

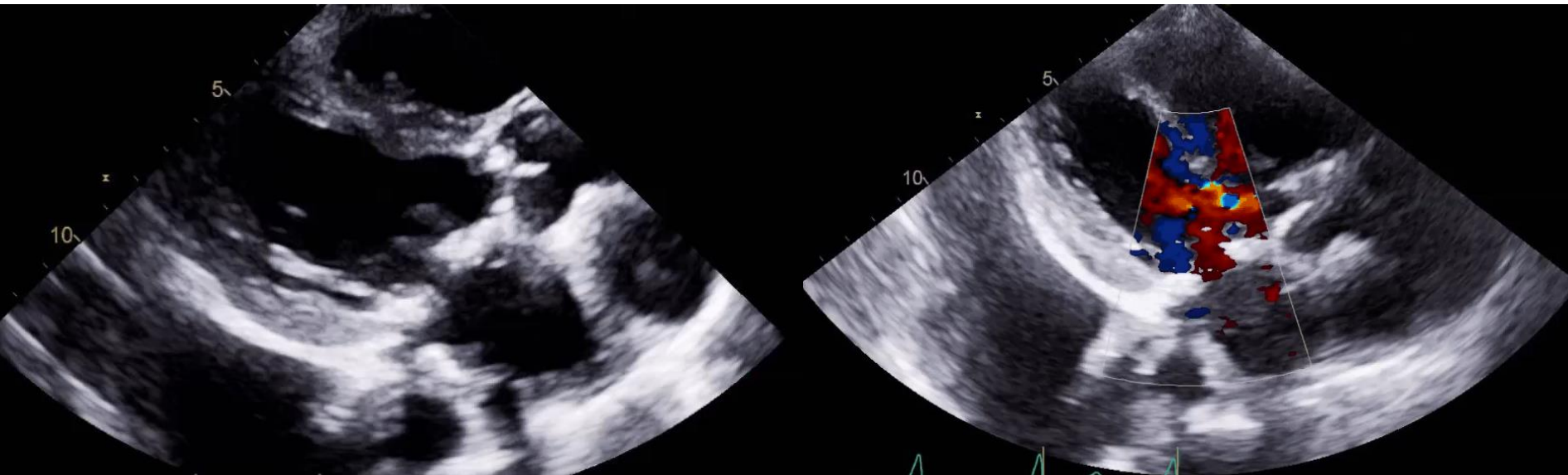
# Regurgitant Lesions

Neal S. Kleiman, MD

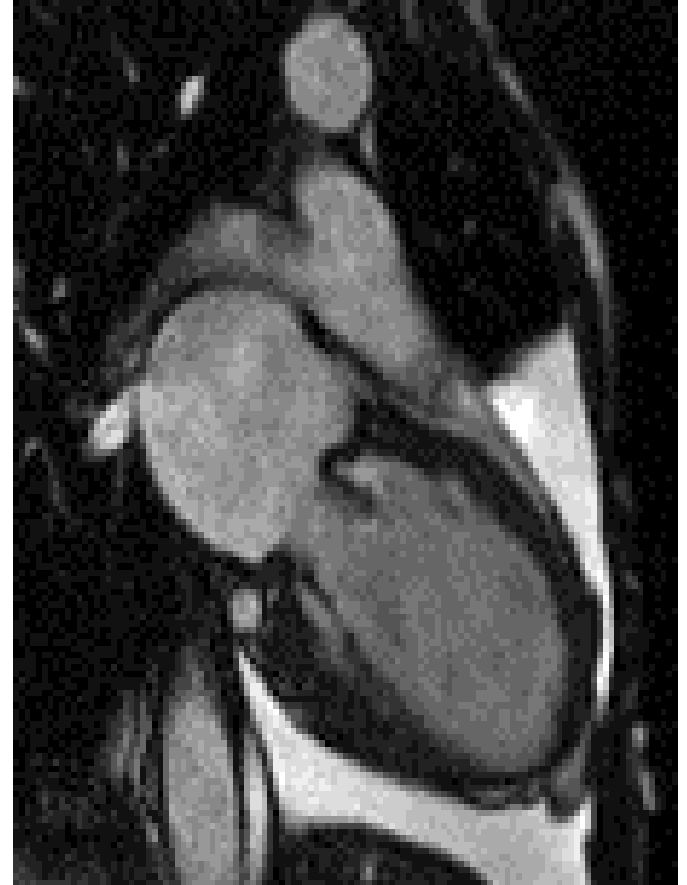
# Case 1

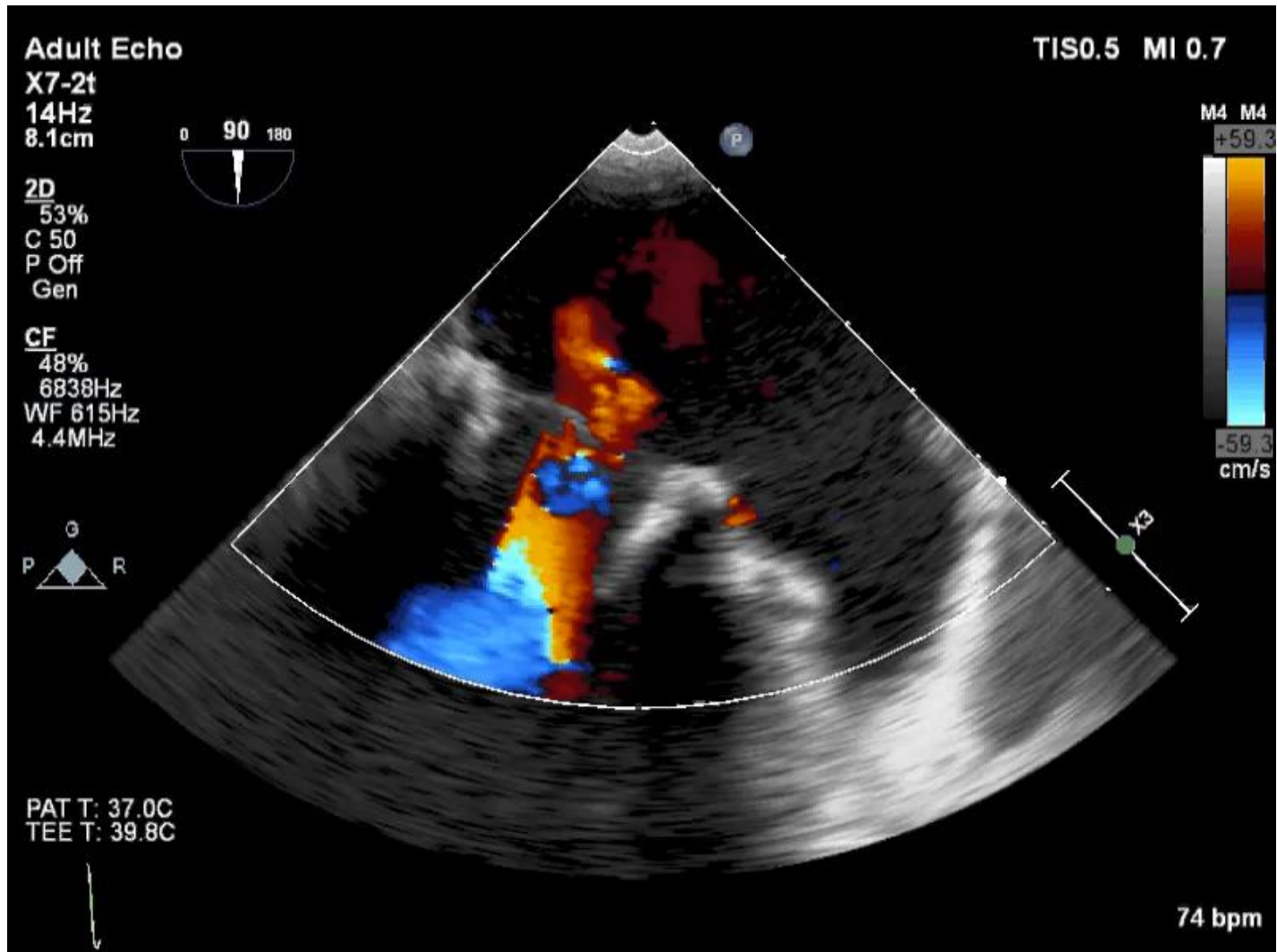
- 76 Year old woman with bioprosthetic mitral valve and coronary bypass 6 years previously and prior breast radiation for ca.
- One year of increasing dyspnea and decreasing exercise tolerance. NYHA III
- Hospitalized 6 months previously for CHF and hemolysis and was told of paravalvular leak.
- Treated with iron infusions and blood transfusions.
- Exam → II/VI holosystolic murmur and pulsatile liver

# Transthoracic Echo

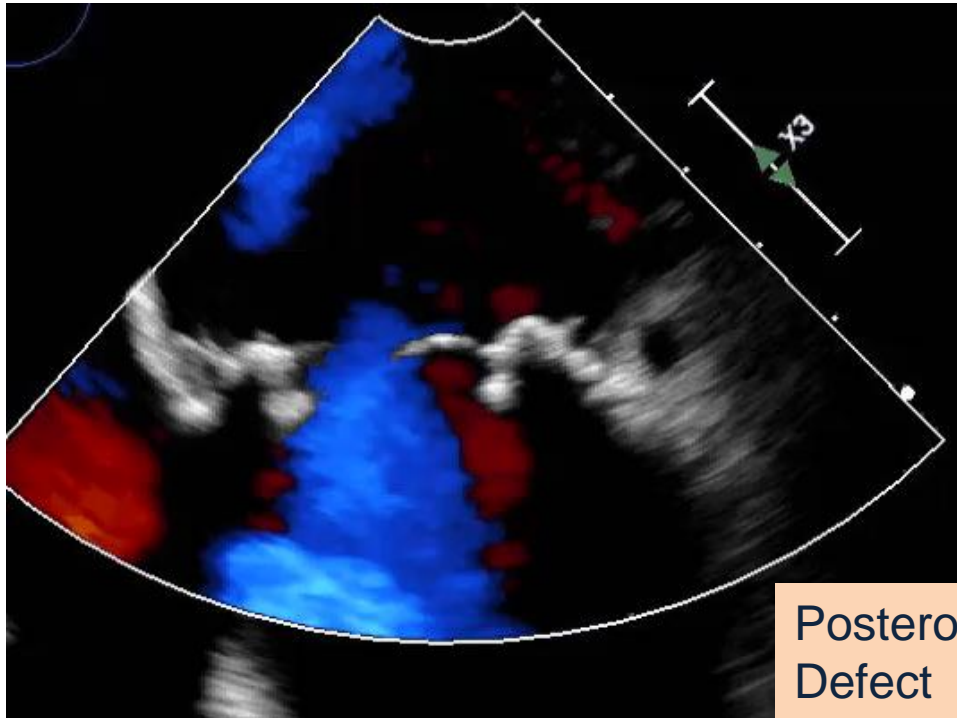


# Baseline CMR



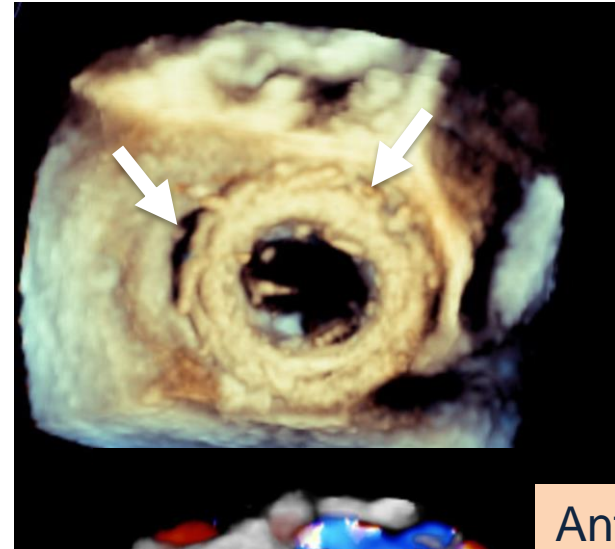


# Baseline TEE

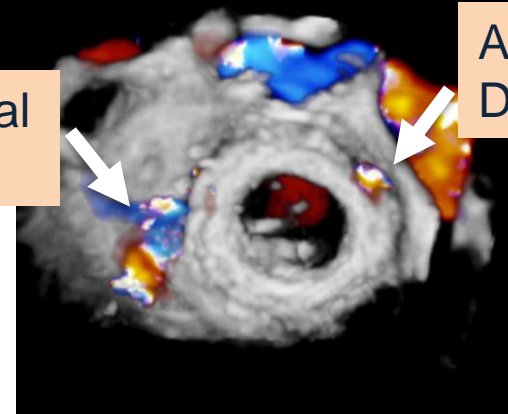


Posterolateral  
Defect

2 Paravalvular jets



Anteromedial  
Defect

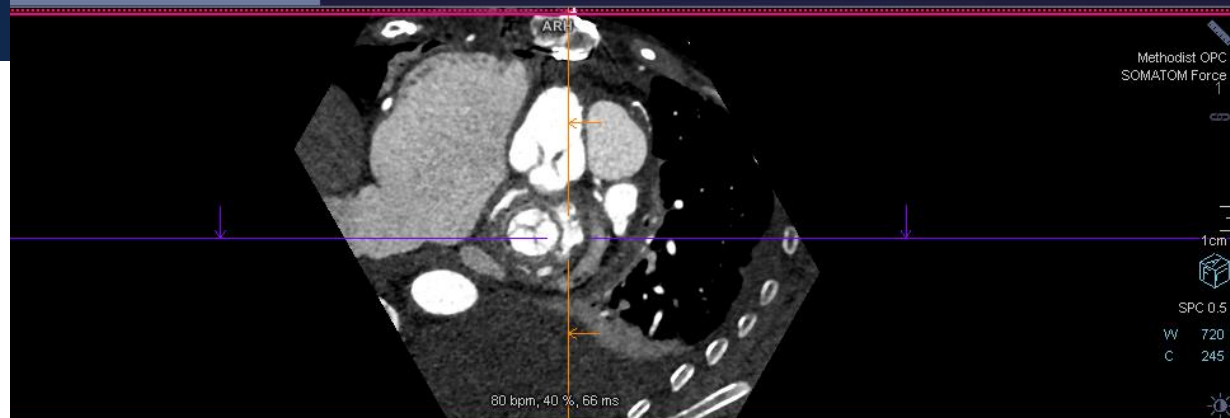


Server: 10.110.117.71

Kleiman, Neal, M.D.



yn  
2 F 108249764



Methodist OPC  
SOMATOM Force

1cm

SPC 0.5

W 720

C 245



Data Groups

Current

CT, 9/17/2018  
Cardiac^RETRO\_COR\_CTA\_(Ad...  
40 % [P11]  
512

Results

S1 Snapshot Vasc [1008]



Methodist OPC  
SOMATOM Force

1cm

SPC 0.5

W 720

C 245



Methodist OPC  
SOMATOM Force

1cm

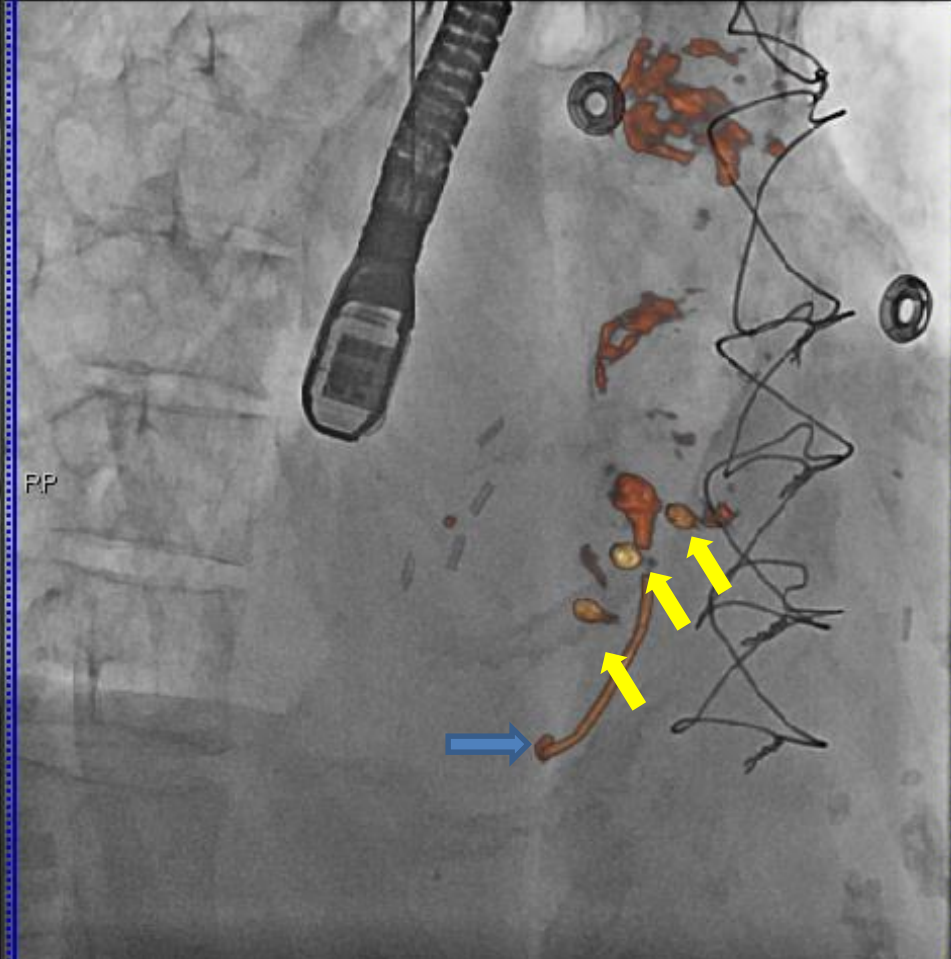
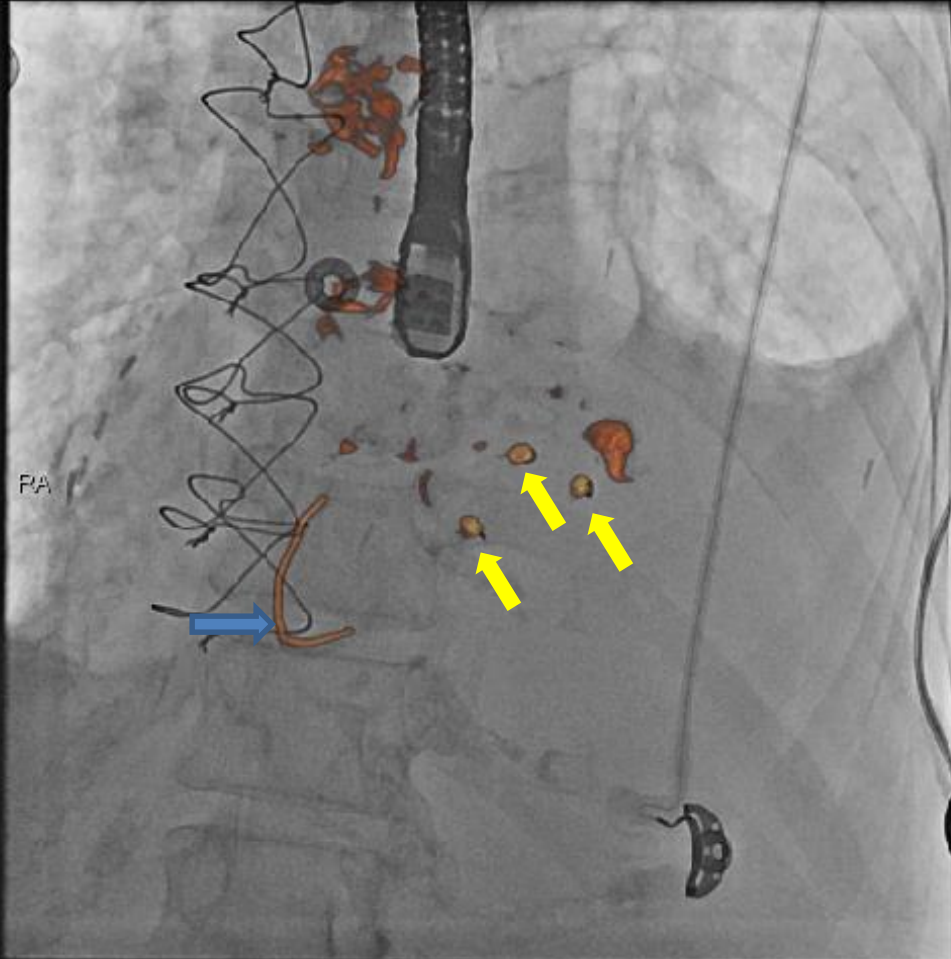
SPC 0.5

W 720

C 245







## CT Image Fusion – 2D3D Fusion

AI

VRT  
LAO 18 / CRAN 4

W 2122  
C 1307

Angle = 63°

VRT  
RAO 45 / CRAN 4

RA

W 2122  
C 1307

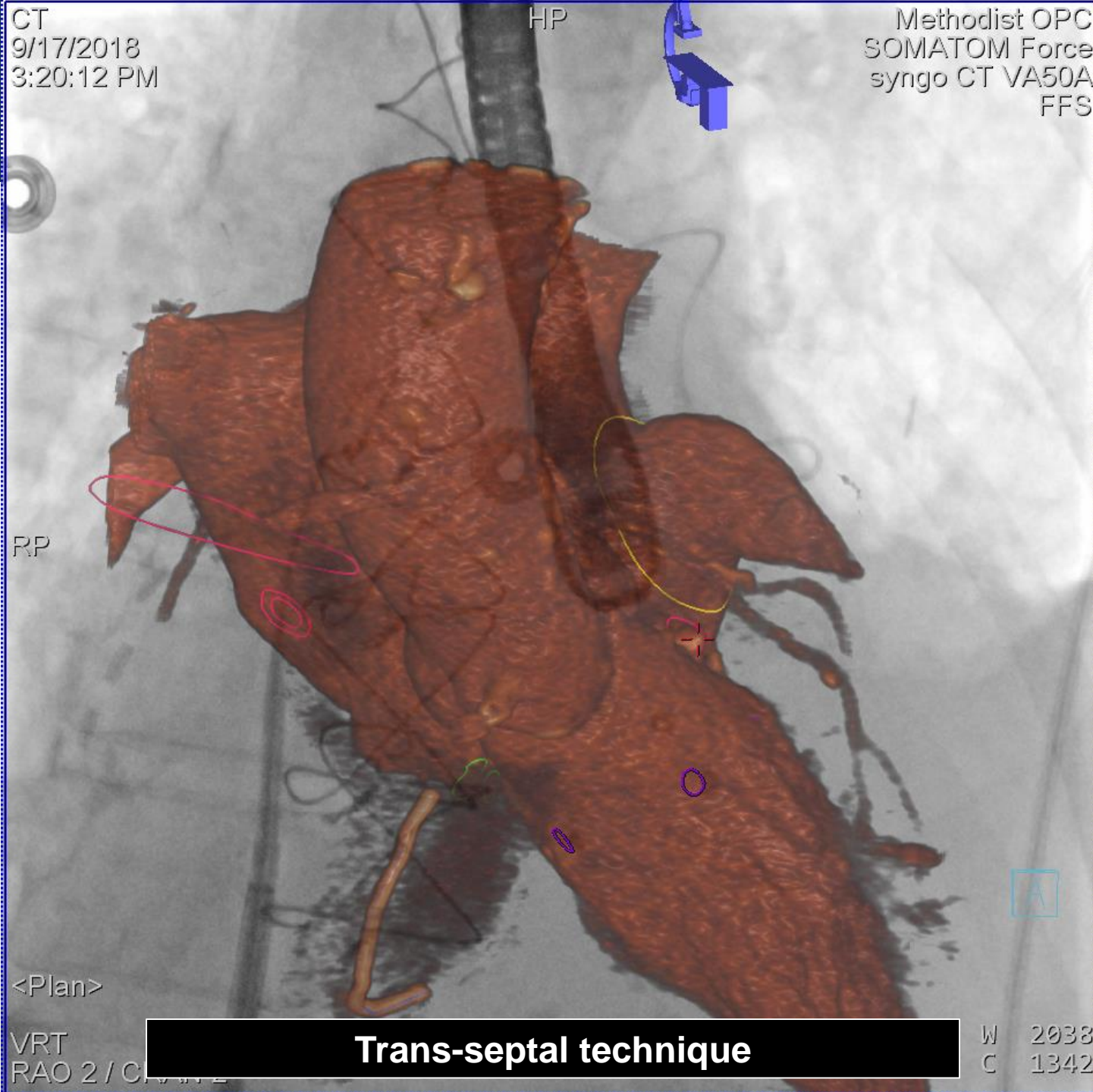


CT  
9/17/2018  
3:20:12 PM

HP

Methodist OPC  
SOMATOM Force  
syngo CT VA50A  
FFS

ist<sup>SM</sup>  
HEART &  
CENTER



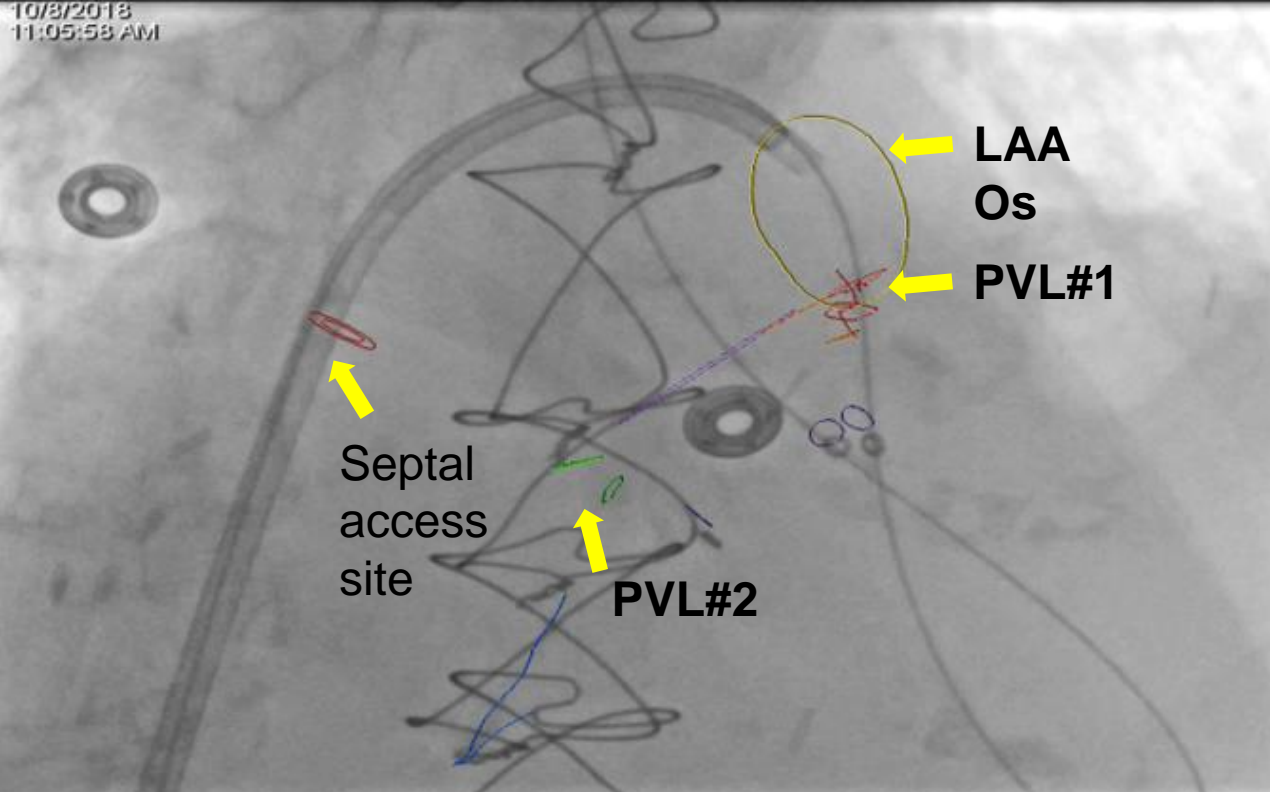
RP

<Plan>

VRT  
RAO 2 / C

**Trans-septal technique**

W 2038  
C 1342



CACathLab^Cath Lab P...  
cm 26  
RAO 9° / CRAN 26°

X8-2t

15Hz

6.9cm

3D Zoom

2D / 3D

% 57 / 50

C 46 / 30

Gen

CF

% 51 / 50

5999Hz

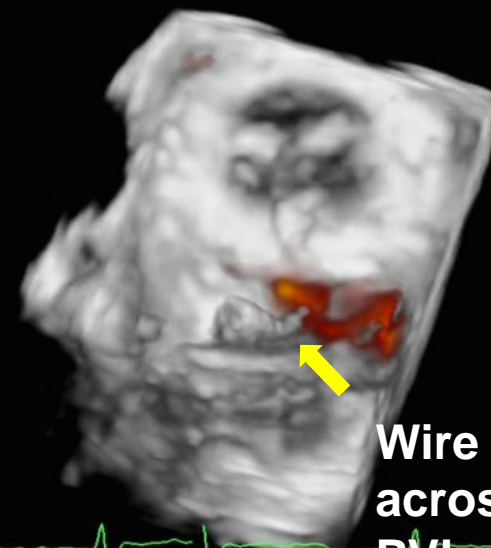
WF 599Hz

3.3MHz

3D Beats 1

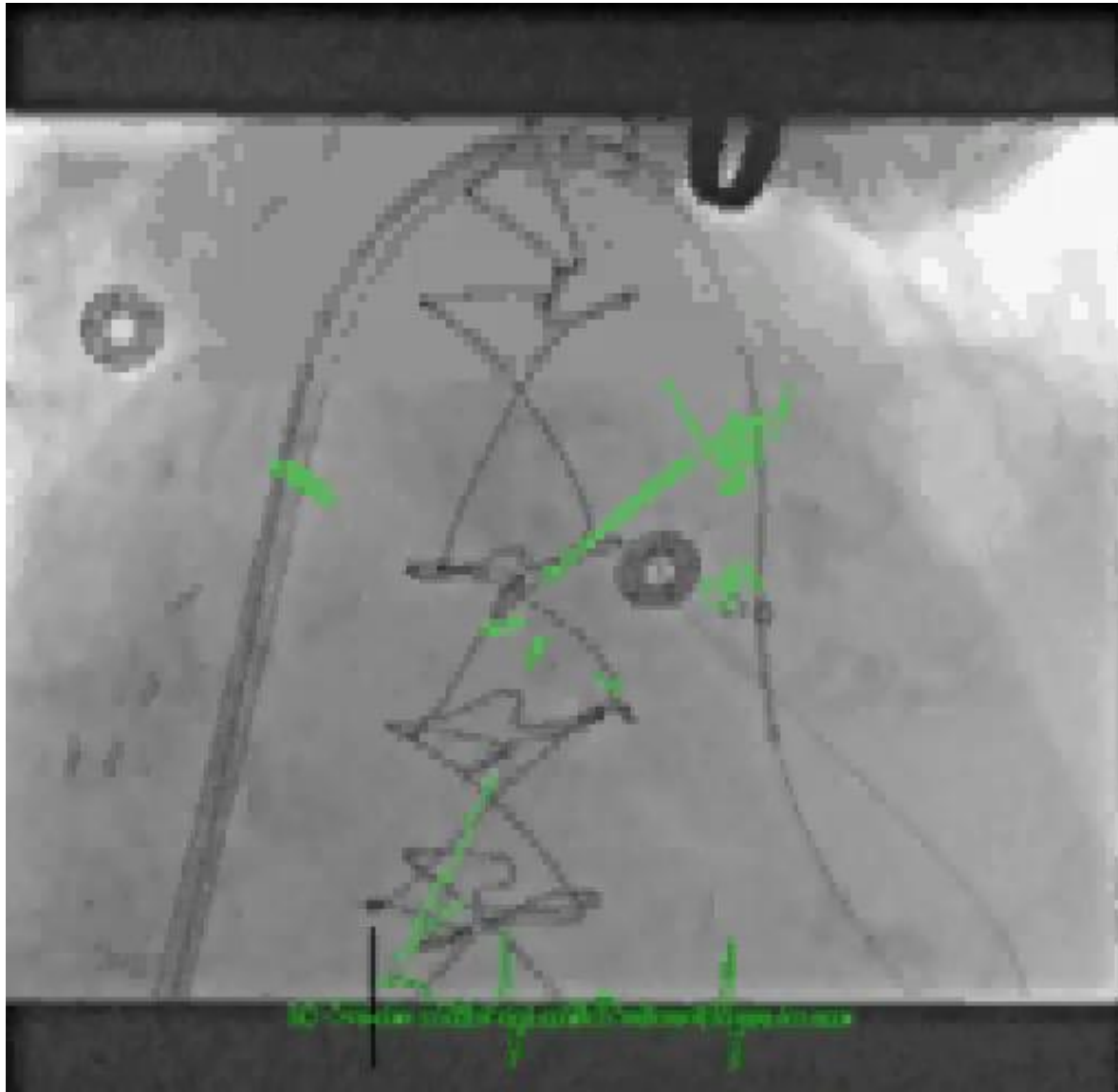


PAT T: 37.0C  
TEE T: 39.5C

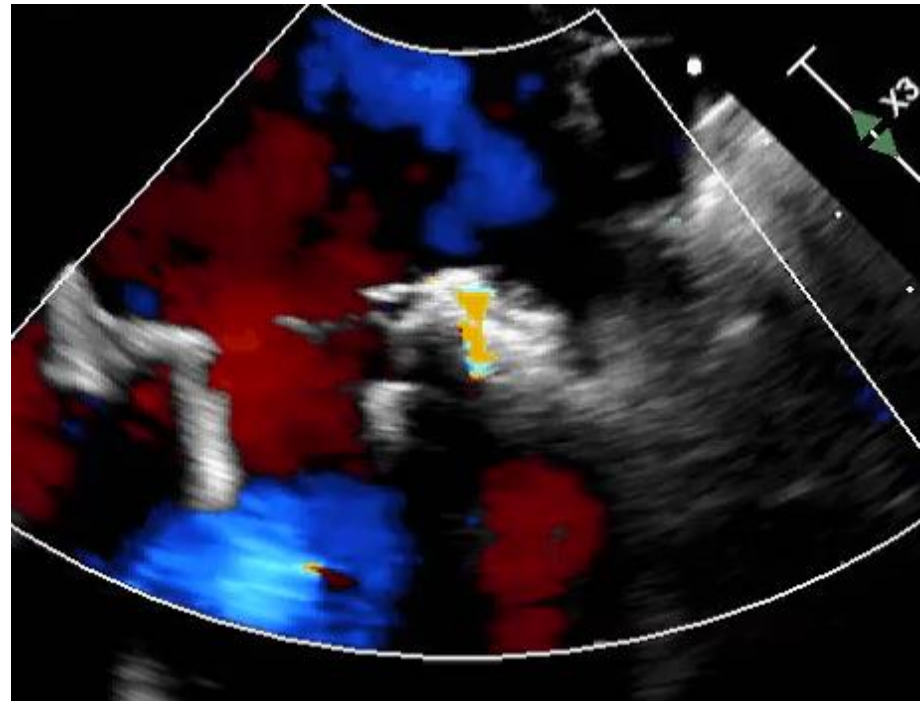
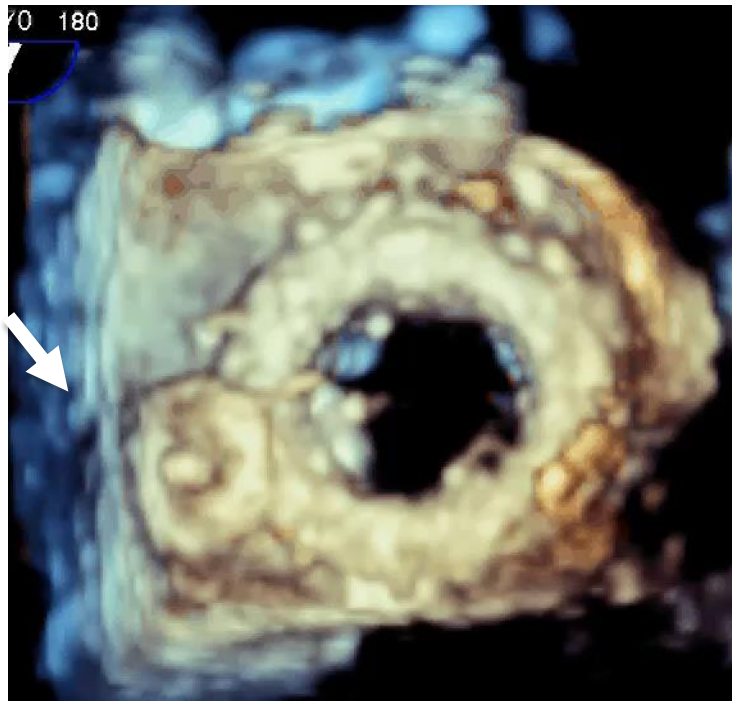


Wire  
across  
PVL

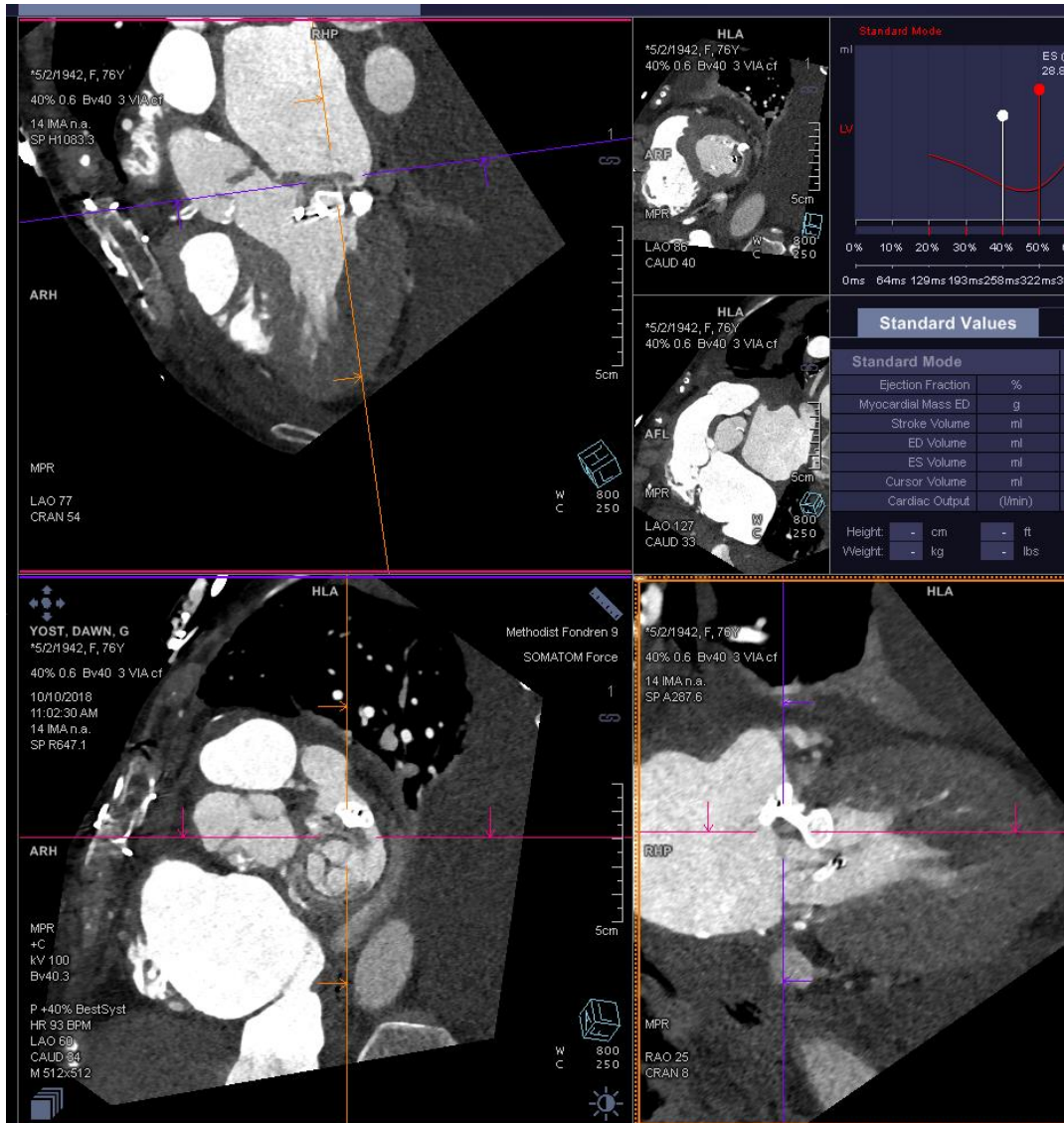
60bpm



# Post VSD Occluder Deployment

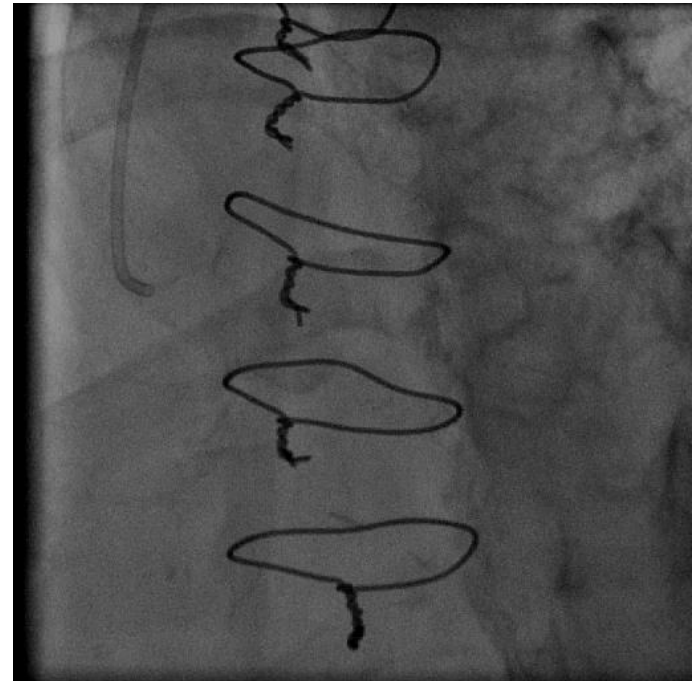






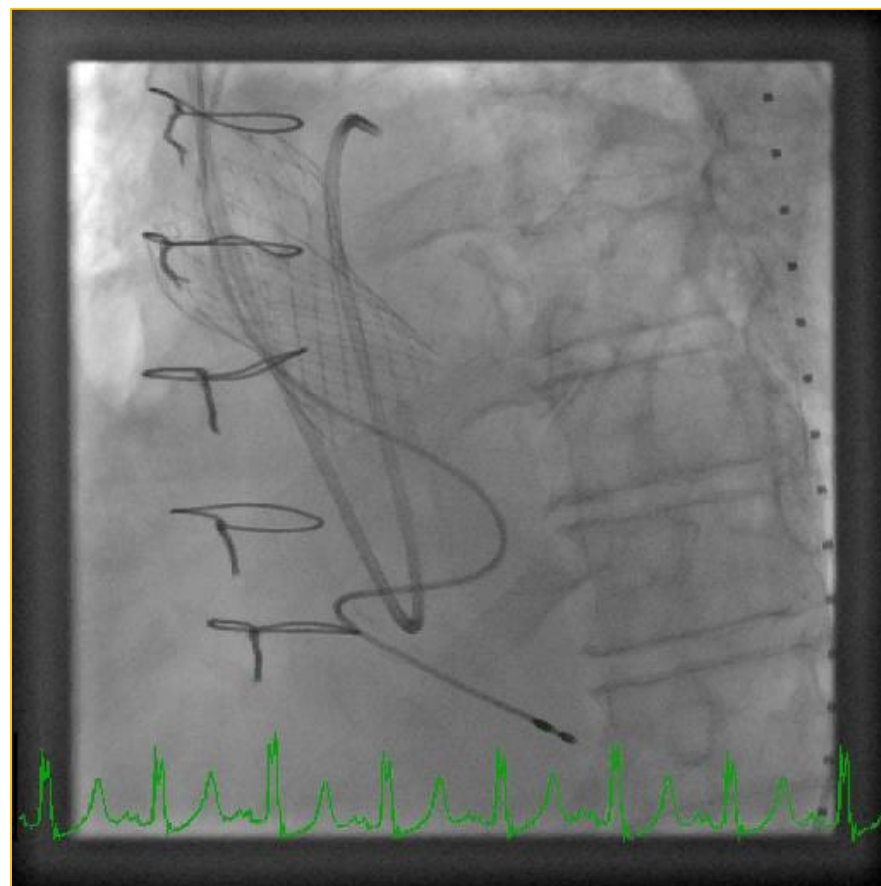
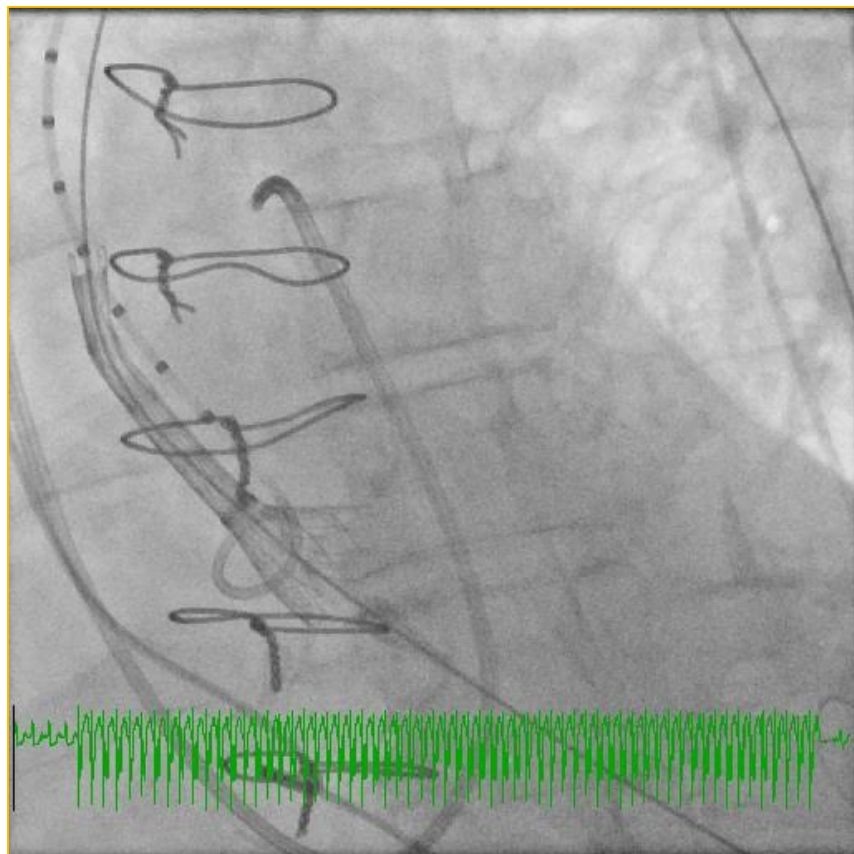
# Case 2

- 88 Year old man with remote CABG (1980s) and increasing exertional dyspnea.
- Creatinine = 1.6 mg/dL
- NYHA III
- LVEF = 0.49
- Peak velocity 3.07 m/s  
→ 4.6 m/s with dobutamine stress





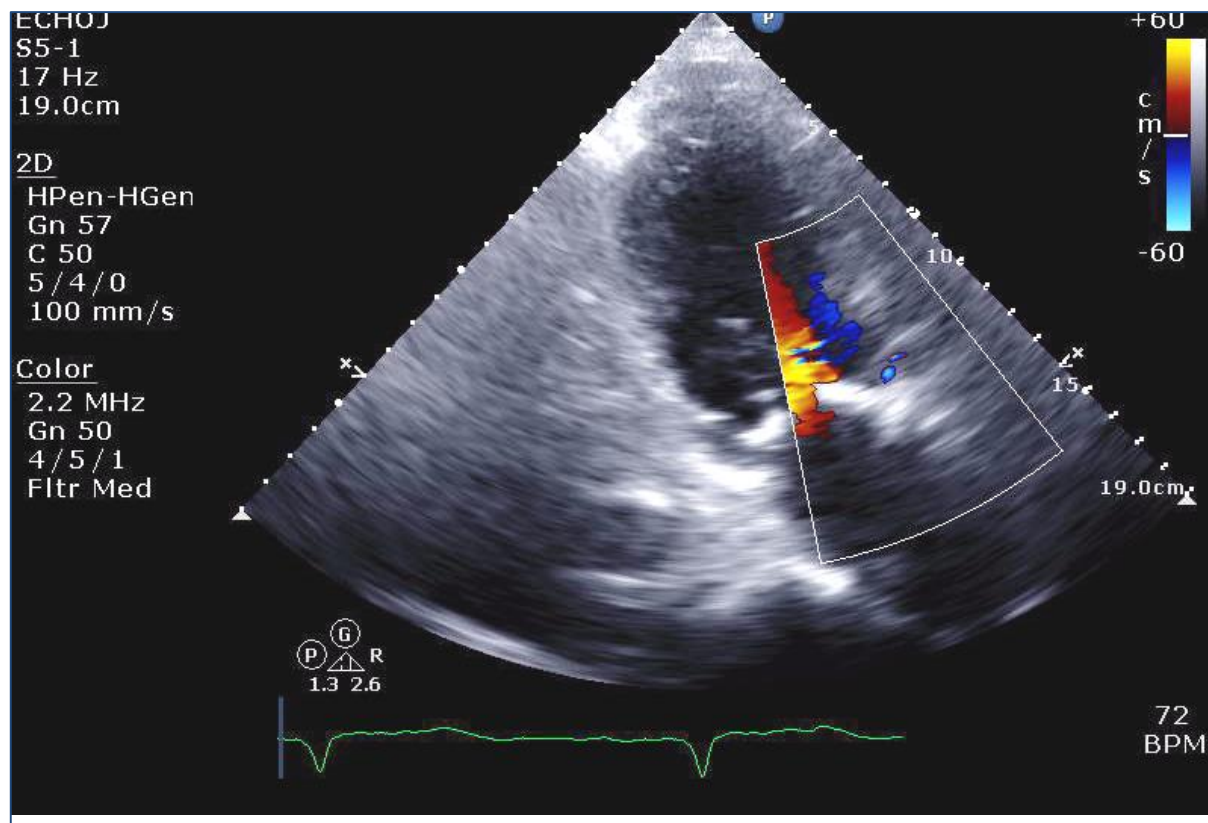
# Implant



29 mm CoreValve: 13% oversized by perimeter measurement

# POD #1

- “I feel great”
- No rales
- No murmur
- Ambulatory



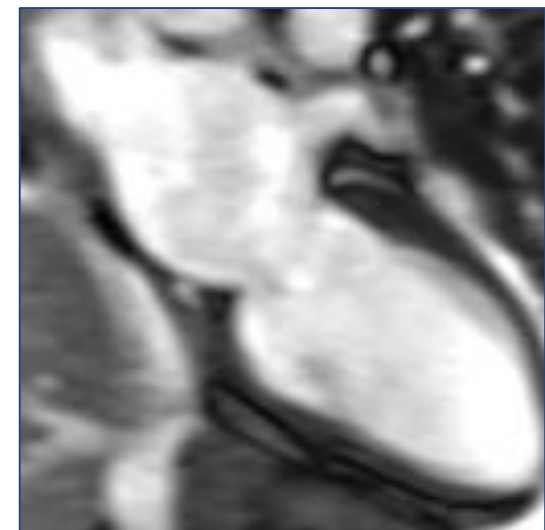
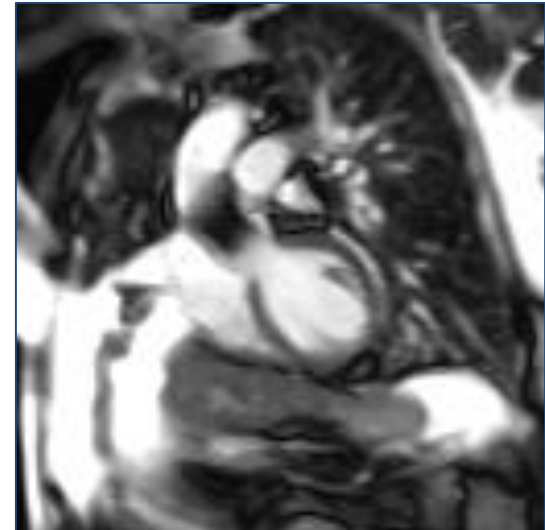
# Post Op Day #3

- “OK, I guess”
  - Basilar rales
  - Peripheral edema
  - Rising creatinine
  - Obstructive uropathy
- Discharged Day 5 on diuretics

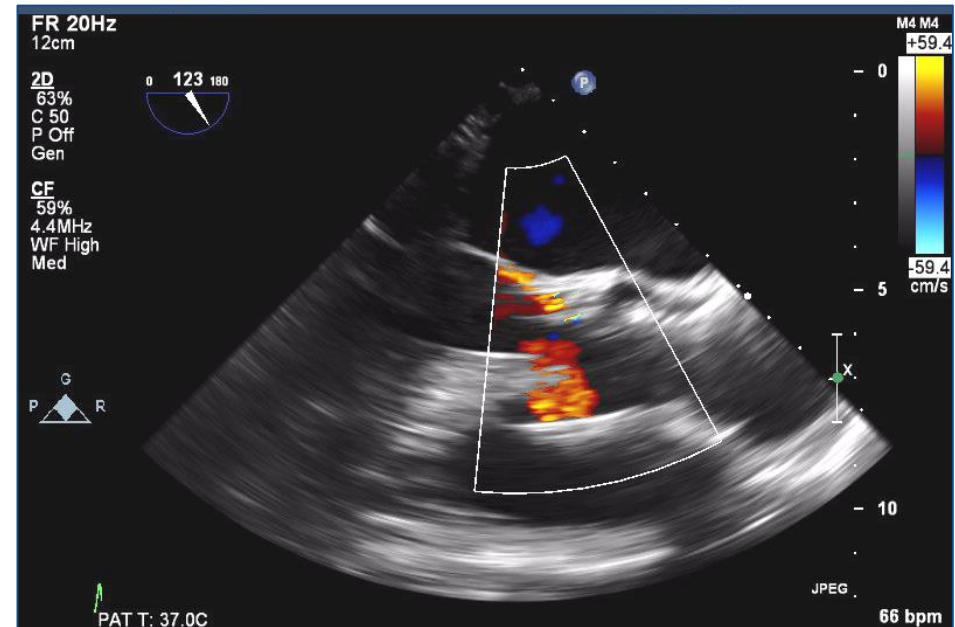


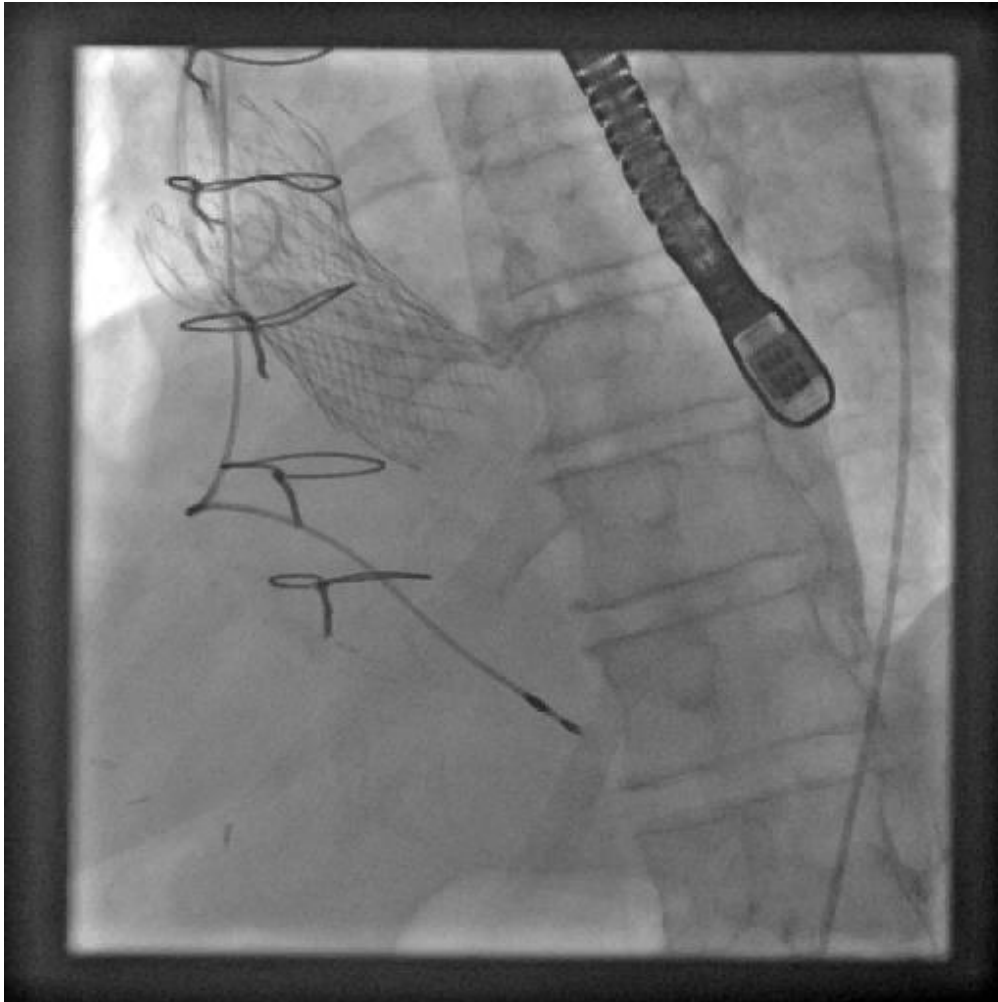
# Case

- Day 35: Still dyspneic
- MRI:
  - LVEF = 0.45
  - Mild aortic regurgitation
  - Mild mitral regurgitation
  - LVEDV = 171 mL
  - LVSV = 94 mL
  - Combined RV = 31 mL



- Day 60:  
Rehospitalized for CHF
- TTE → mild  
paravalvular AR;
- LVEF = 0.30
- “Since valve is  
functioning well, valve  
svc consult isn’t  
needed.”





- Uneventful recovery
- Creatinine decreased to 1.2
- Discharged POD # 3
- NYHA 1 on at follow-up