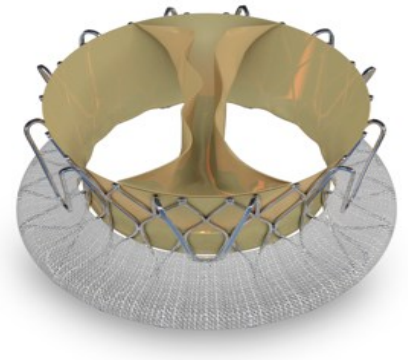
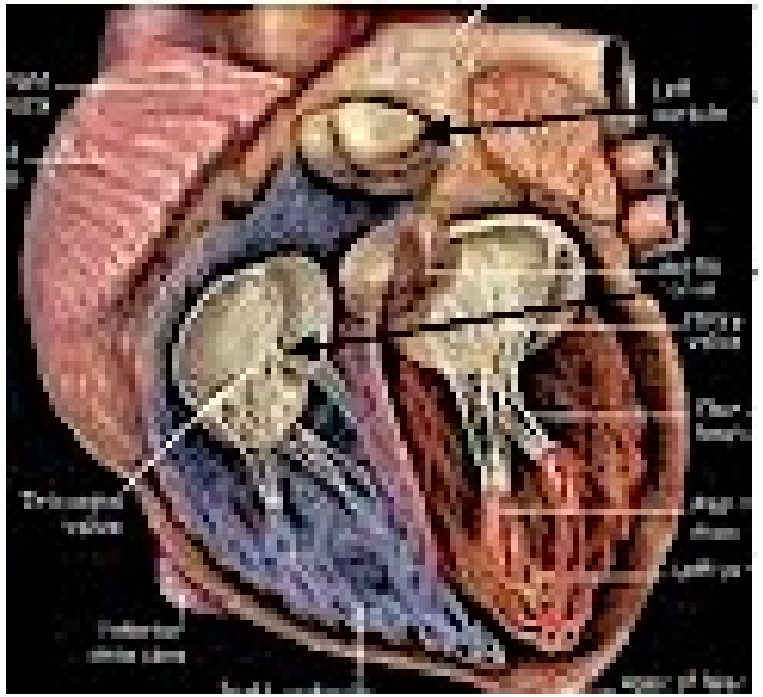
TRISOLMEDICAL
tricuspid valve replacement

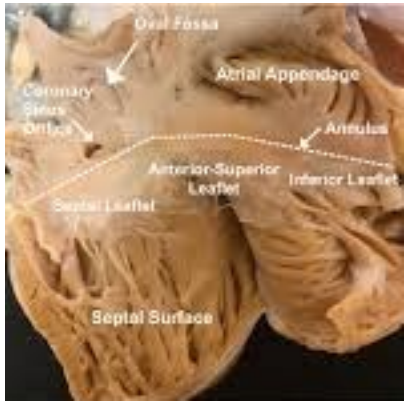


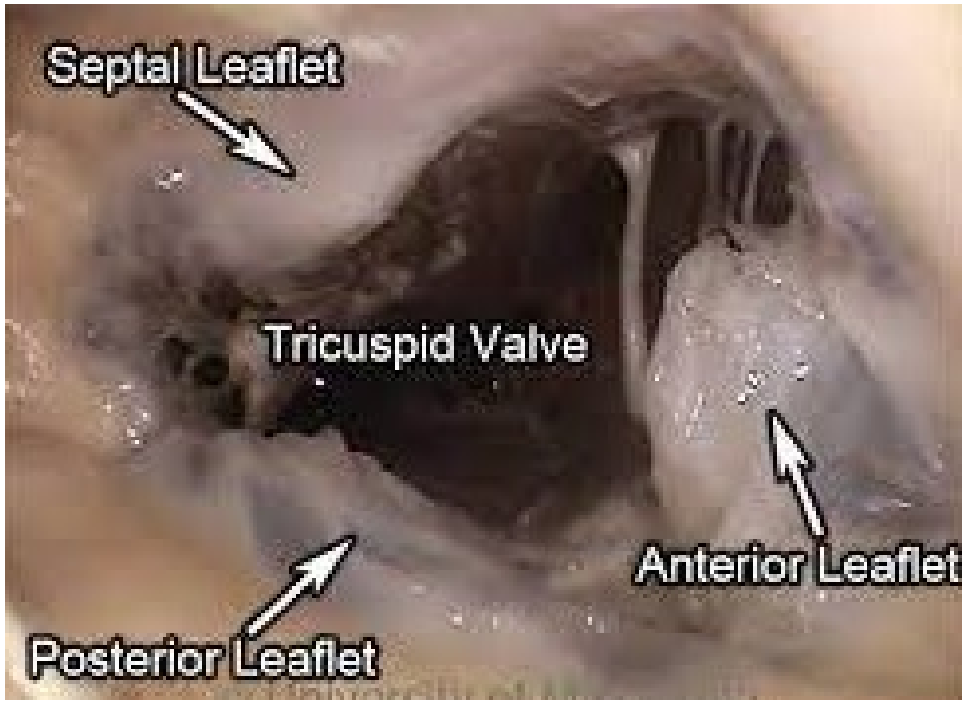
The Challenges of TTVR With The Trisol Valve

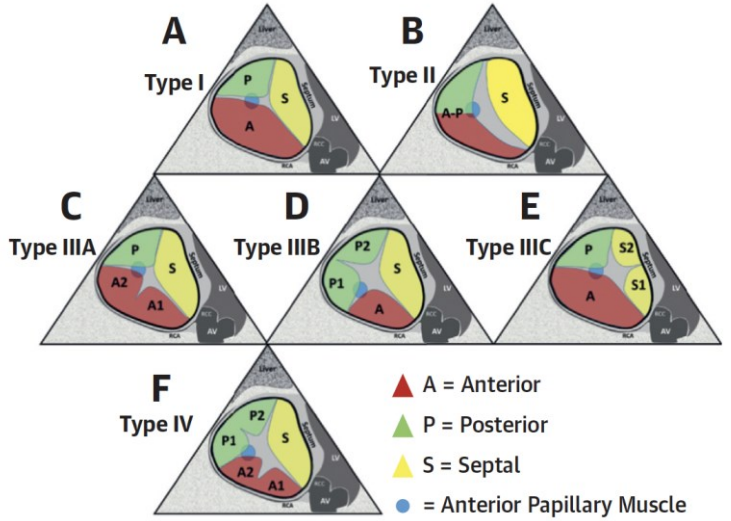
M. Vaturi
Rabin Medical Center

TV & RV Anatomy









Hahn, R.T. et al. J Am Coll Cardiol Img. 2021;14(7):1299-305.

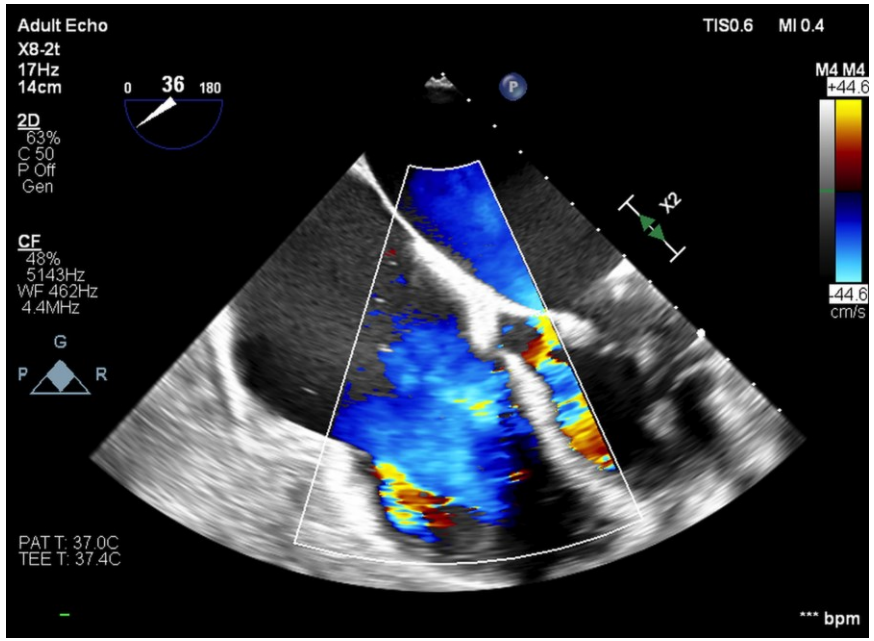
Imaging: selecting the right patient

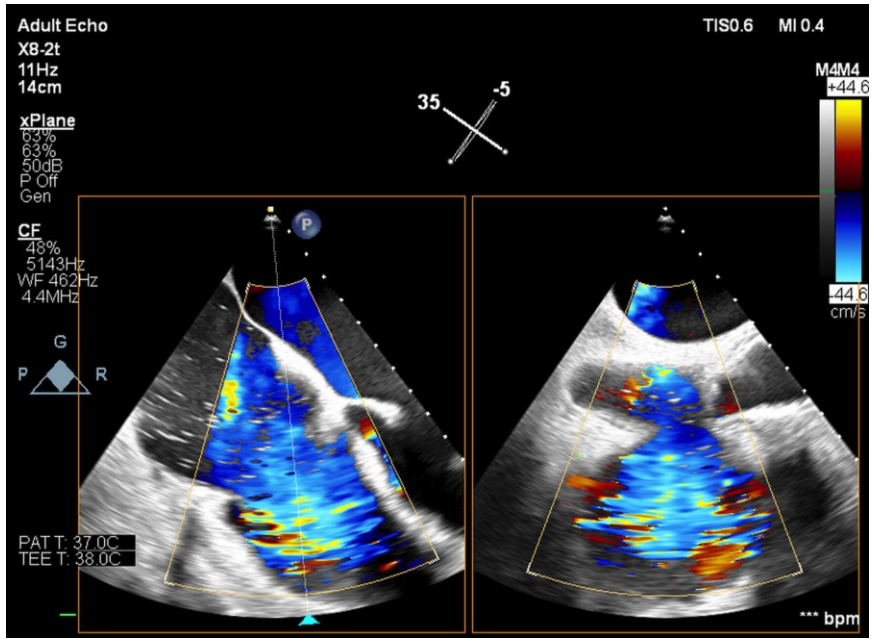
- TTE vs. TEE
- CT

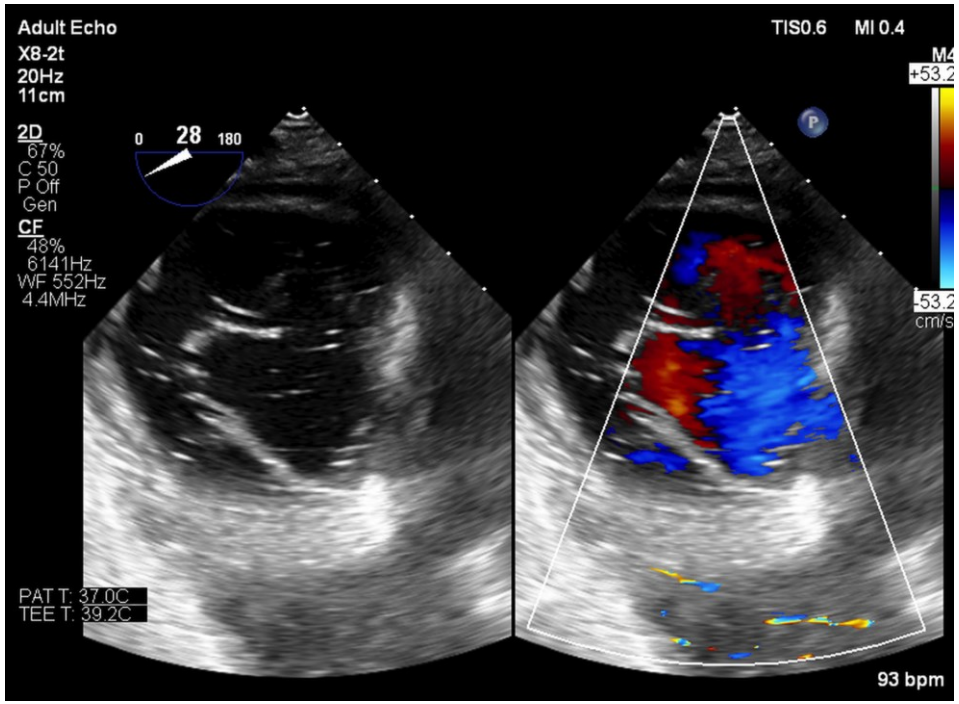
The key to TTVR success is absolute spatial orientation and real-time navigation in the RA-TV-RV complex.

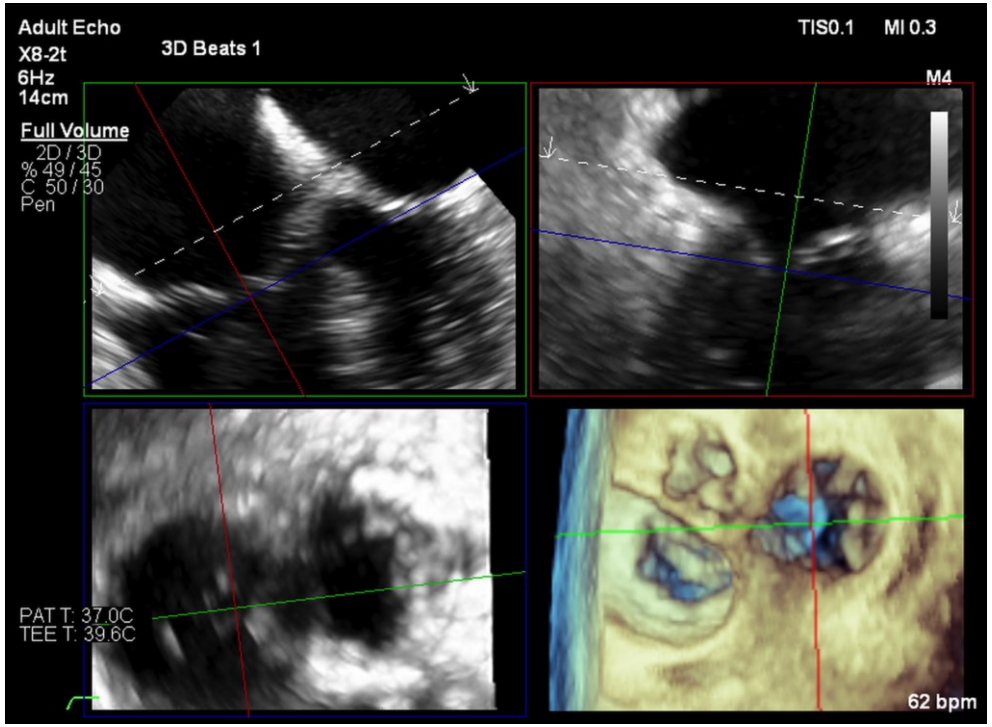
Imaging: viewing the entire valve

- Imaging all leaflets
- Marking the annular plane (wire in the RCA)
- Identifying potential obstacles in the RV's cavity (chordae, moderator band)
- Pacemaker endovascular electrode
- Adjacent prosthetic valves
- The patient is supine during the procedure (not on the left decubitus): imaging quality may vary with the body position

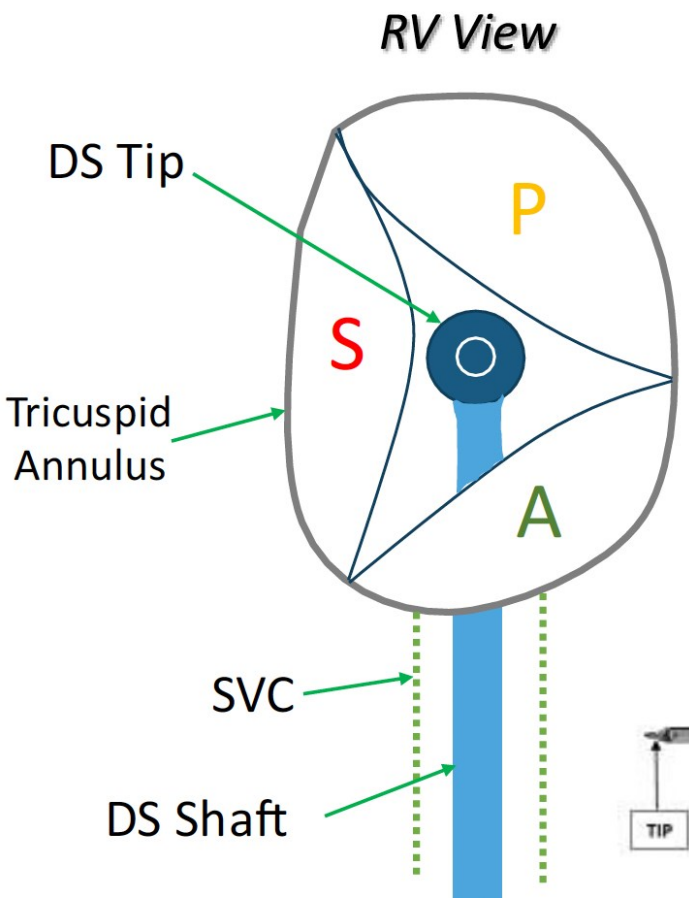

Adult Echo
X8-2t
17Hz
14cm
2D
63%
C 50
P Off
Gen
CF
48%
5143Hz
WF 462Hz
4.4MHz
TIS0.6 MI 0.4
M4 M4
+44.6
-44.6
cm/s
PAT T: 37.0C
TEE T: 37.4C
*** bpm


Adult Echo
X8-2t
11Hz
14cm
xPlane
63%
63%
50dB
P Off
Gen
CF
48%
5143Hz
WF 462Hz
4.4MHz
TIS0.6 MI 0.4
M4M4
+44.6
-44.6
cm/s
PAT T: 37.0C
TEE T: 38.0C
*** bpm

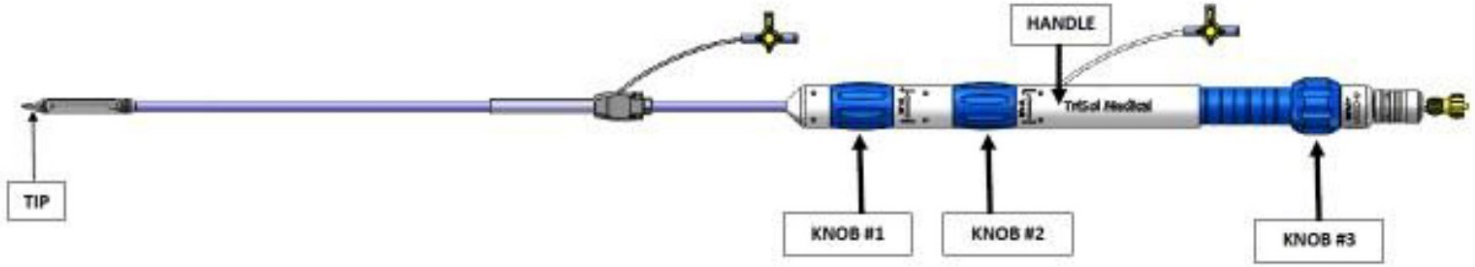

Adult Echo
X8-2t
20Hz
11cm
2D
67%
C 50
P Off
Gen
CF
48%
6141Hz
WF 552Hz
4.4MHz
TIS0.6 MI 0.4
PAT T: 37.0C
TEE T: 39.2C
93 bpm


Adult Echo
X8-2t
6Hz
14cm
3D Beats 1
Full Volume
2D / 3D
% 49 / 45
C 50 / 30
Pen
TIS0.1 MI 0.3
M4
PAT T: 37.0C
TEE T: 39.6C
62 bpm

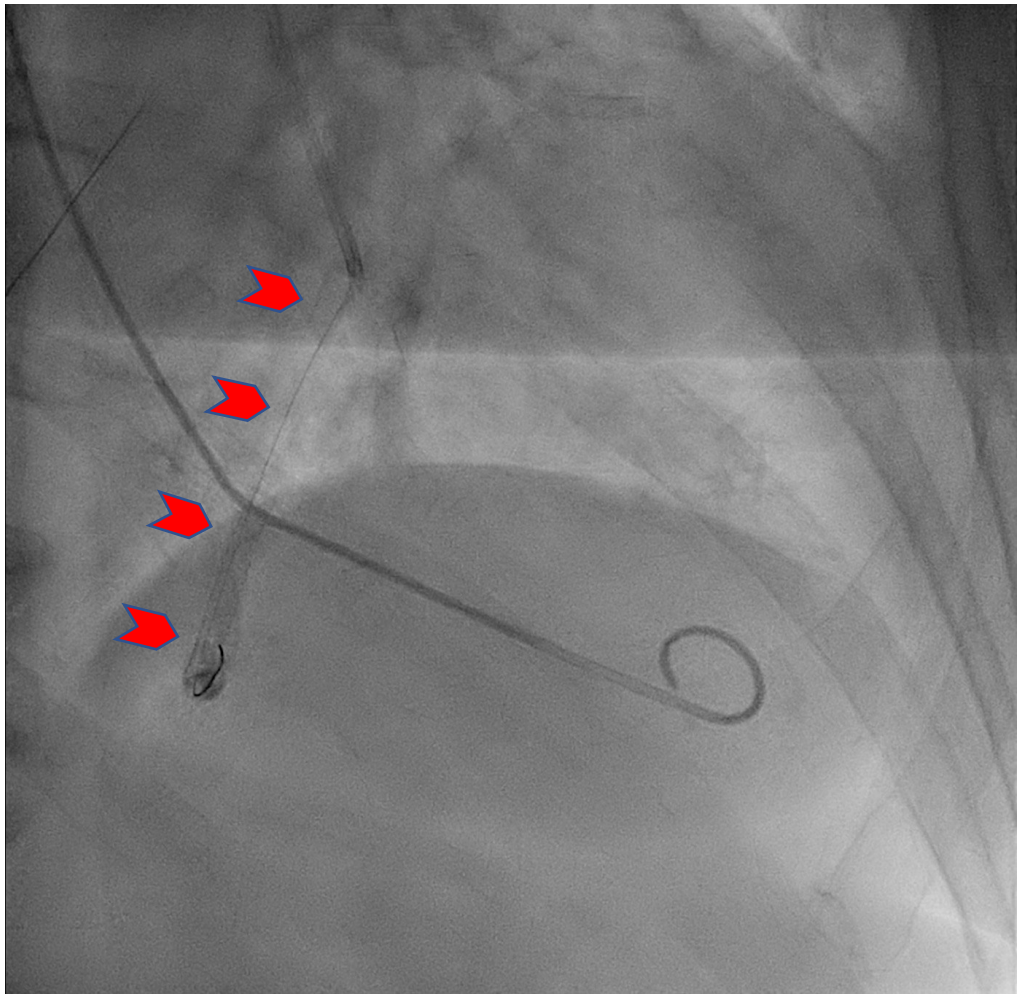
Communication



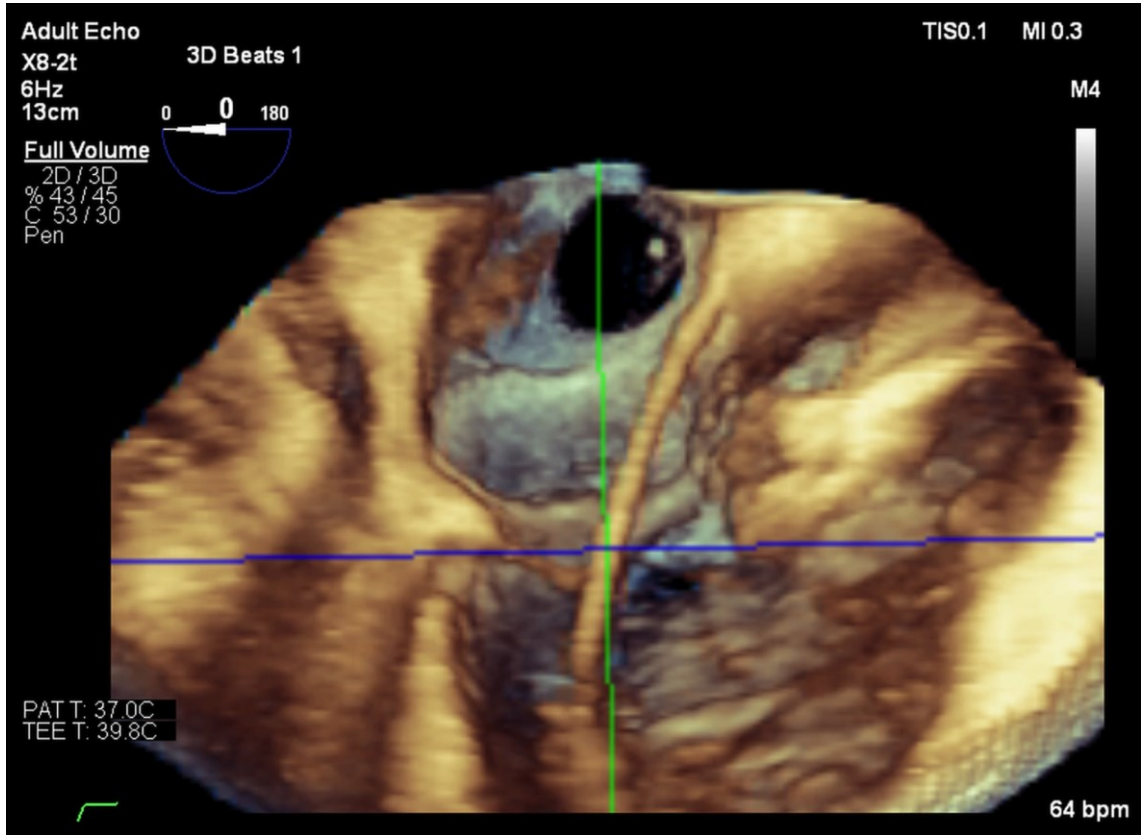
- ✓ To **Septal** L → Handle CCW
- ✓ To **Posterior** L → Knob #1 CCW \ Push handle in
- ✓ To **Anterior** L → Knob #1 CW \ Withdraw handle
- ✓ To RA → Knob #2 CW
- ✓ Deployment → Knob #3 CW

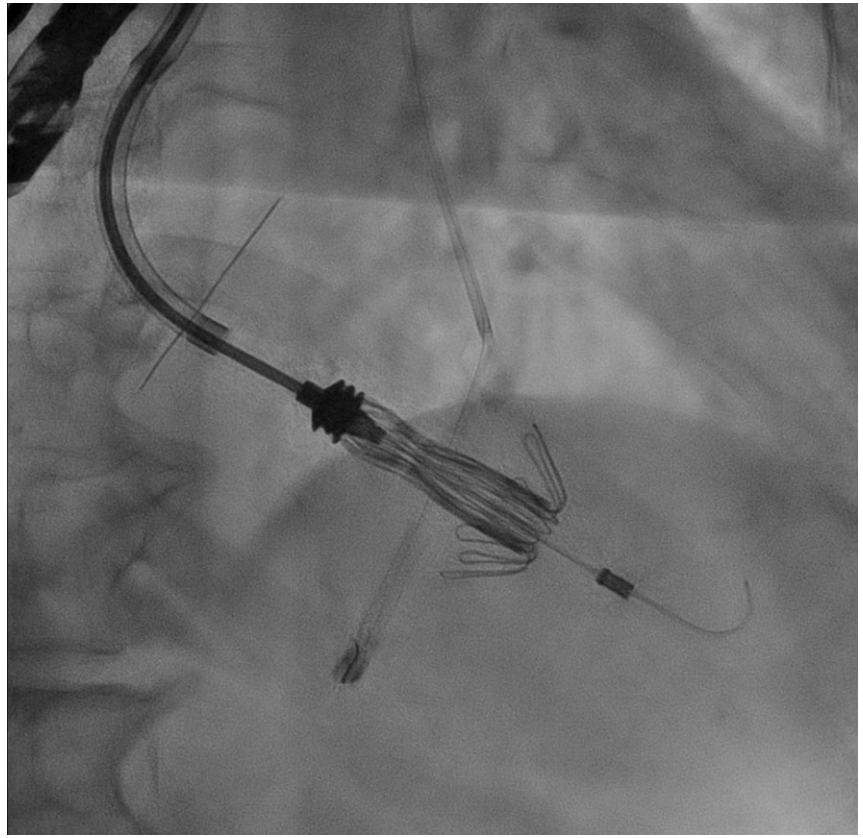


Marking the TV annulus

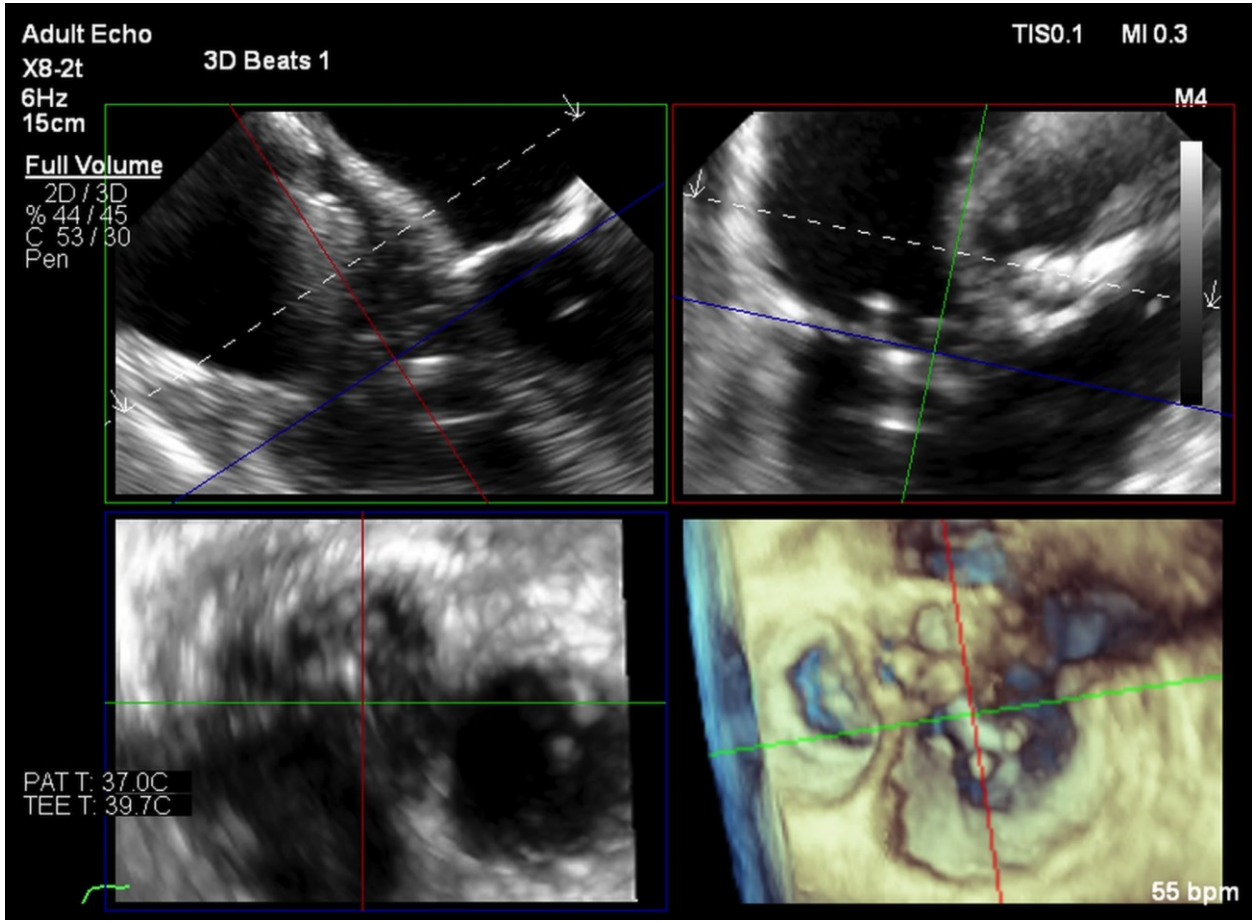


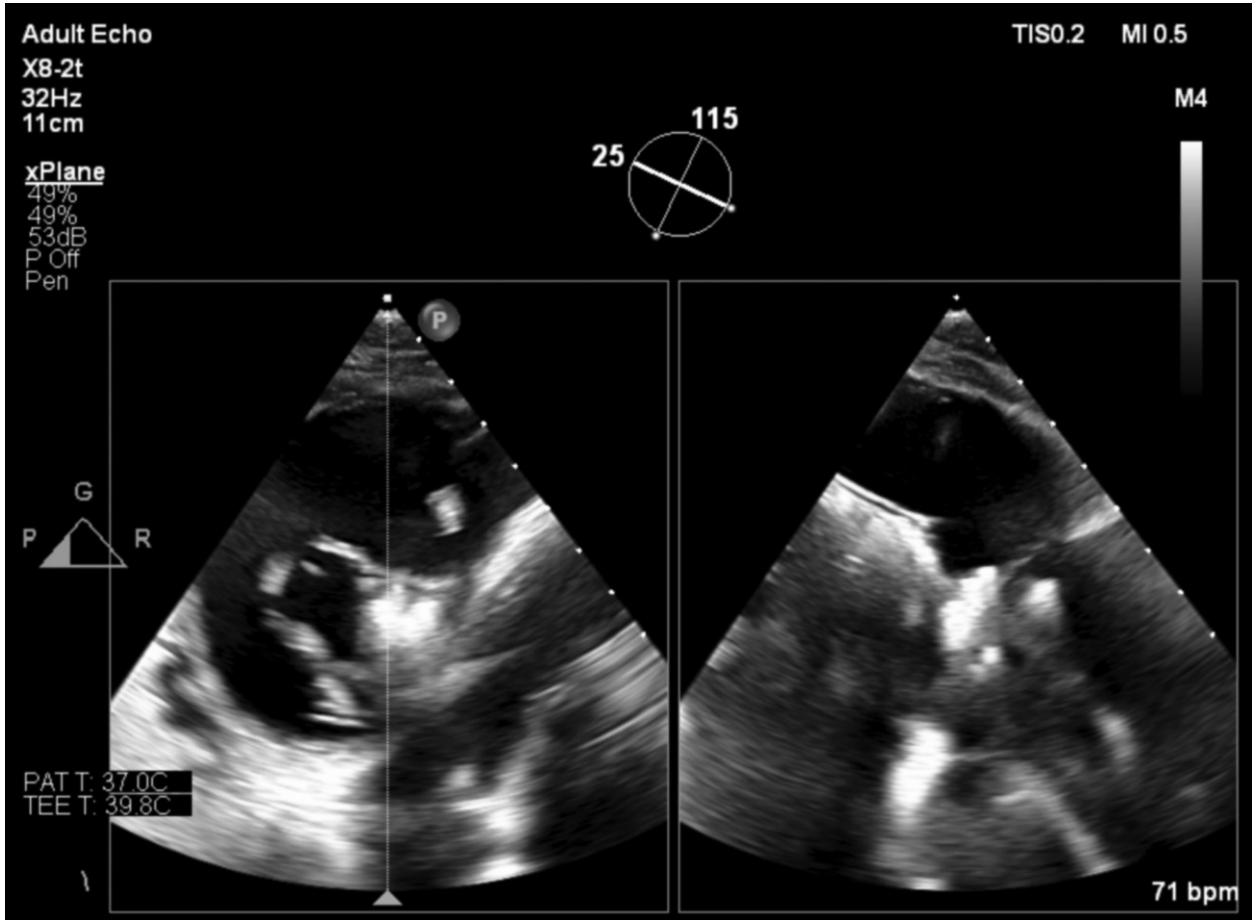
Maintaining Perpendicularity



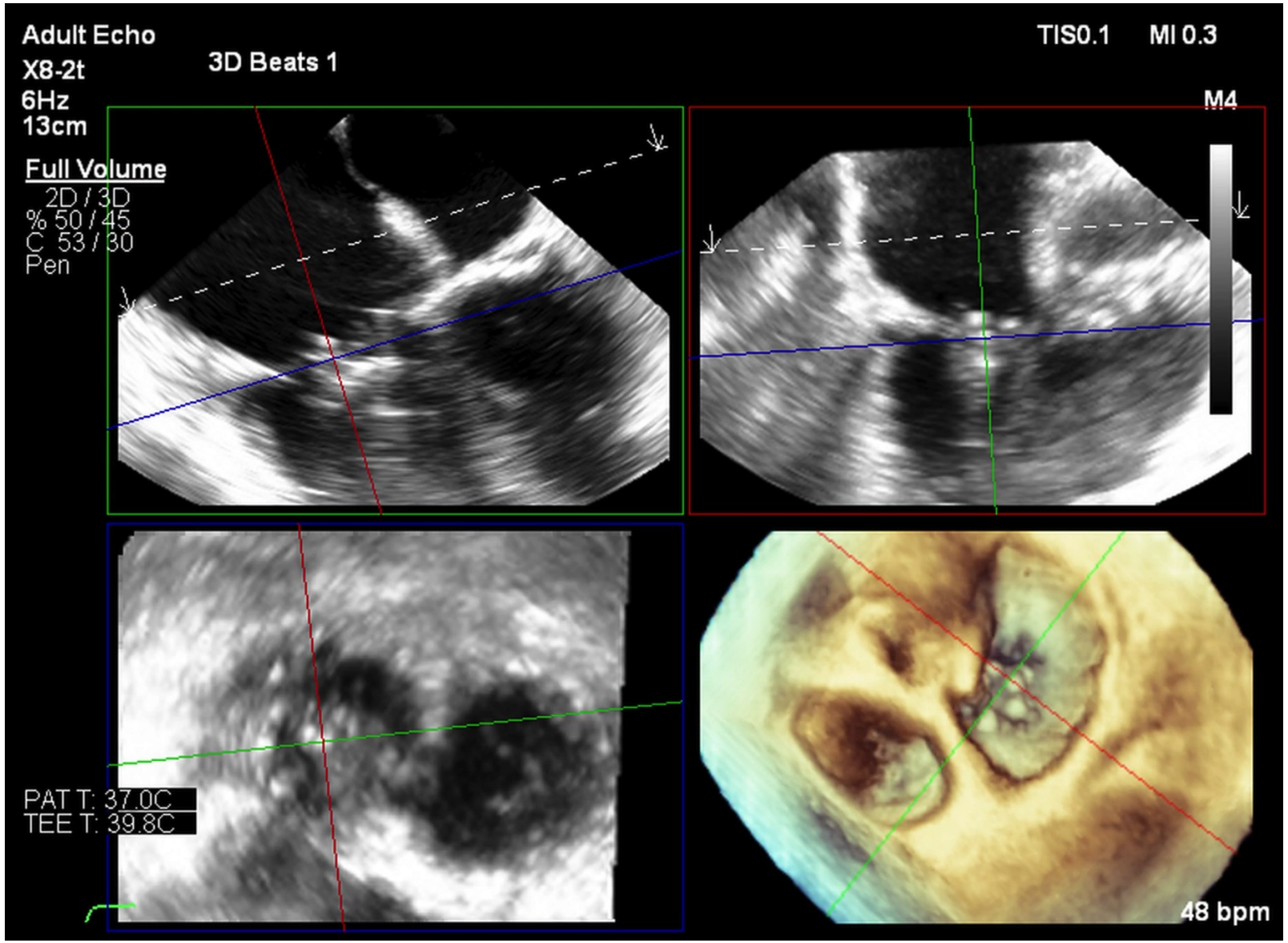


The Tango dance in the Cath. Lab.

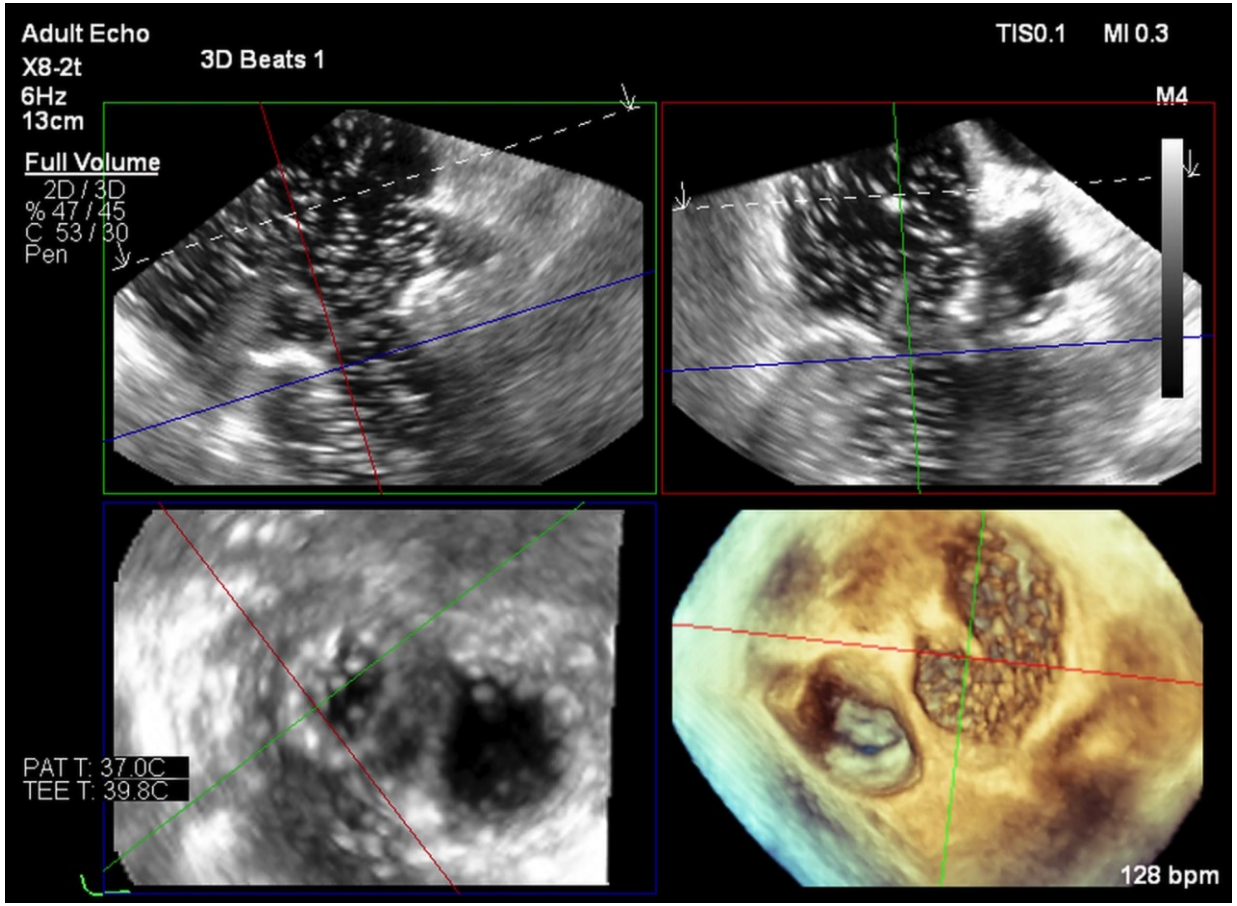


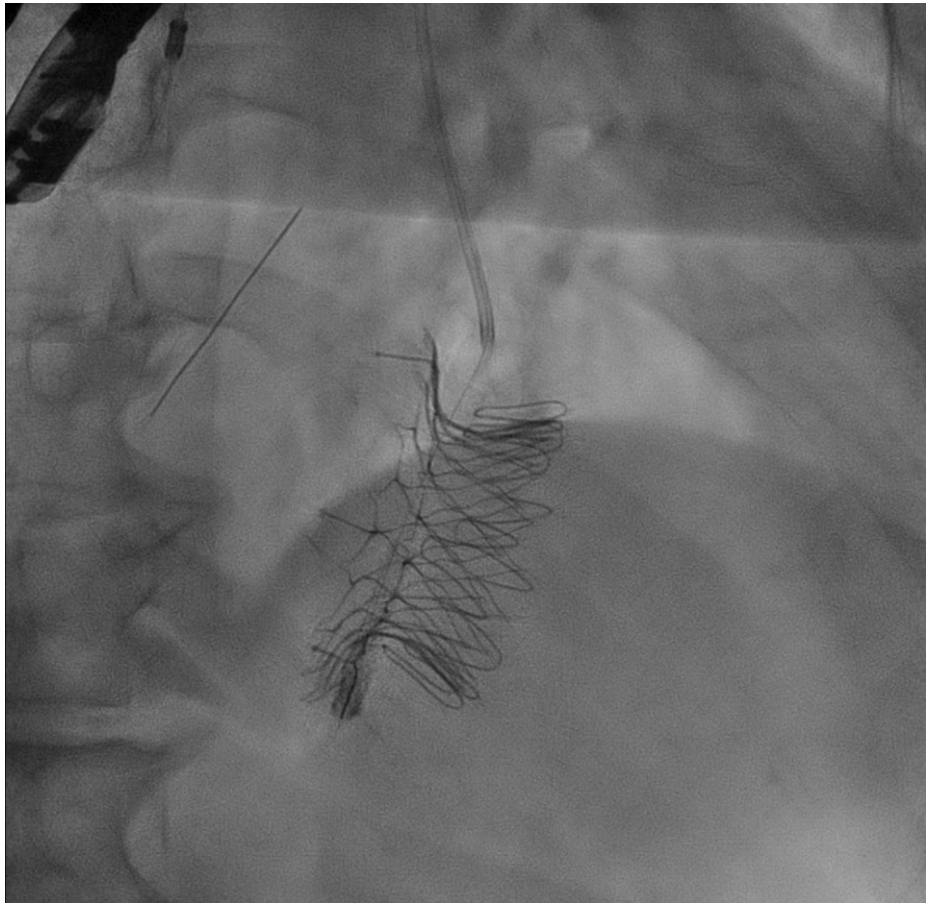


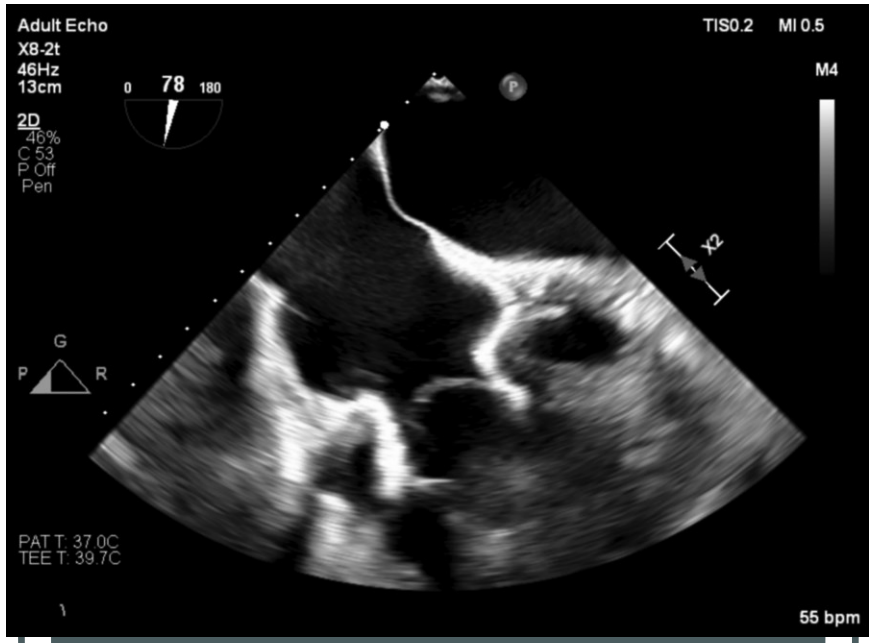
Patience (lots)

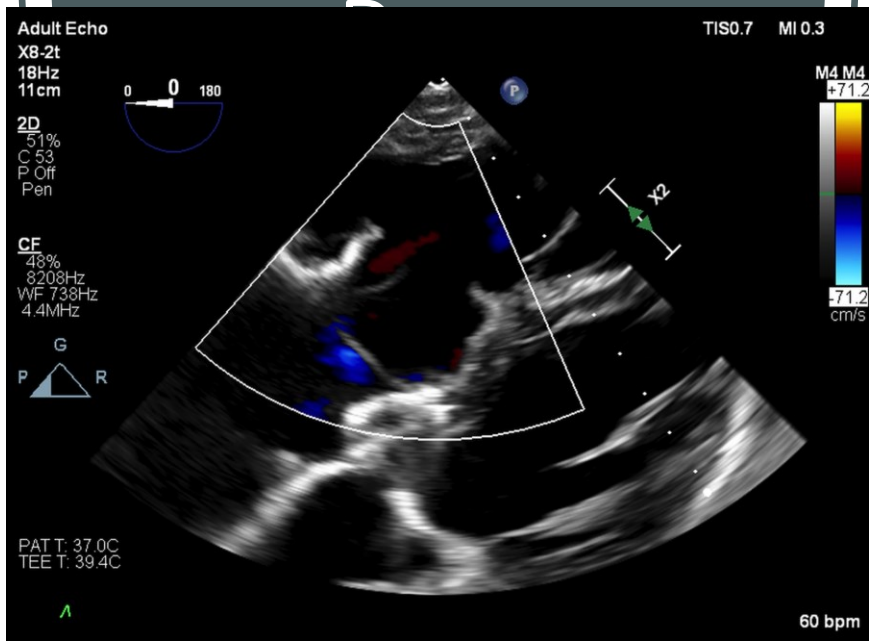

Adult Echo
X8-2t
6Hz
13cm
3D Beats 1
TIS0.1 MI 0.3
M4
Full Volume
2D / 3D
% 50 / 45
C 53 / 30
Pen
PAT T: 37.0C
TEE T: 39.8C
48 bpm

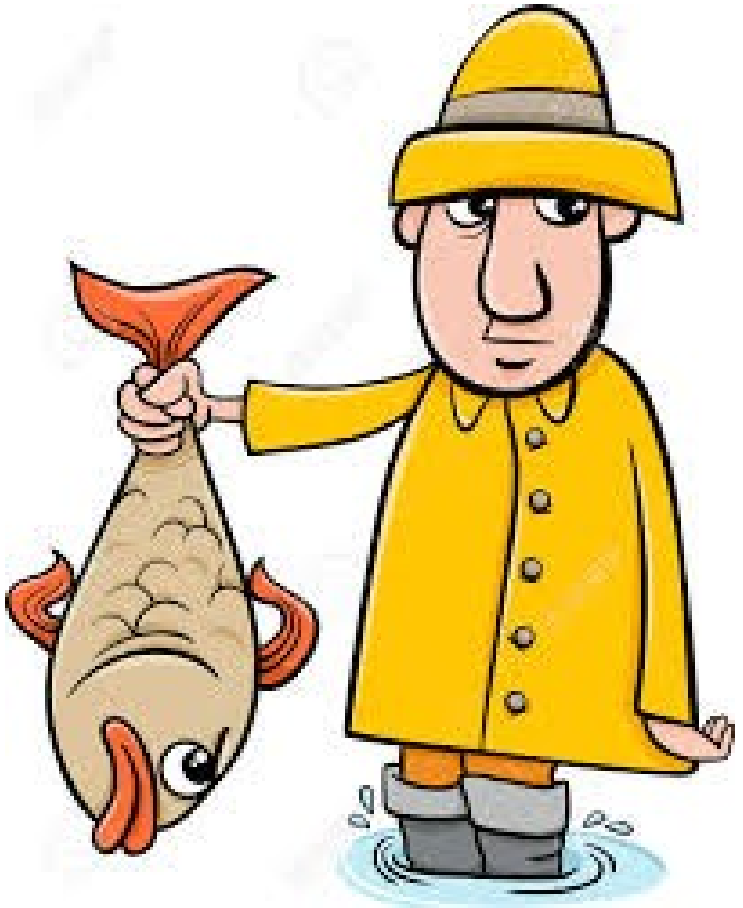
The Count Down

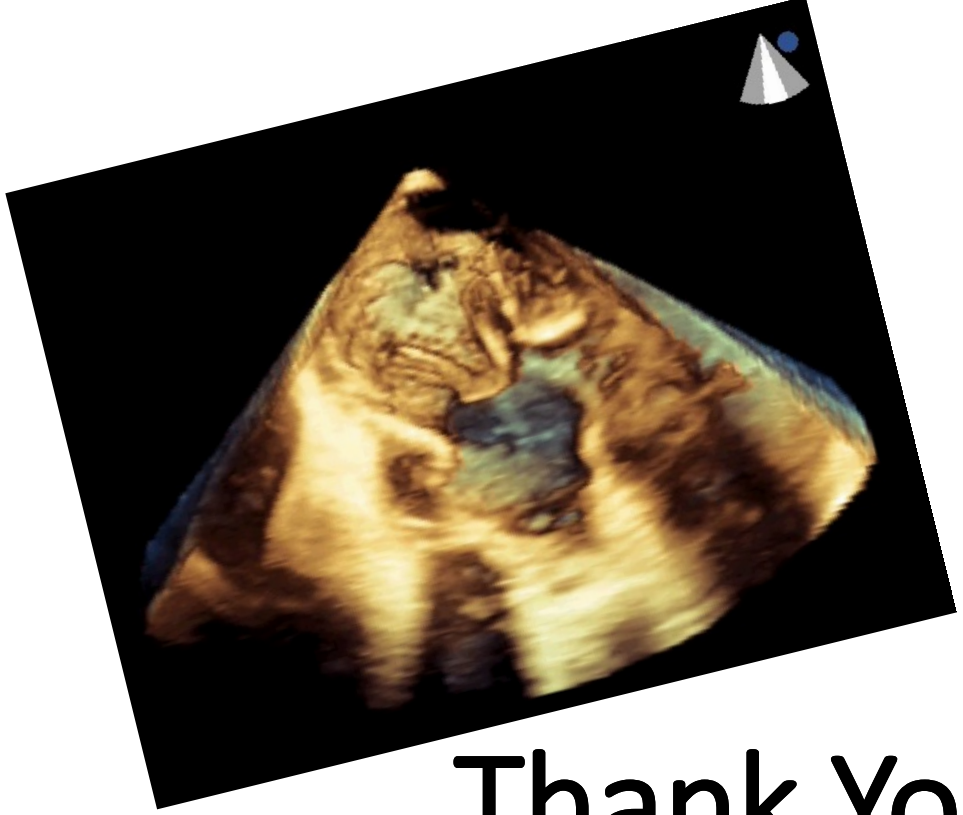





Adult Echo
TIS0.2 MI 0.5
X8-2t
46Hz
13cm
M4
2D
46%
C 53
P Off
Pen
PAT T: 37.0C
TEE T: 39.7C
55 bpm


Adult Echo
TIS0.7 MI 0.3
X8-2t
18Hz
11cm
M4 M4
2D
51%
C 53
P Off
Pen
CF
48%
8208Hz
WF 738Hz
4.4MHz
cm/s
PAT T: 37.0C
TEE T: 39.4C
60 bpm





Thank You for Your Attention