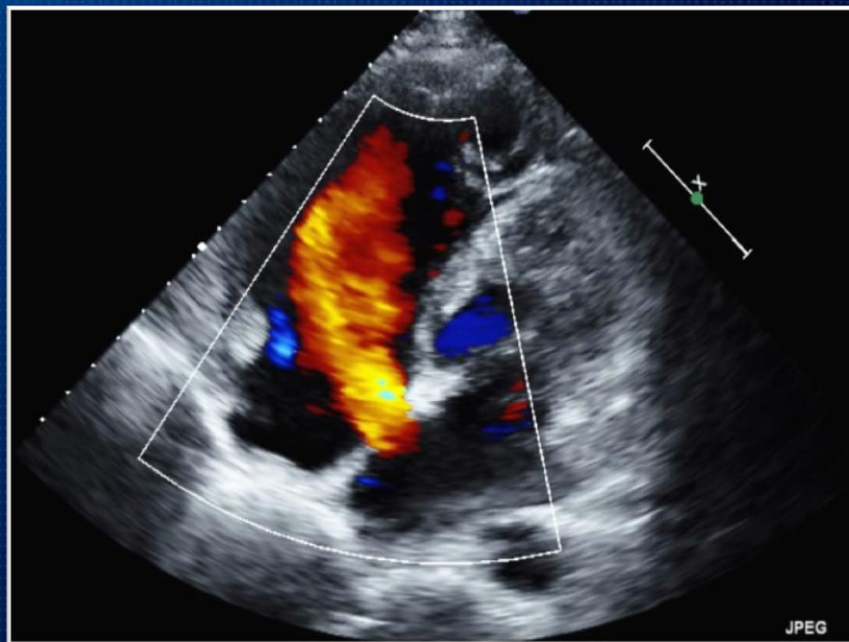
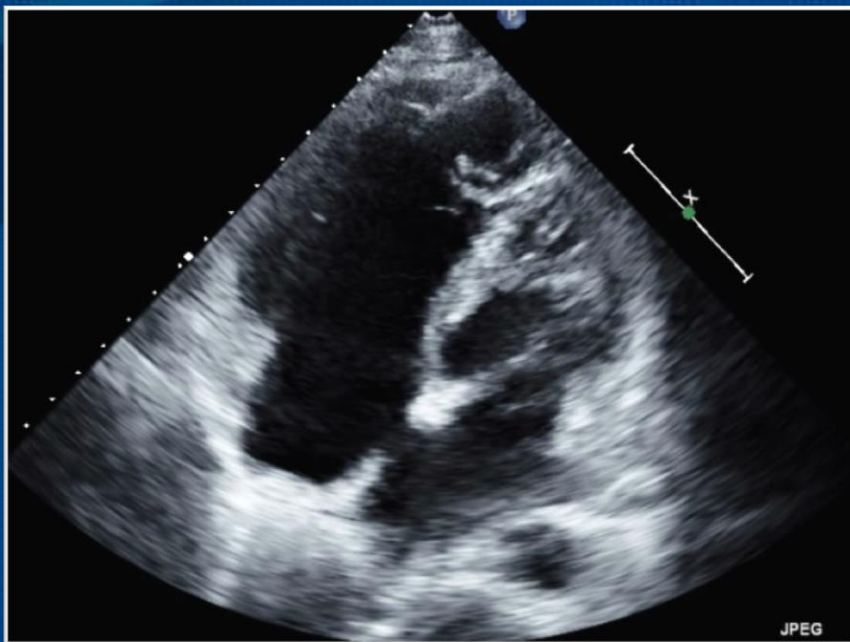
10.00 mm/mV 25.0 mm/s 100 Hz



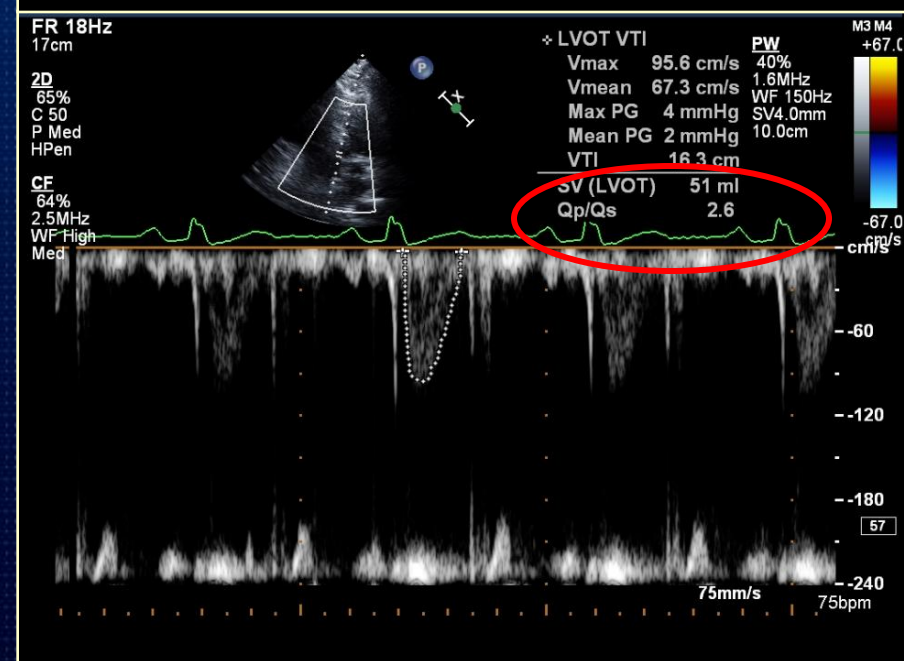
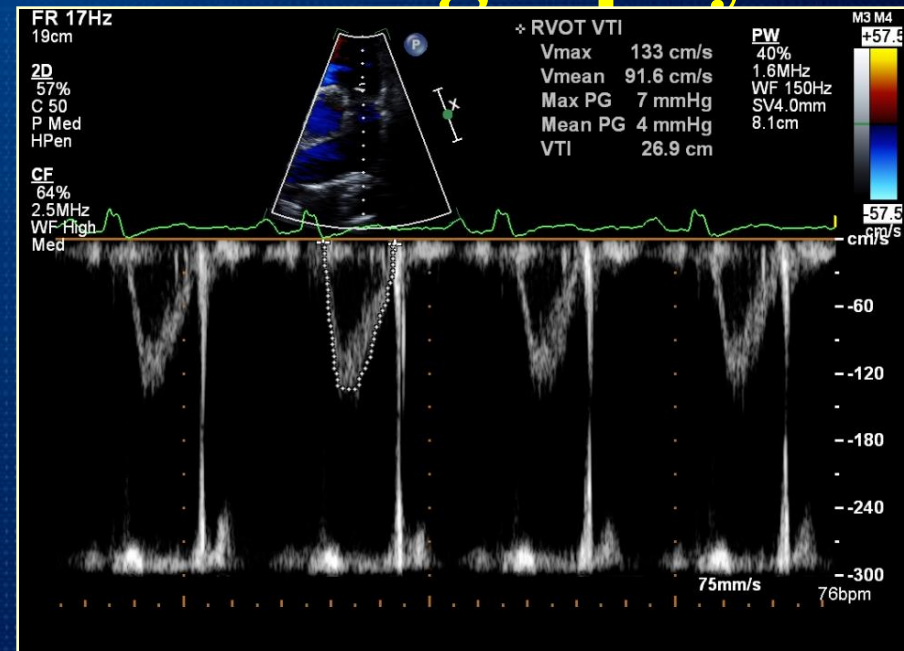
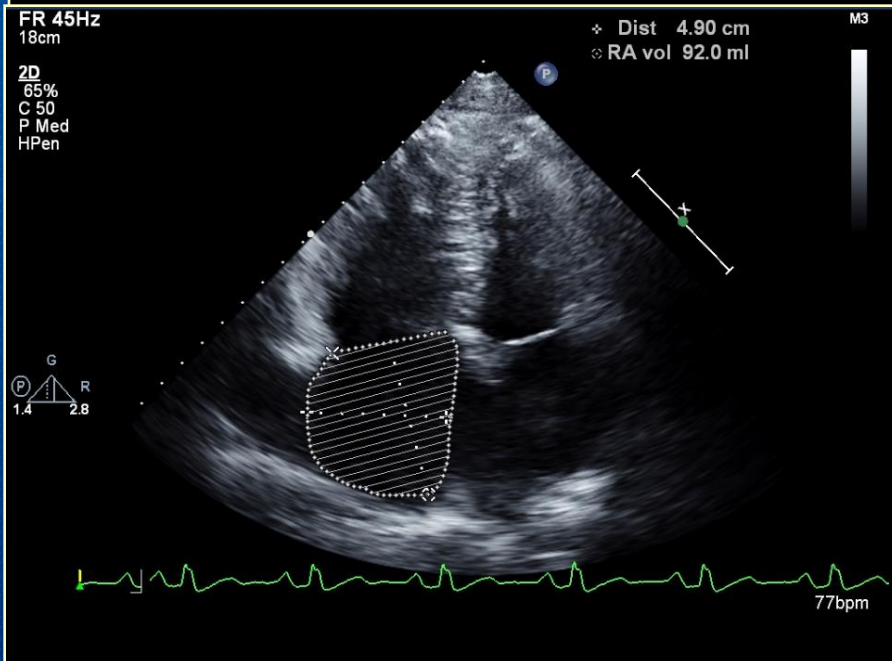
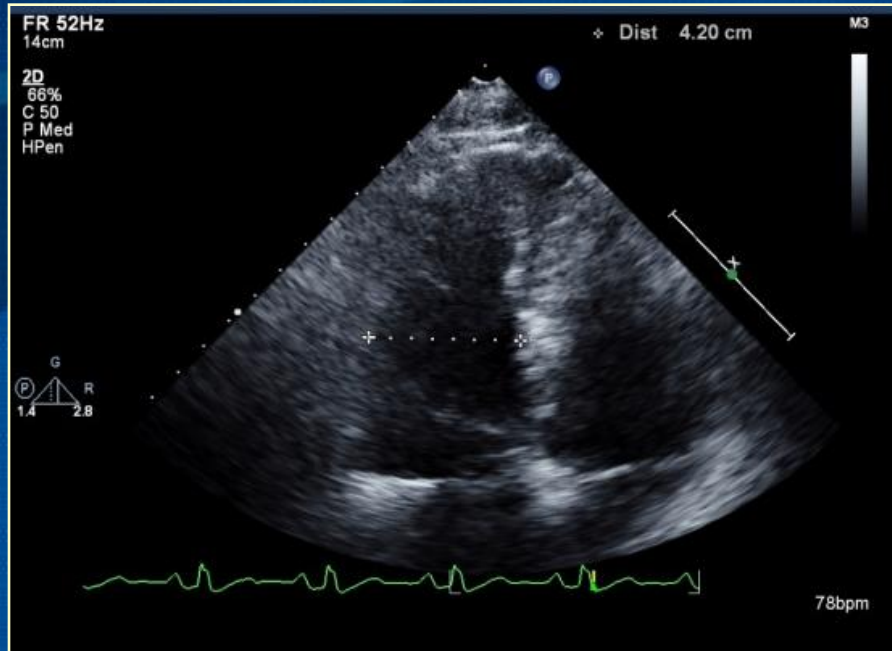
Chest radiography



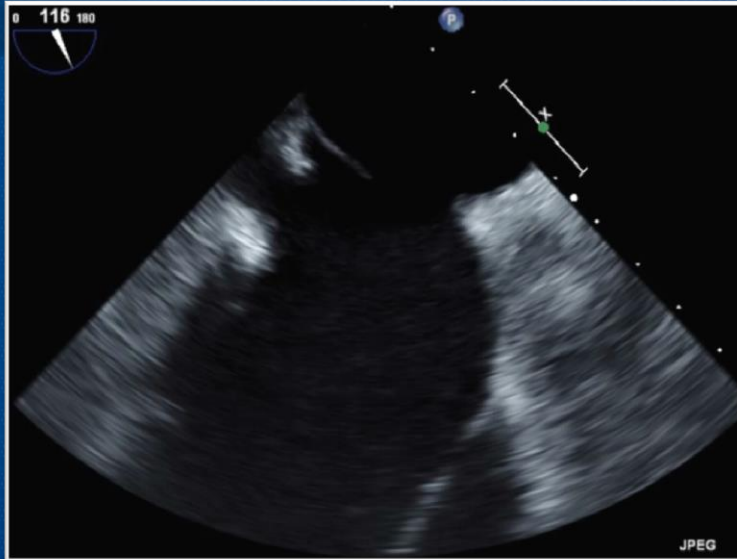
Transthoracic echocardiography



Transthoracic echocardiography



Transeosophageal Echocardiography



Defect size 20*18mm

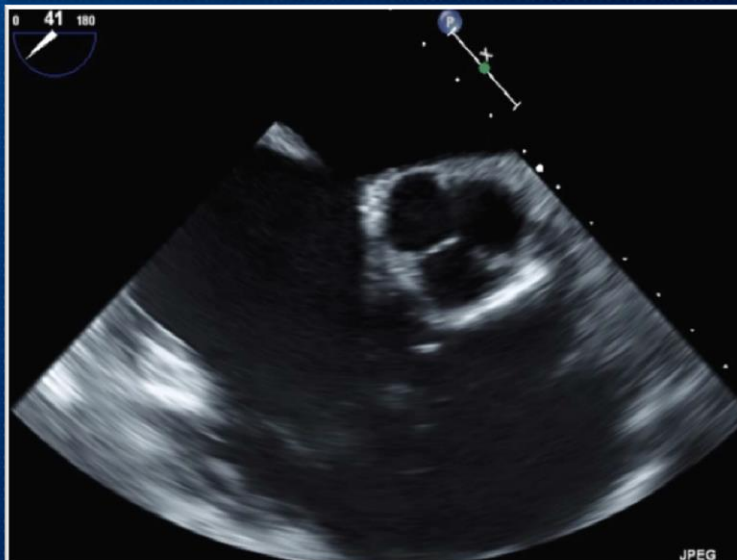
Posterosuperior rim > 10mm

Posteroinferior rim > 10mm

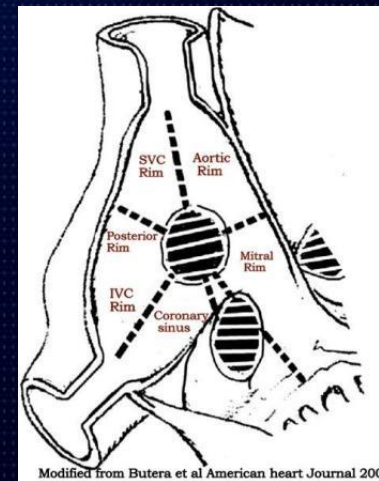
Posterior rim >10mm

Coronary sinus rim >10mm

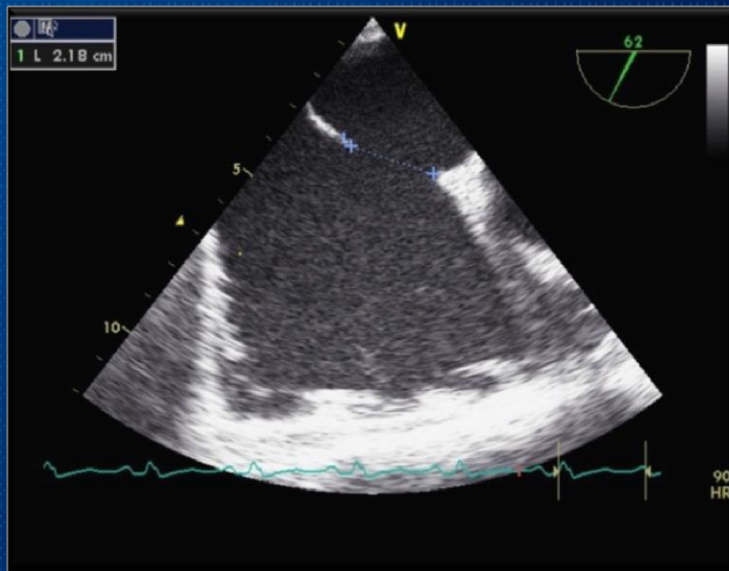
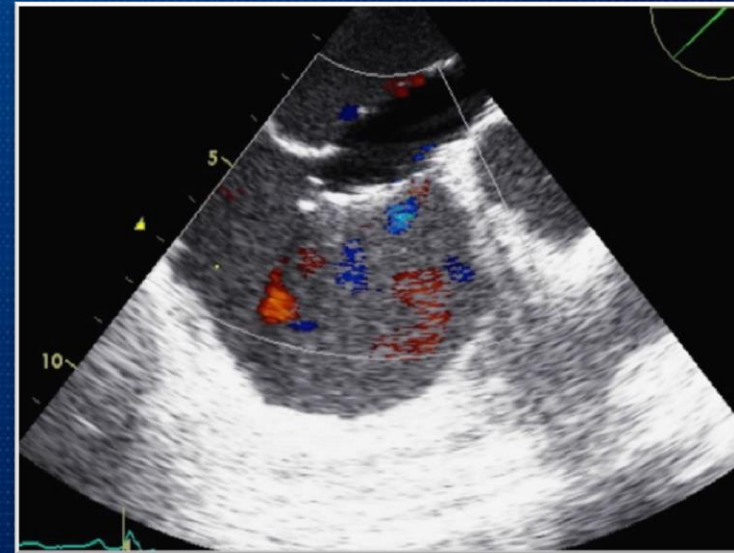
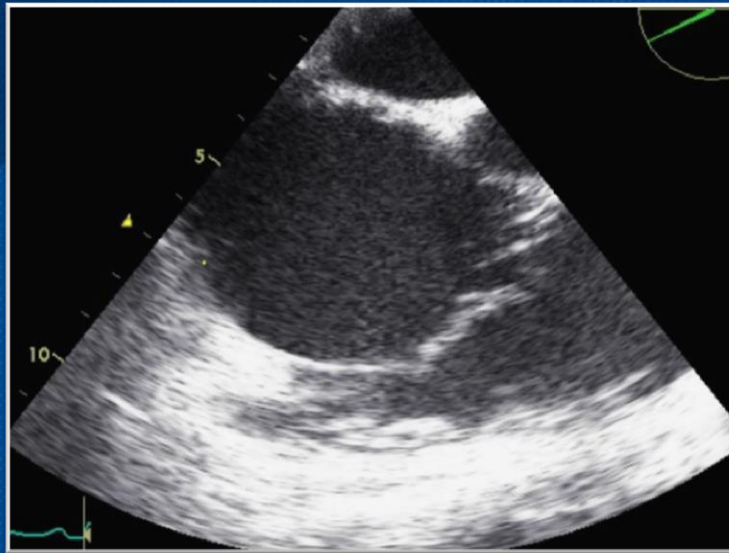
Anteroinferior rim >10mm



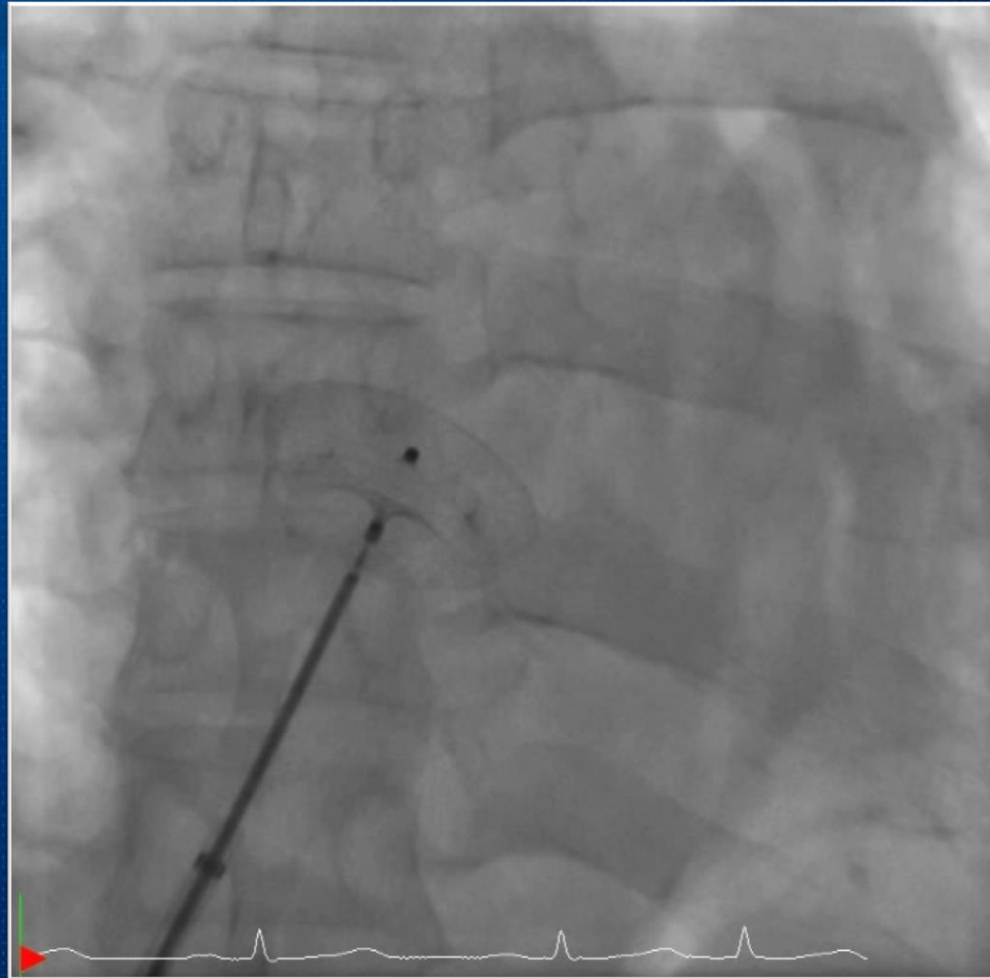
Anterosuperior rim 2mm



Percutaneous transcatheter closure of ASD

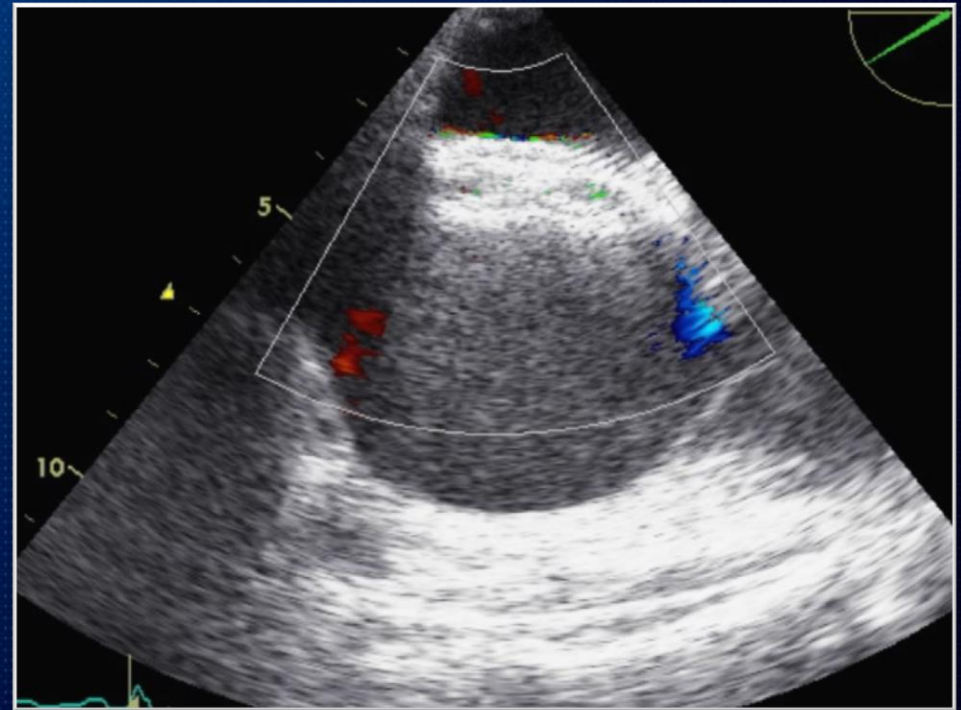
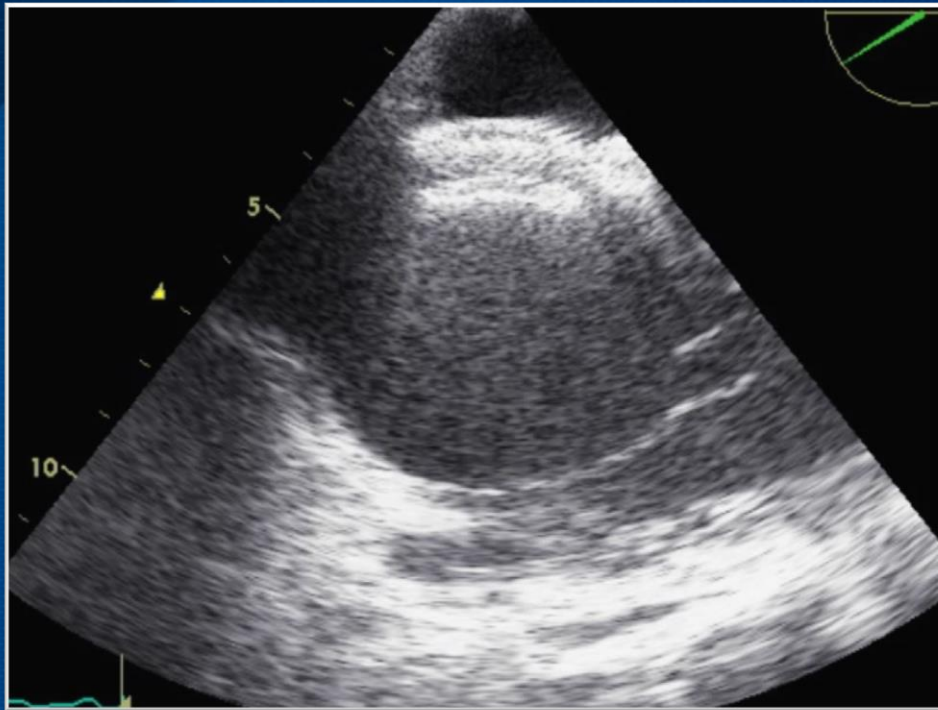


Percutaneous transcatheter closure of ASD

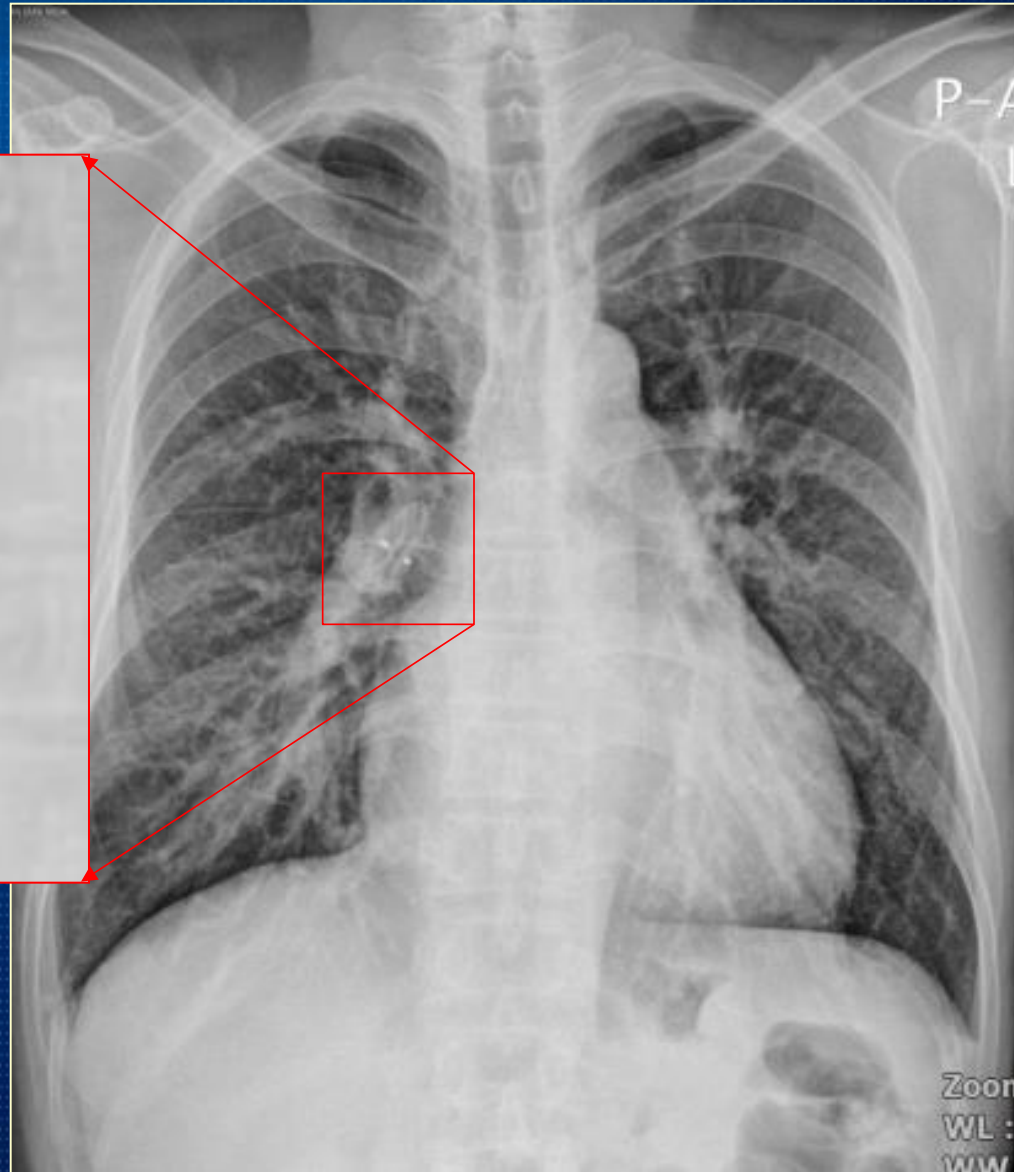


9Fr Amplatzer delivery system
Amplatzer septal occluder 22mm

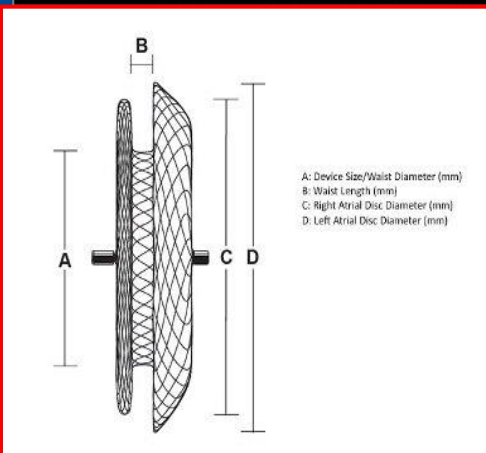
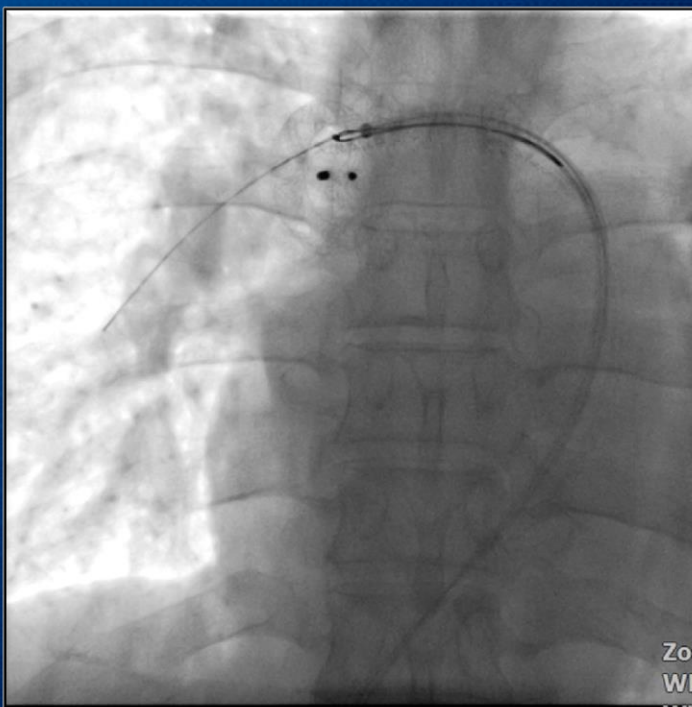
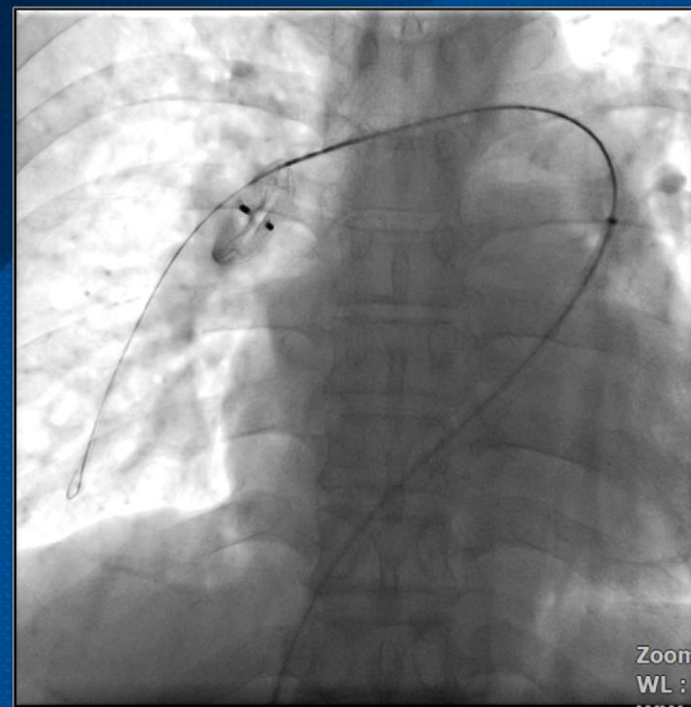
Post-procedural TEE



F/U CXR

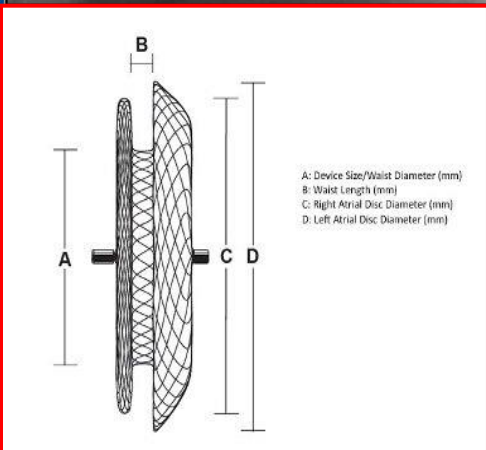
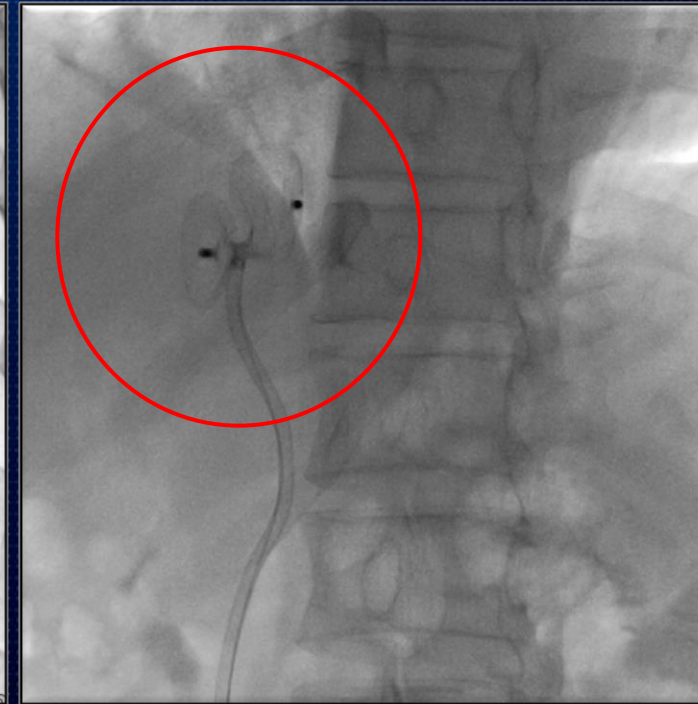
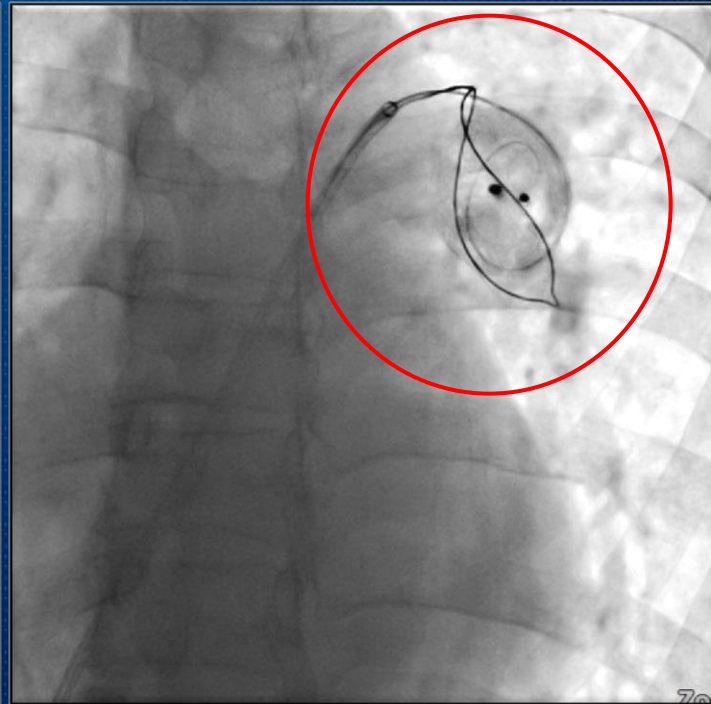
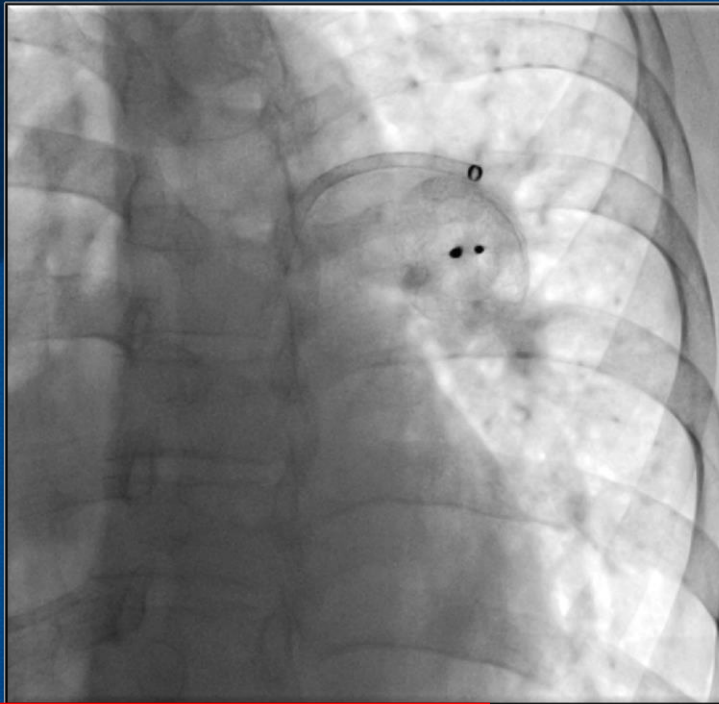


Retrieval of Amplatzer septal occluder



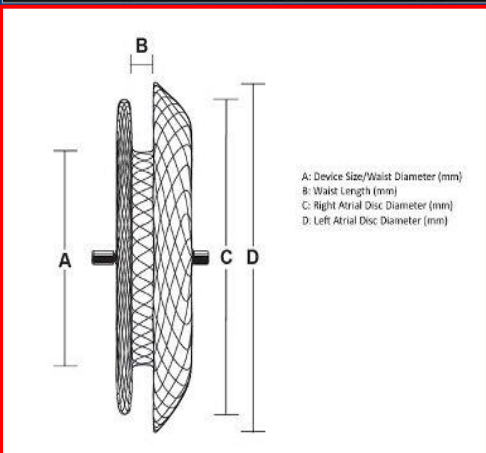
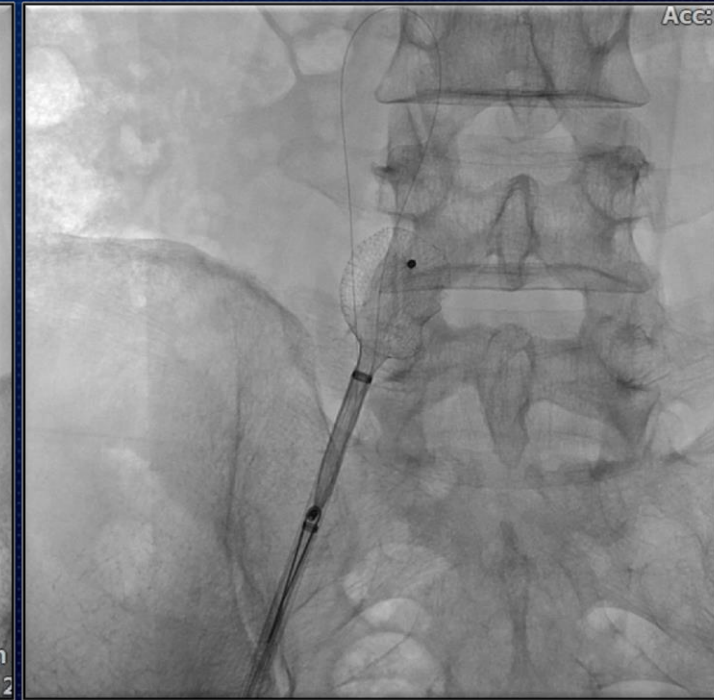
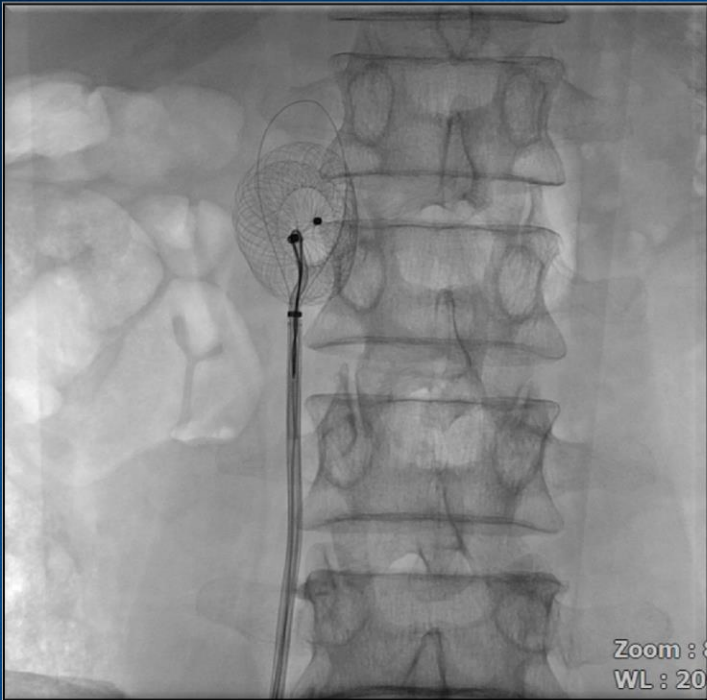
0.035" Guide Wire
8-French Guiding shuttle
15mm goose neck snare

Retrieval of Amplatzer septal occluder



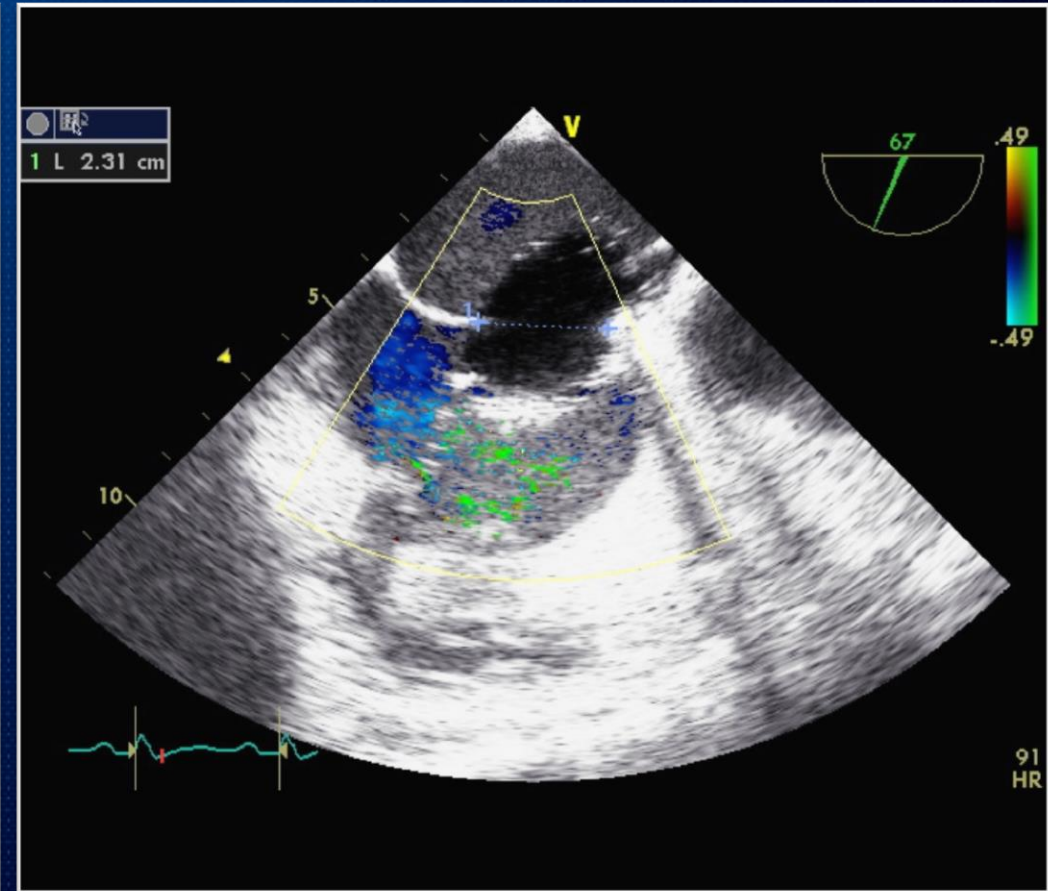
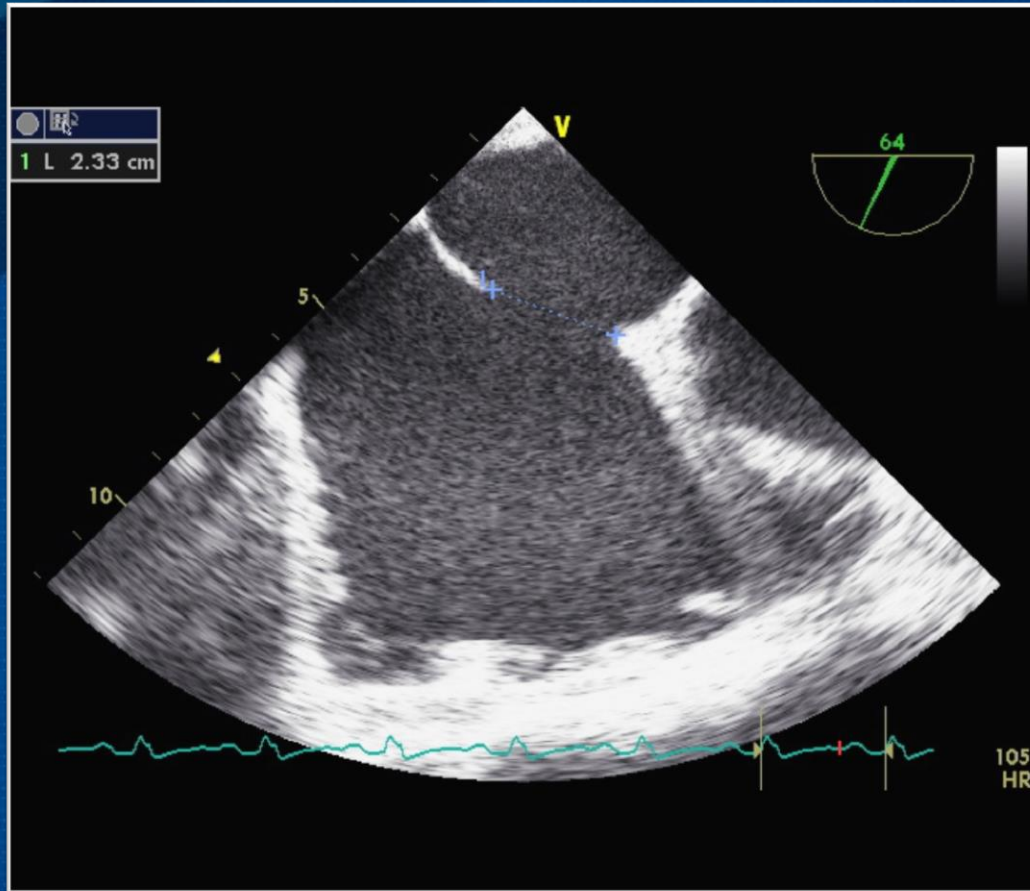
0.014" Guide Wire (Length 2m)
8-French Guiding shuttle (inner diameter 2.87mm)

Retrieval of Amplatzer septal occluder

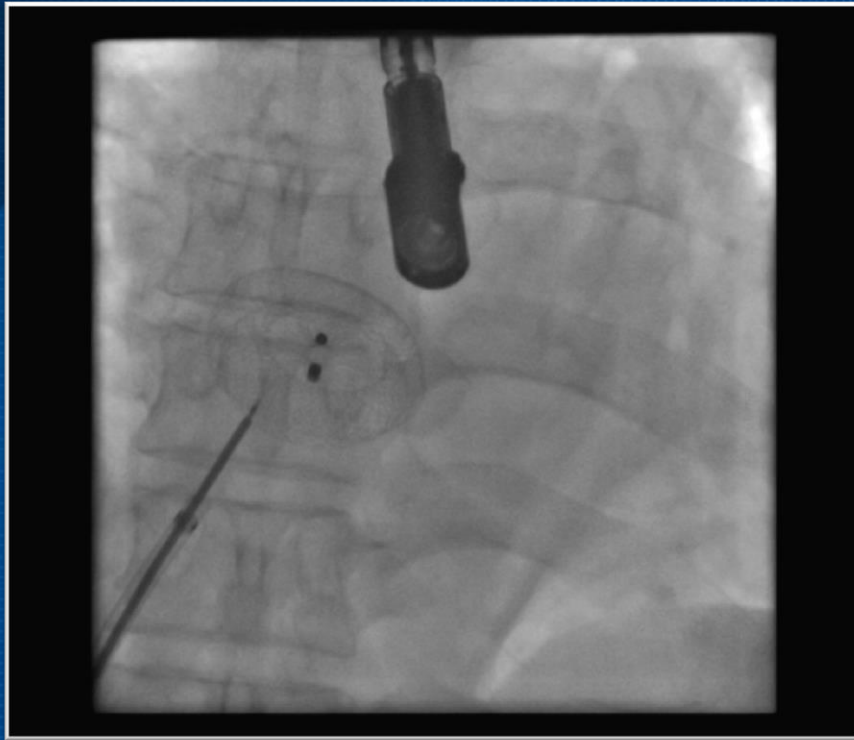


- 0.014" Guide Wire
- 8-French Guiding shuttle (inner diameter 2.87mm)
- 15mm goose neck snare
- 12-French catheter (only sheath, inner diameter 4mm)

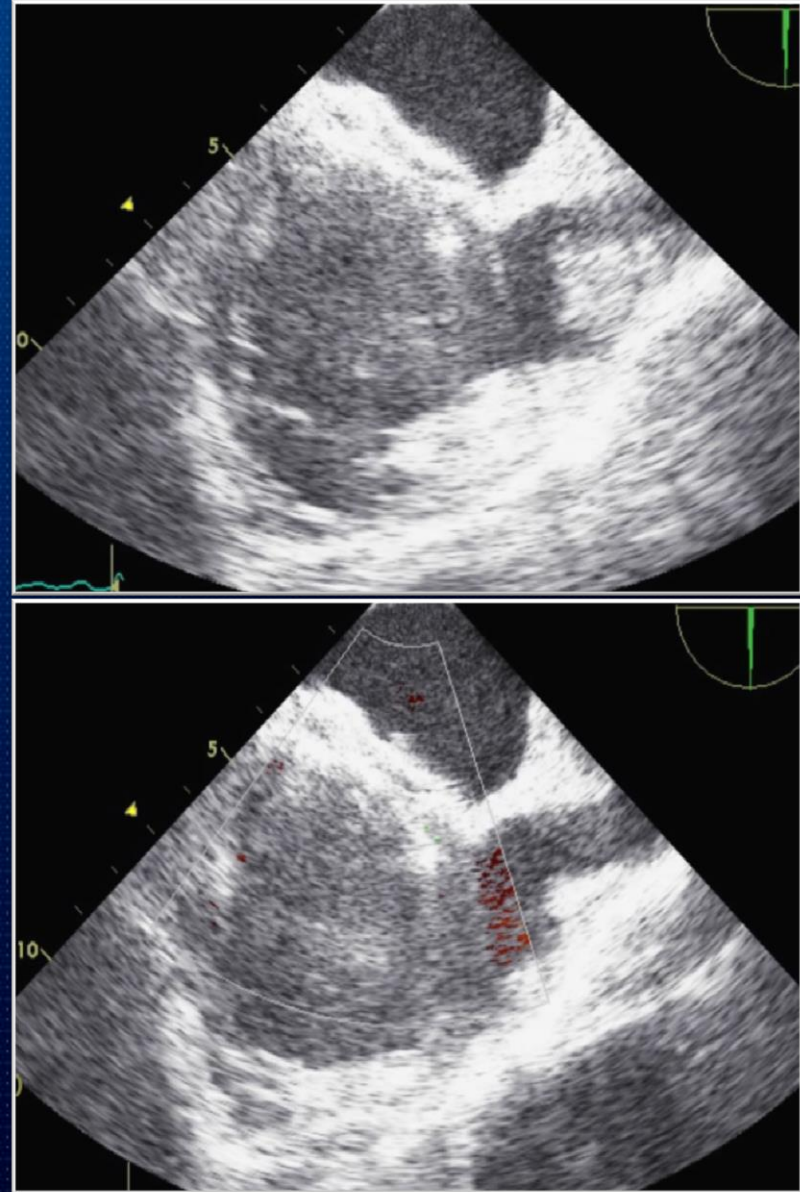
Post Retrieval - TEE



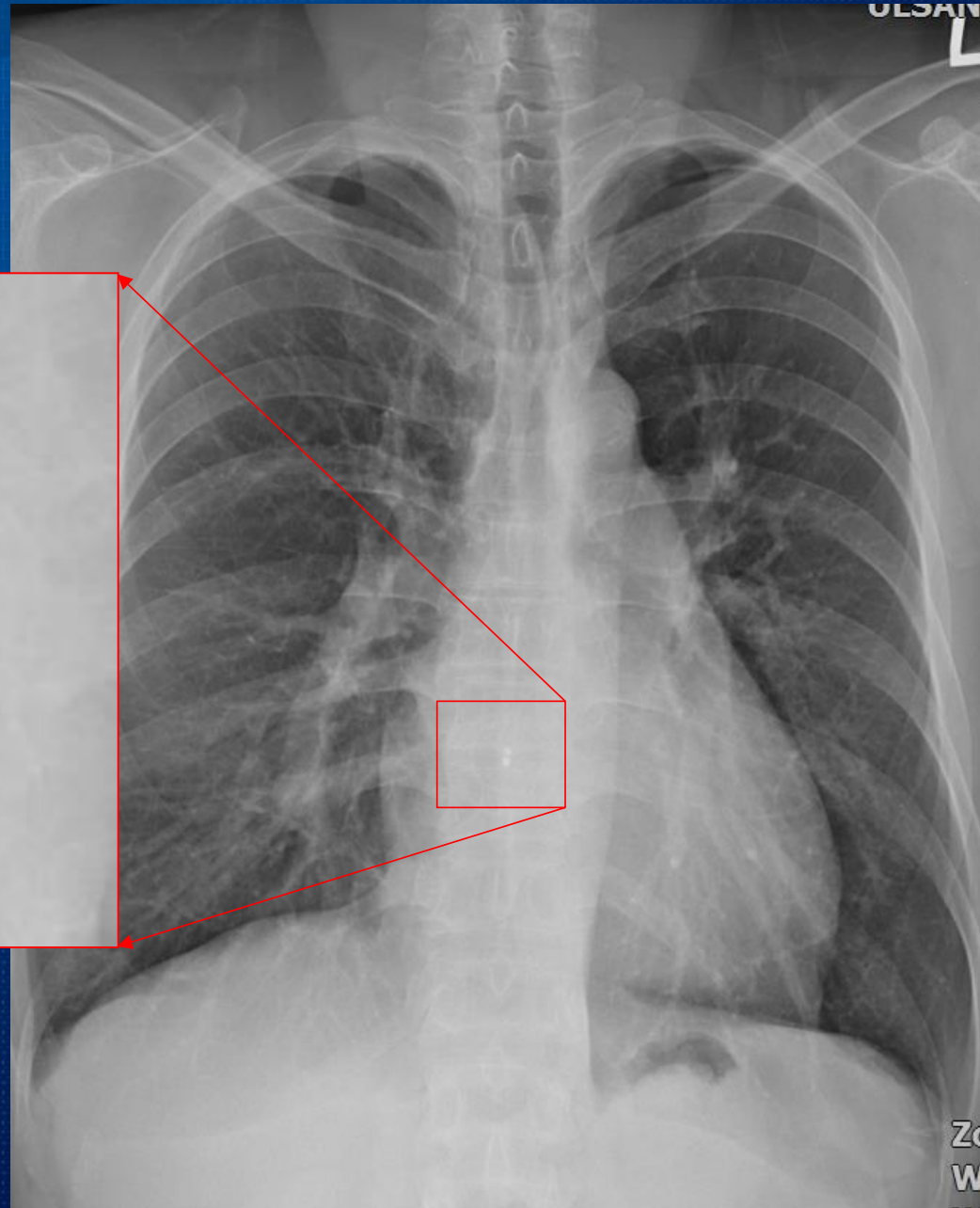
2nd Percutaneous transcatheter closure of ASD



9Fr Amplatzer delivery system
Amplatzer septal occluder 26mm



F/U CXR



Device embolization is the most commonly encountered complication, which may relate to inadequate rims, improper sizing, or placement of the device

J Invasive cardiol 2013;25(5):257-264

Authors	Chan ³⁸	Waight ³⁹	Massimo ⁴⁰	Spies ⁴¹
Year	1999	2000	2002	2007
Patient number	100	77	417	170
Used devices	ASO	ASO	SF/ASO/CS	ASO
Overall complication rate	5%	3.9%	8.6%	17%
Major complications	0%	3.9%	2.6%	7%
Atrial fibrillation			8	6
Supraventricular tachycardia			2	
Complete heart block	1	1	1	
Device embolization	1	2	15	4
Pericardial effusion			2	1

Device embolization incidence

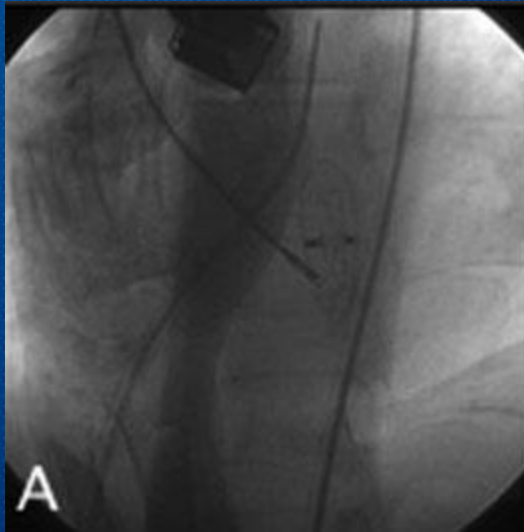
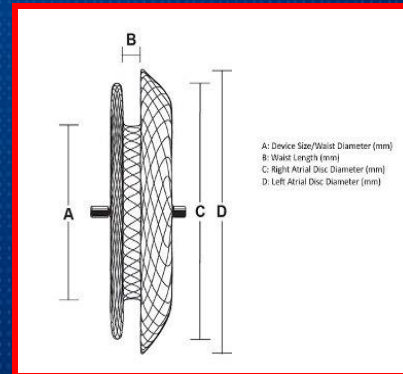
0.3-1%

Emergency open heart surgery for device retrieval is the standard rescue procedure

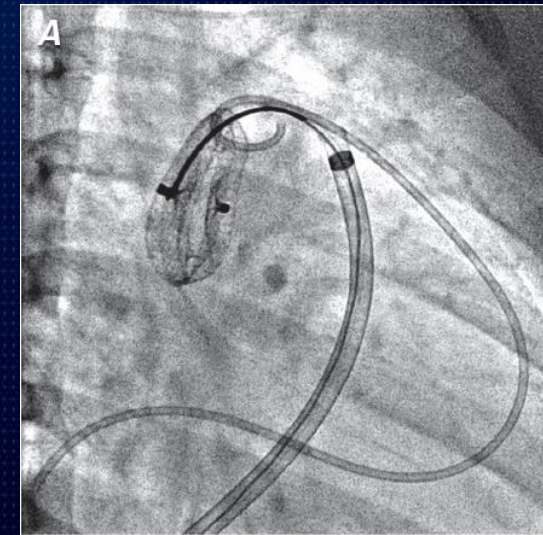
Am J Cardiol 2009;103:550-554

Transcatheter retrieval of the embolized device is possible in about 50% of cases

Catheter Cardiovasc Interv 2008;72:559-62.

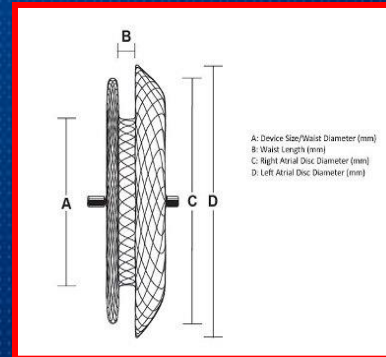


bioptome



pigtail

How to retrieve the embolized ASD occluder device ?



Before retrieval, the embolized device should be *stabilized*

Try to snare *the screw on the RA disk*, not LA disk

Make to *slenderize* the device on large in *slightly larger sheath*

Thank you for your attention !



