

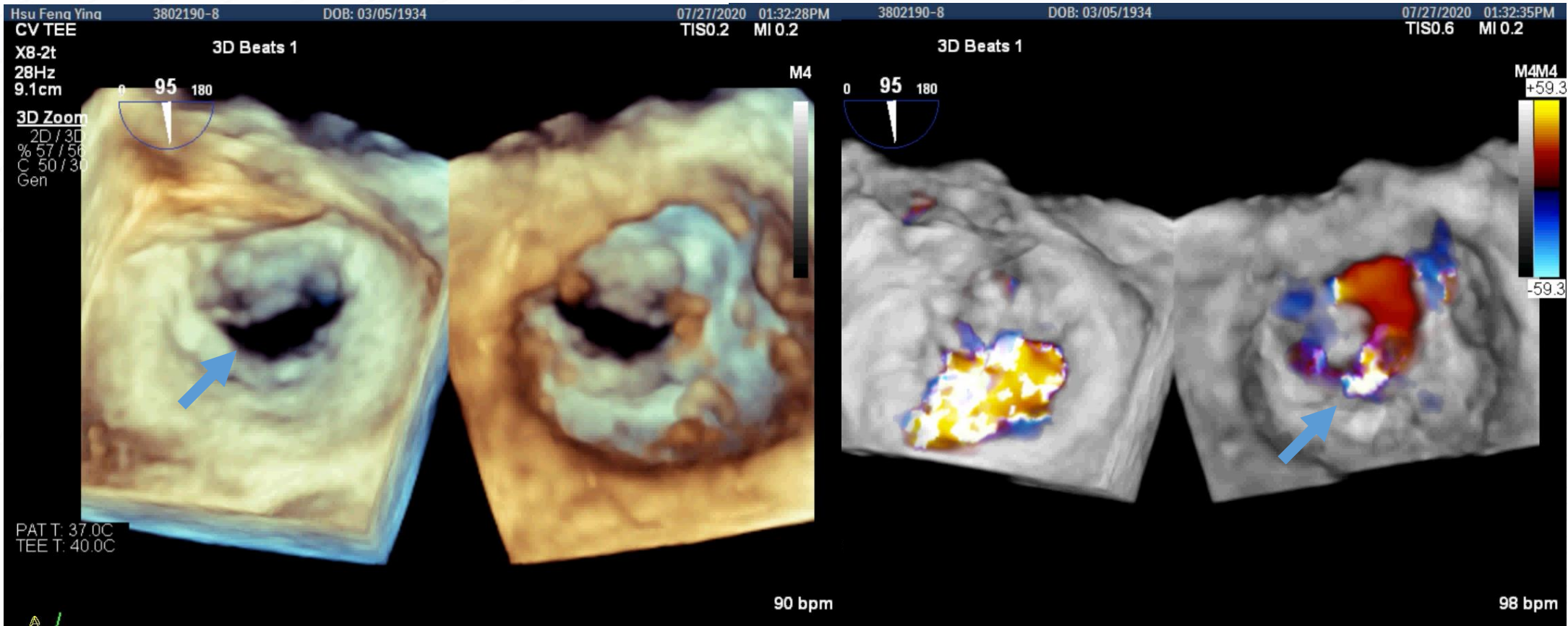
AP VALVES & SH 2023

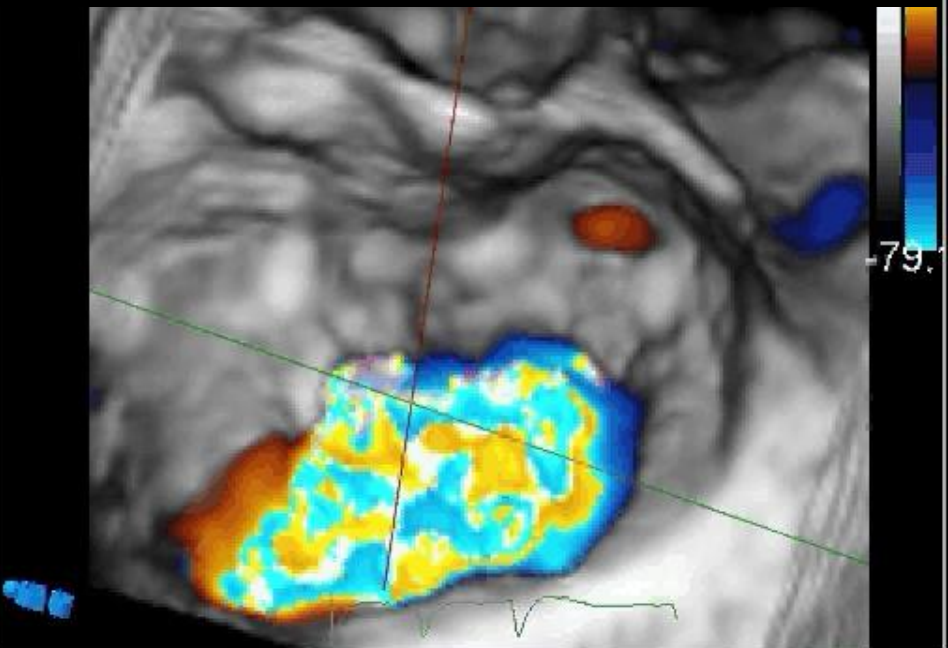
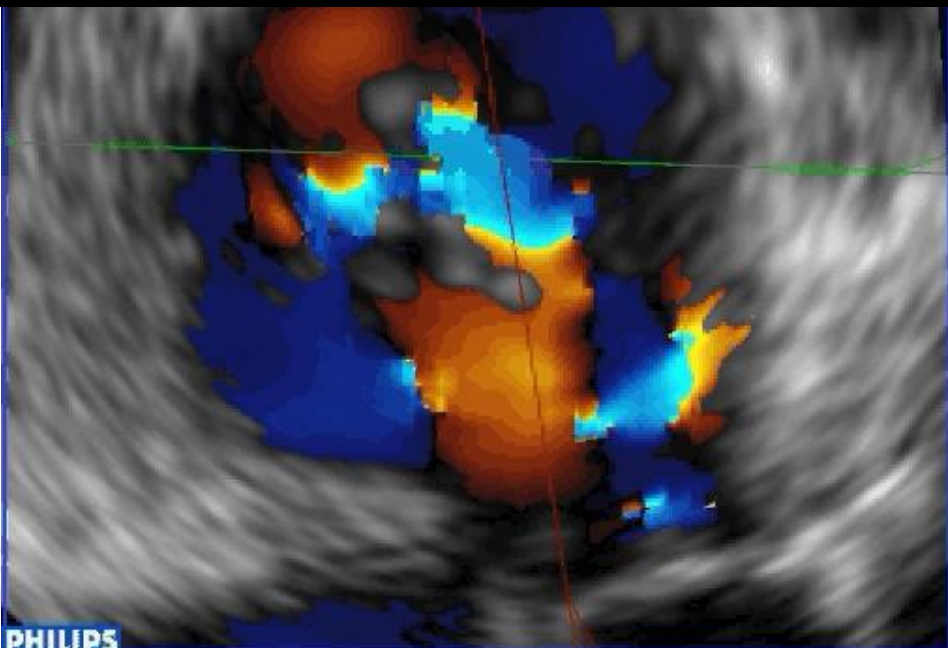
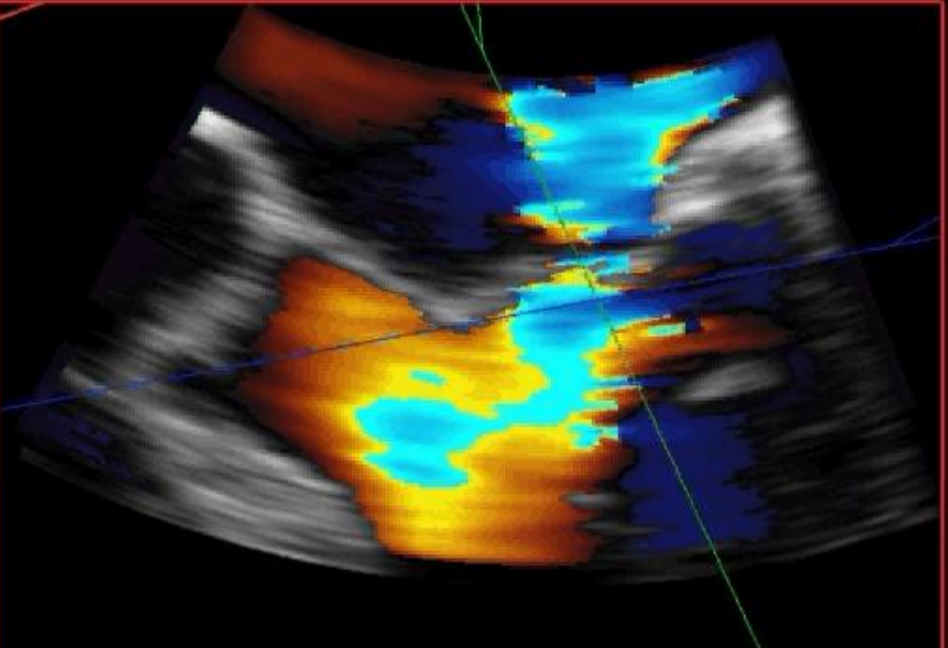
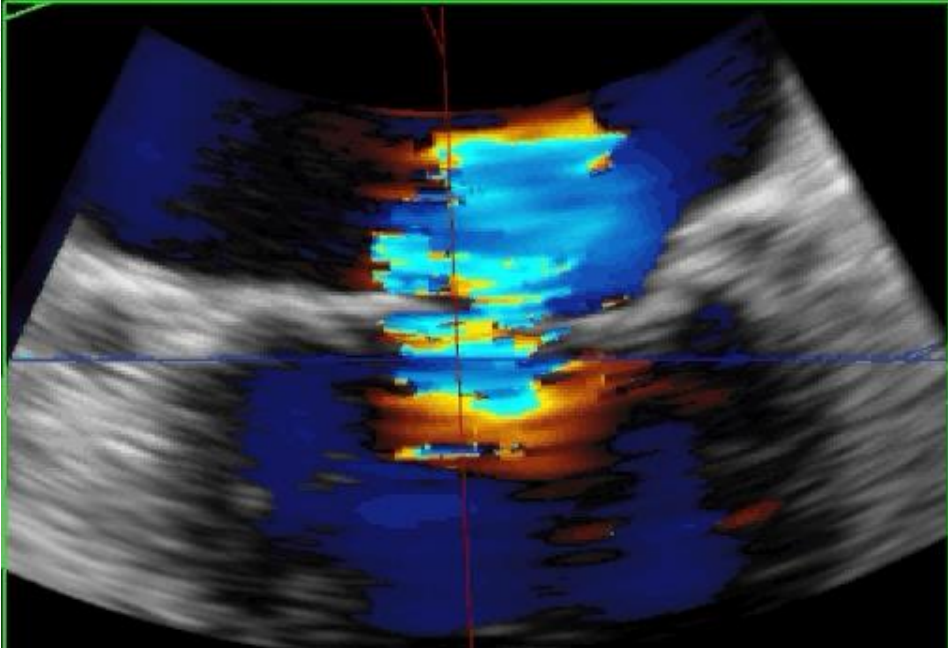
Taiwan Challenging Case

Shih-Hsien Sung, MD, PhD

**National Tang Ming Chiao Tung University;
University Taipei Veterans General Hospital, Taiwan**

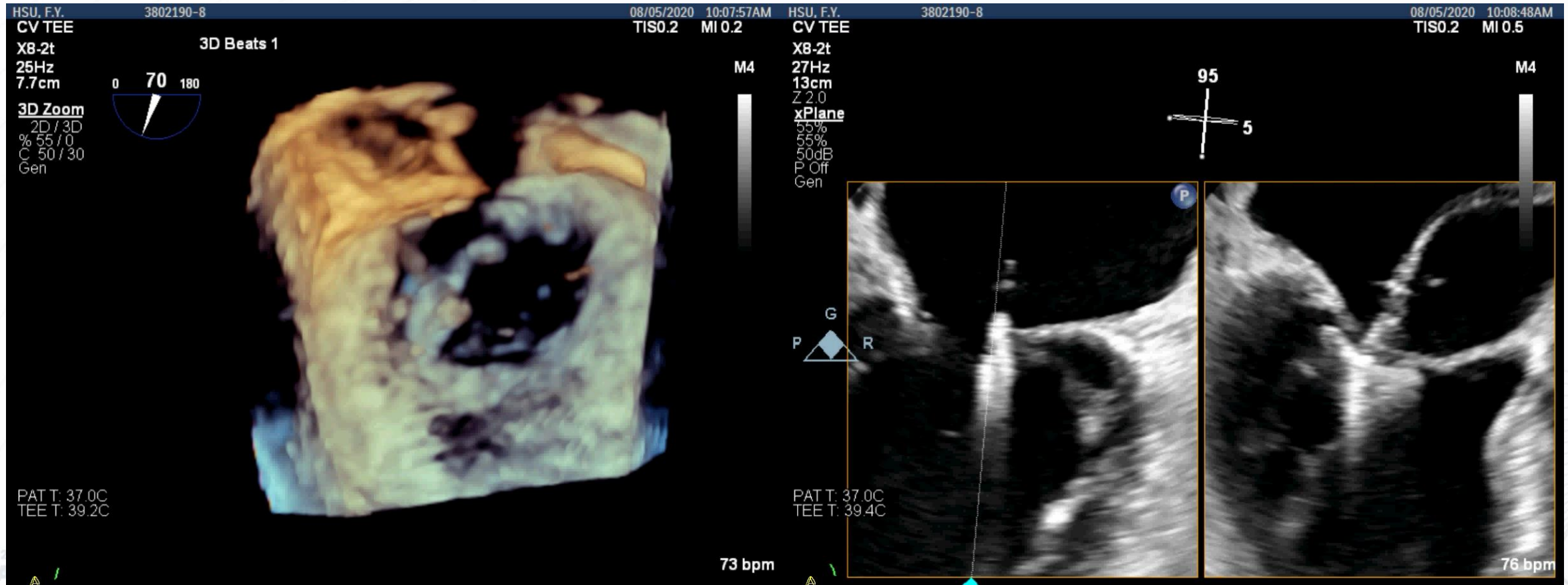
87 y/o lady, presented with repeated HF
Hx of Afib, CAD s/p PCI, CKD stage IIIb-IV
Severe primary MR (mitral cleft)
Severe TR, EF 45%, MPAP 40mmHg





After puncture the LFV, we did DC cardioversion
The rhythm was restored to SR.

Then, we start MitraClip procedure (NTR)



3D Zoom
2D / 3D
% 60 / 32
C 50 / 30
Gen



PAT T: 37.0C
TEE T: 39.6C

60%
60%
50dB
P Off
Gen

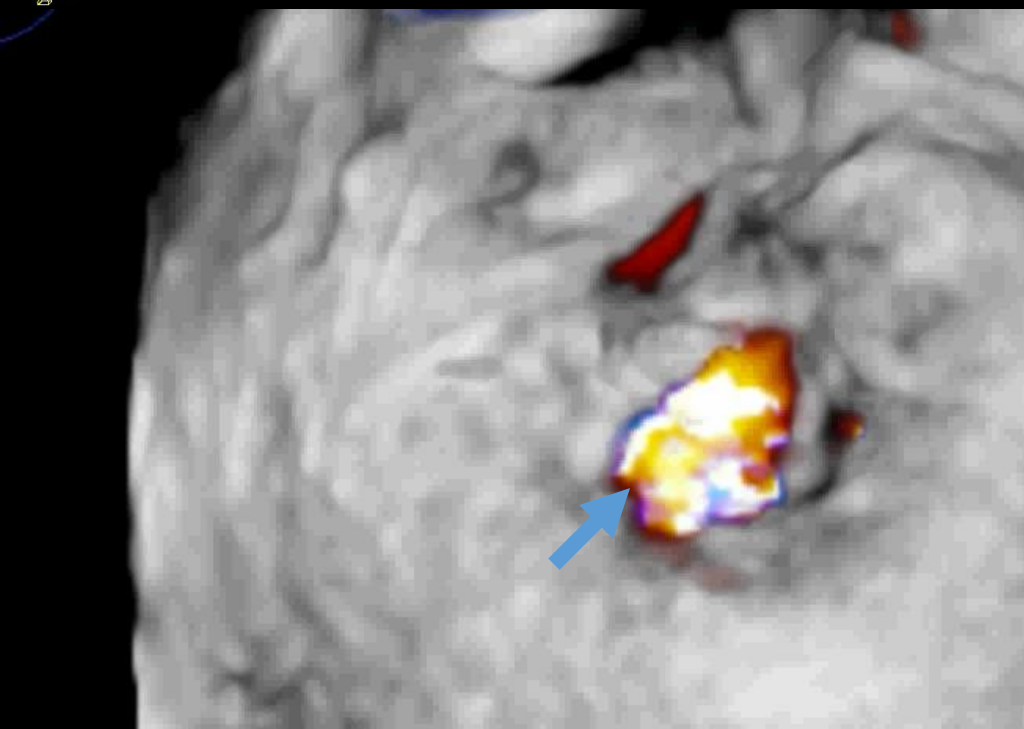


HSU, F.
CV TI
XB.2t

PAT T: 37.0C
TEE T: 39.6C

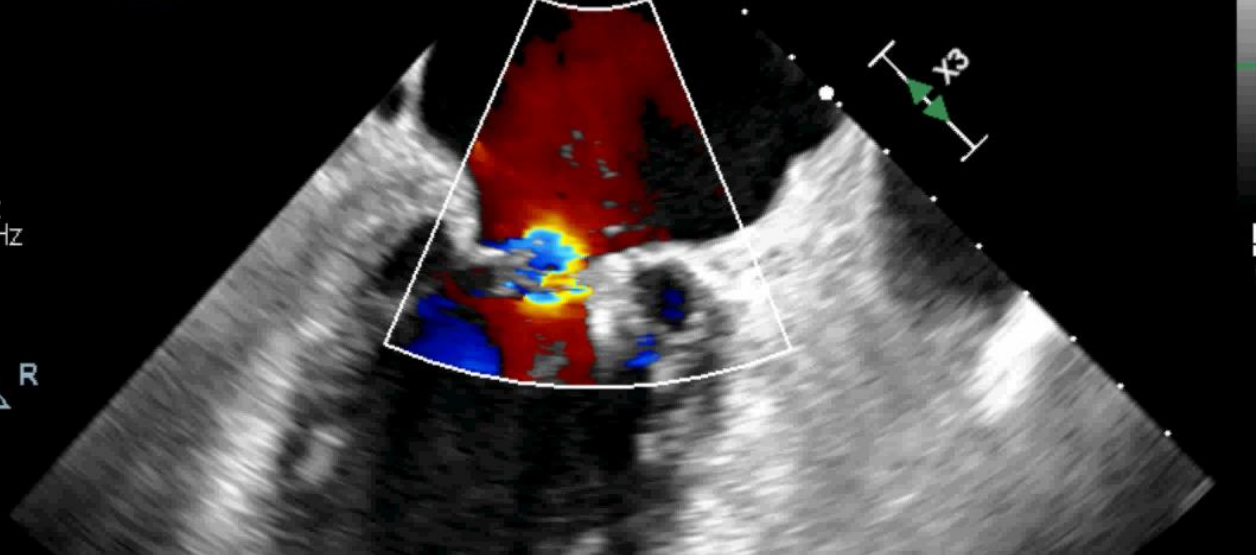


82 bpm



3Hz
15Hz
Hz

R



M
M4
59.3
59.3
cm/s

X8-2t

3D Beats 1

24Hz

6.3cm

0 65 180

M4

3D Zoom

2D / 3D

% 50 / 52

C 50 / 30

Gen



PAT T: 37.0C
TEE T: 39.5C

X8-2t

3D Beats 1

24Hz

6.3cm

0 65 180

M4

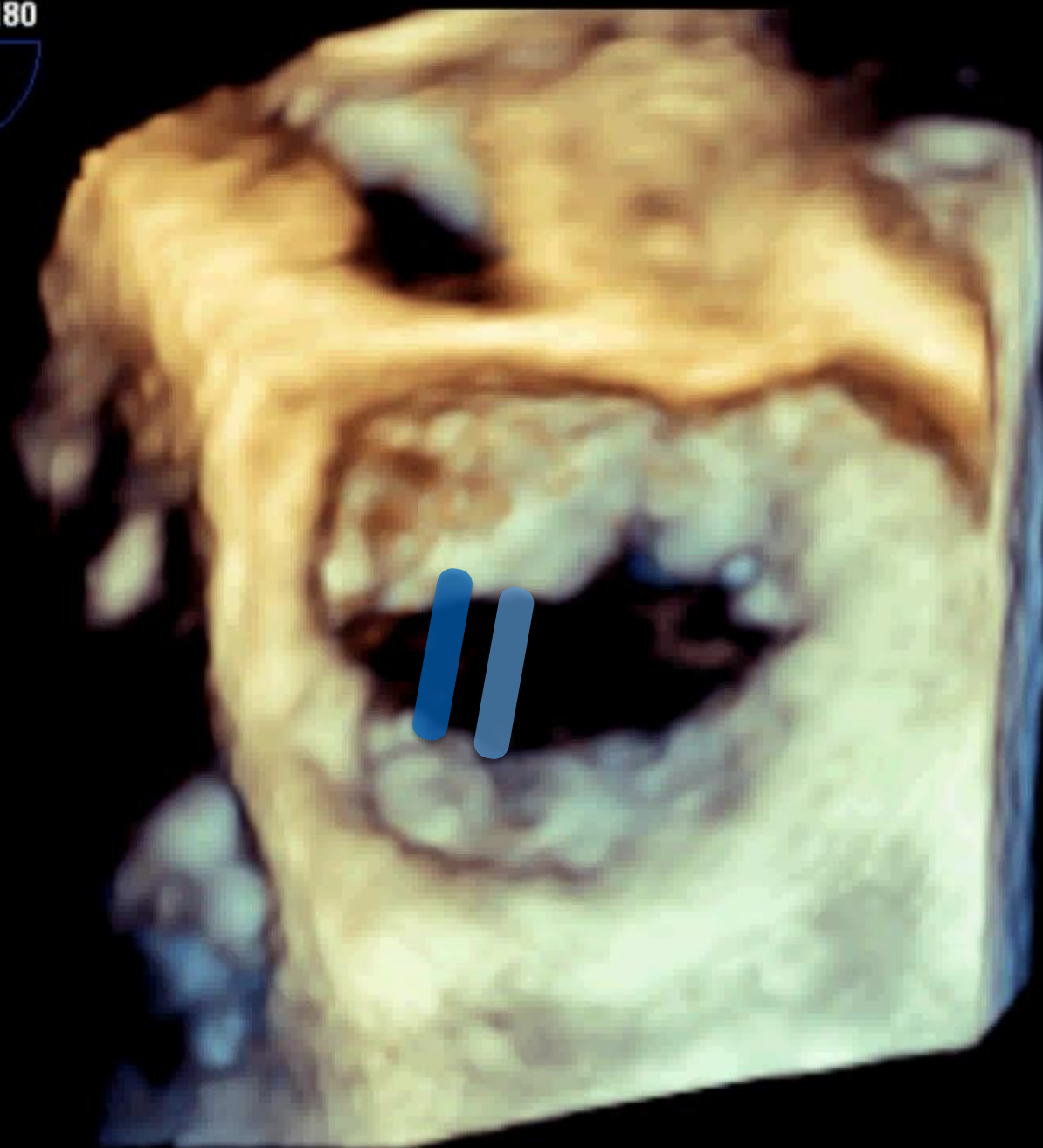
3D Zoom

2D / 3D

% 50 / 52

C 50 / 30

Gen



PAT T: 37.0C
TEE T: 39.5C

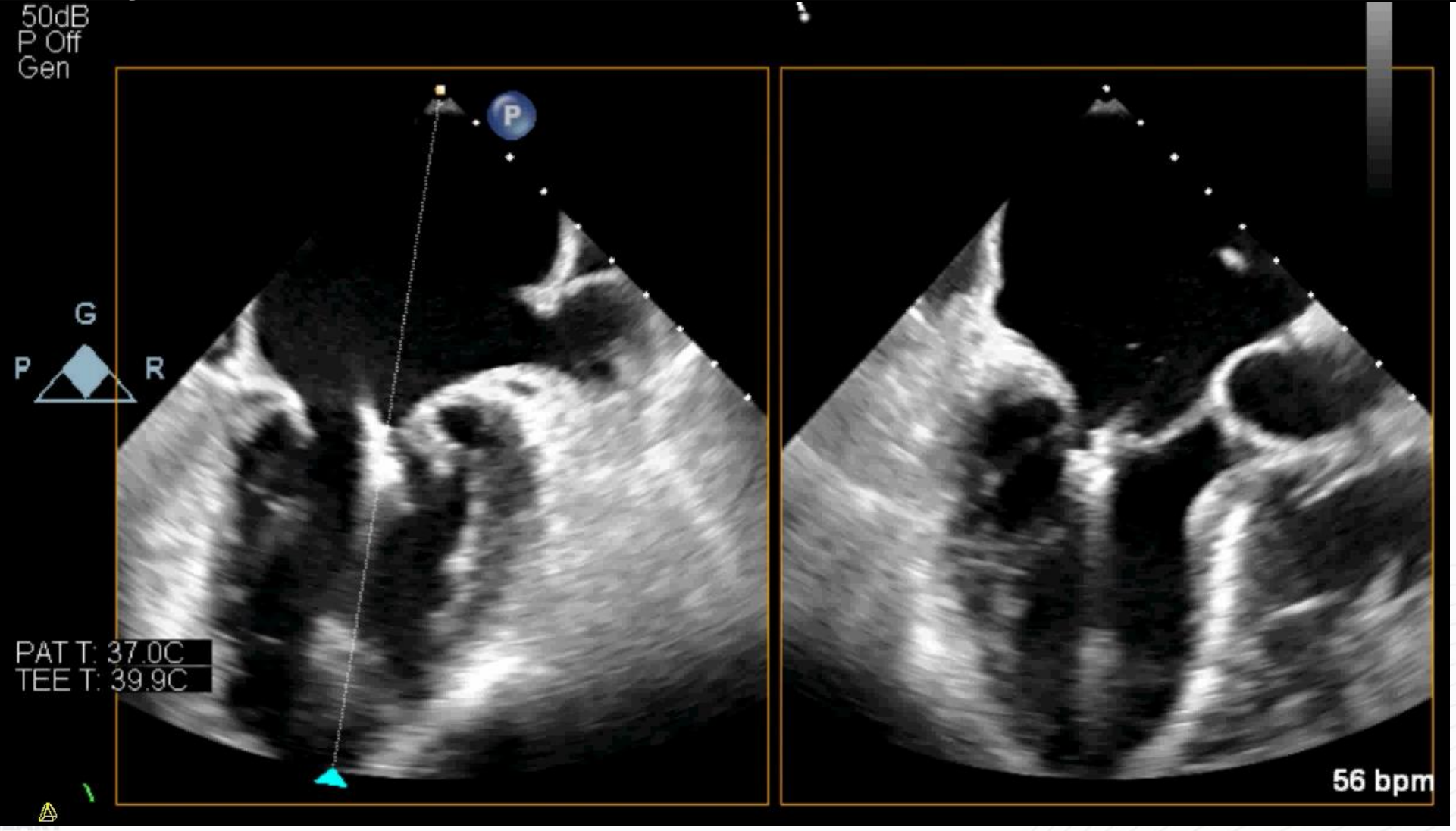
CV TEE
X8-2t
27Hz
14cm

TI 0.2 MI 0.3

70

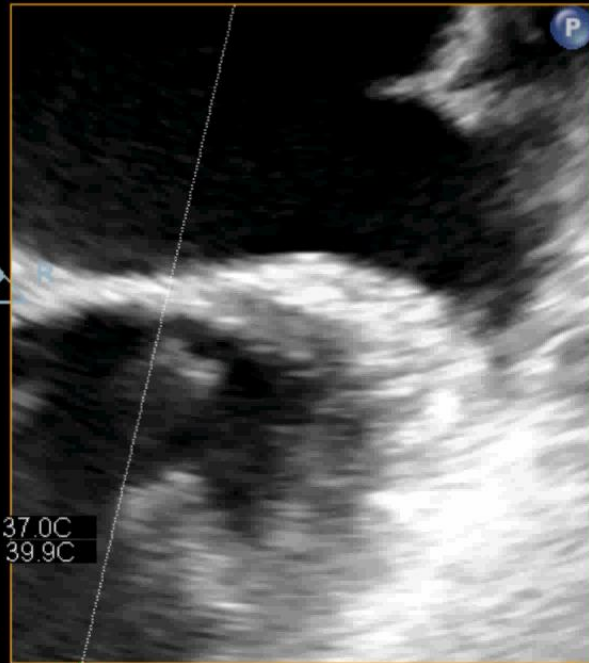
M4

Apply 2nd clip over medial site of the cleft





Gen

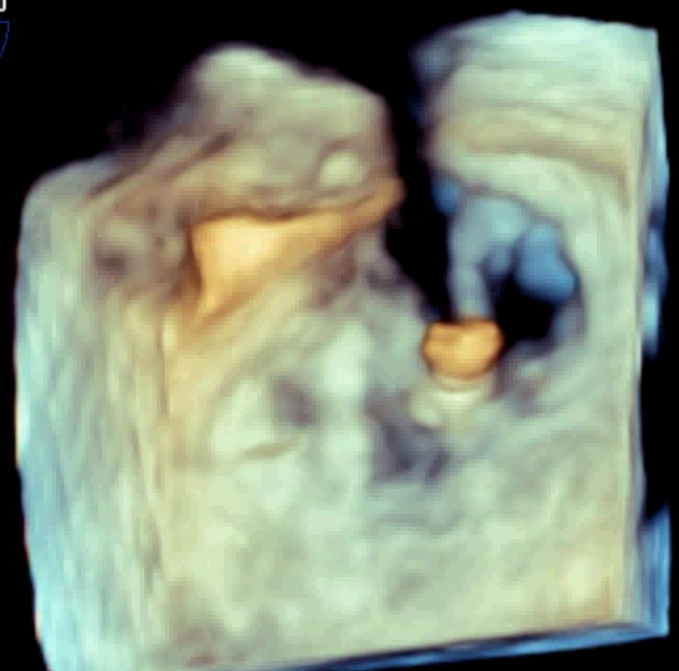


PAT T: 37.0C
TEE T: 39.9C

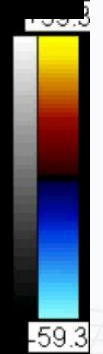
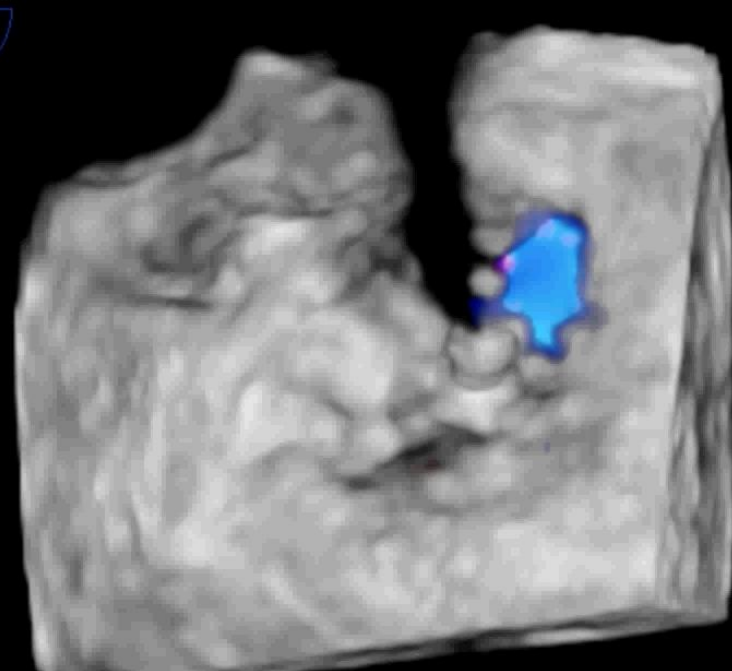
87 bpm

8.2cm 0 100 180

3D Zoom
2D / 3D
% 58 / 41
C 50 / 30
Gen



100 100

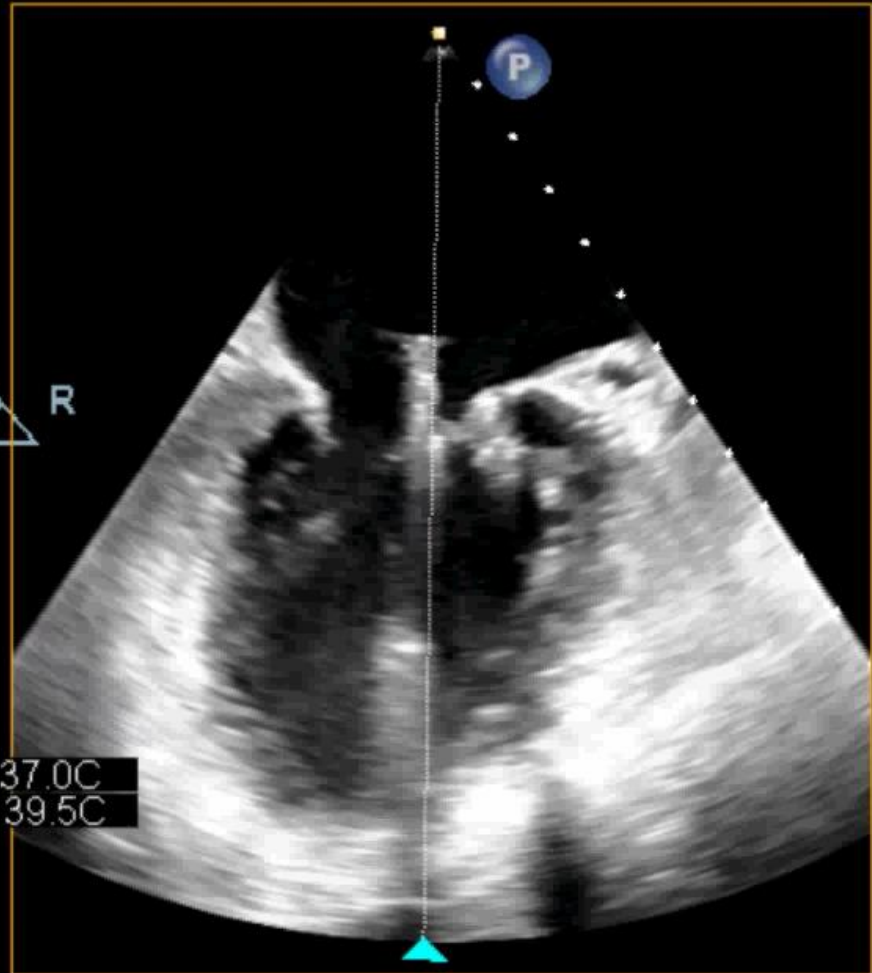


X8-Z1
33Hz
14cm

xPlane
59%
59%
50dB
P Off
Gen



M4



PAT T: 37.0C
TEE T: 39.5C

82 bpm

Mild MR was achieved

3802190-8

08/05/2020 11:01:06AM 802190-8
TISO.2 MI 0.2

3D Beats 1



M4



3D Beats 1

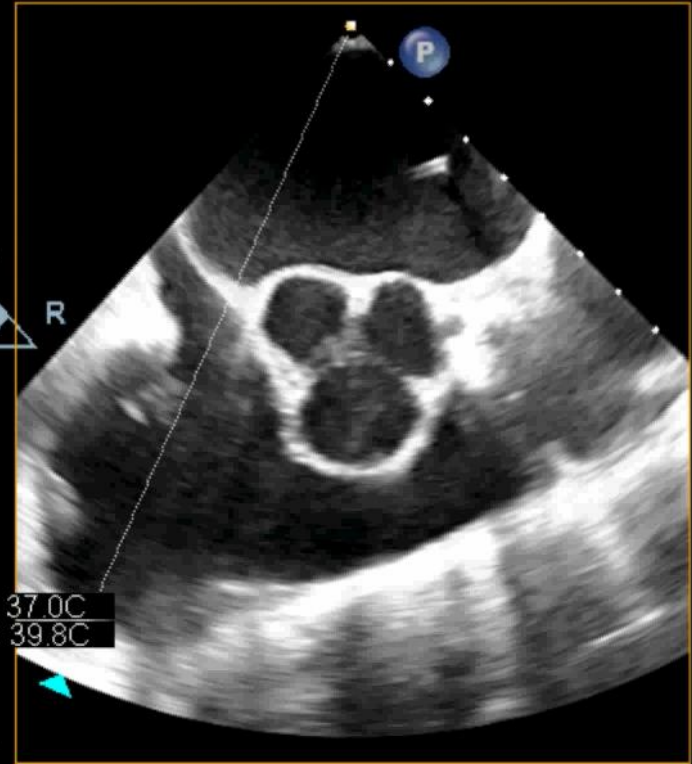


M4M4

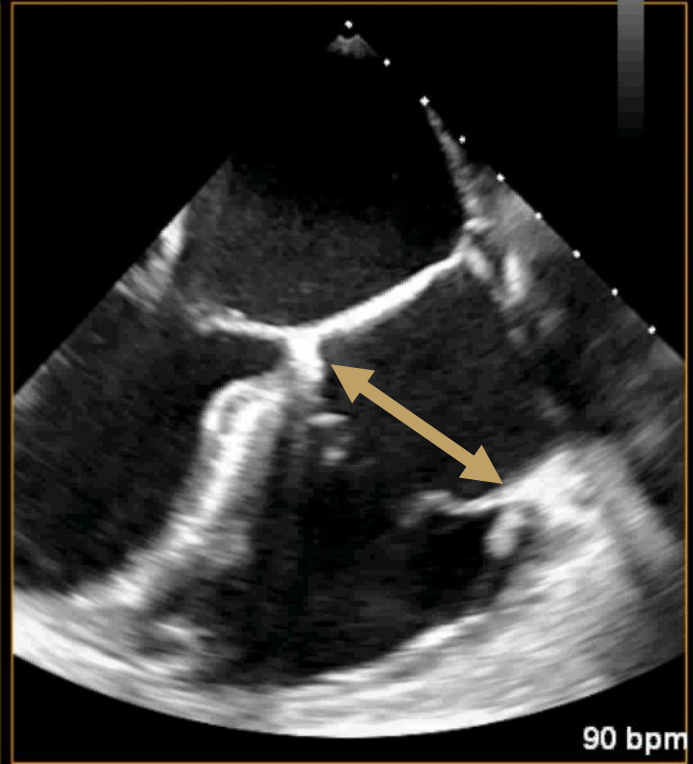


08/05/2020 11:01:12AM
TISO.6 MI 0.2

Gen



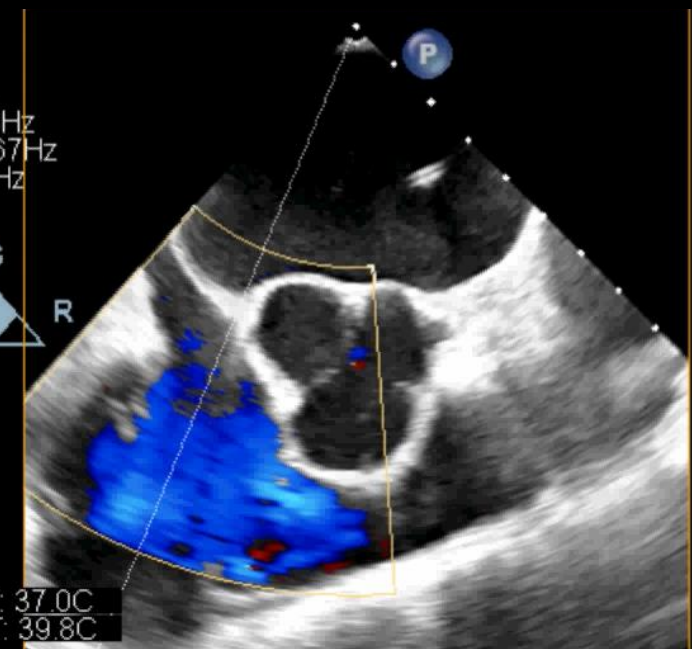
PAT T: 37.0C
TEE T: 39.8C



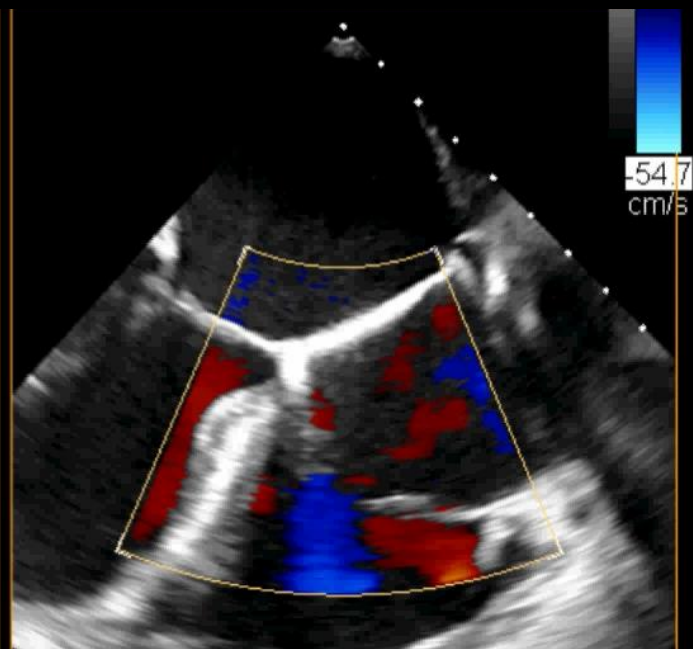
90 bpm



CF
48%
6308Hz
WF 567Hz
4.4MHz

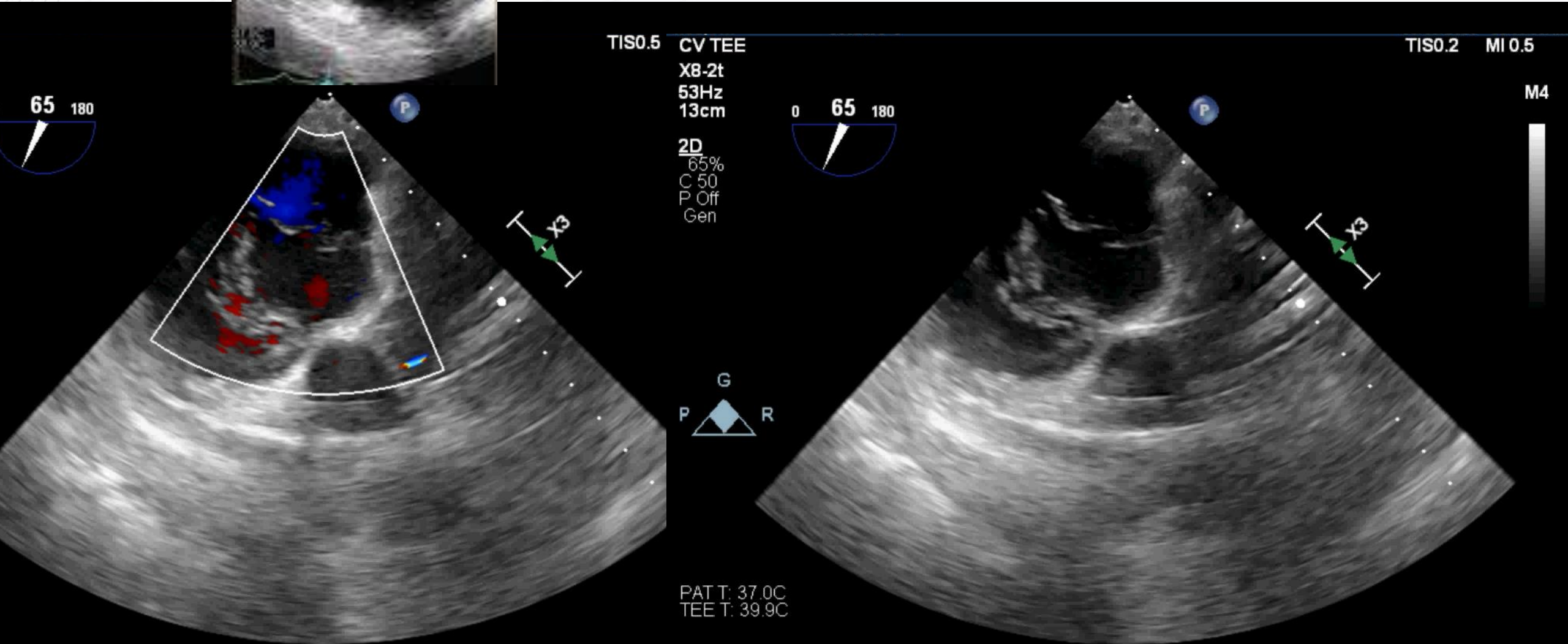


PAT T: 37.0C
TEE T: 39.8C



54.7
cm/s

Trans-gastric view of Severe TR



TrueVue Technology: Tricuspid Valve

TIS0.2

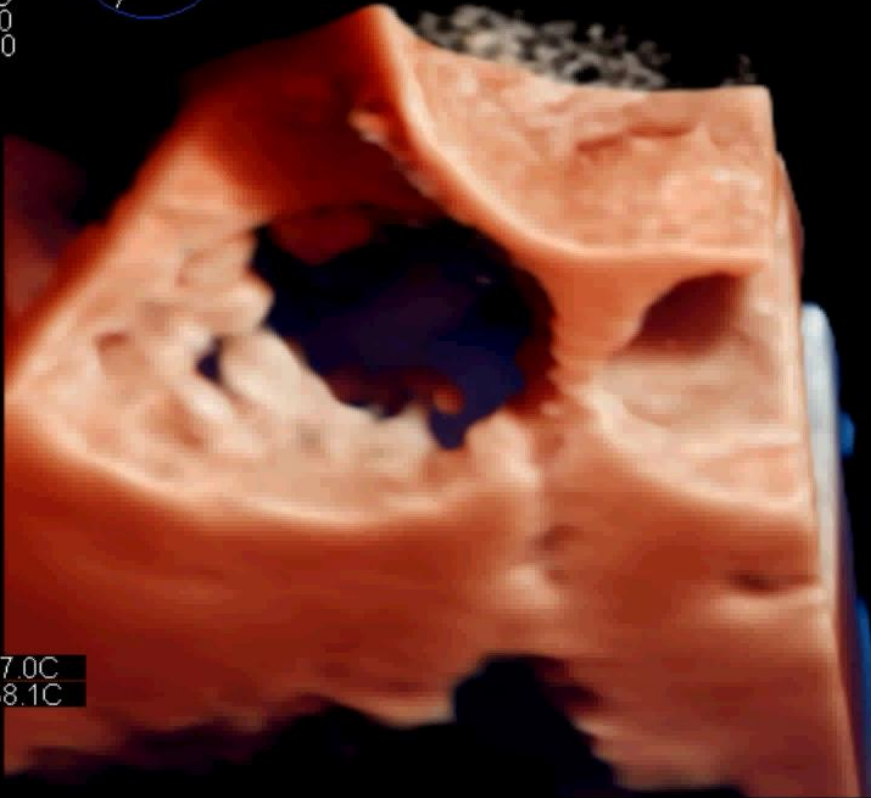
Good for evaluation but can't be used for clip orientation

CHO
8-2t
3Hz
6cm

3D Beats

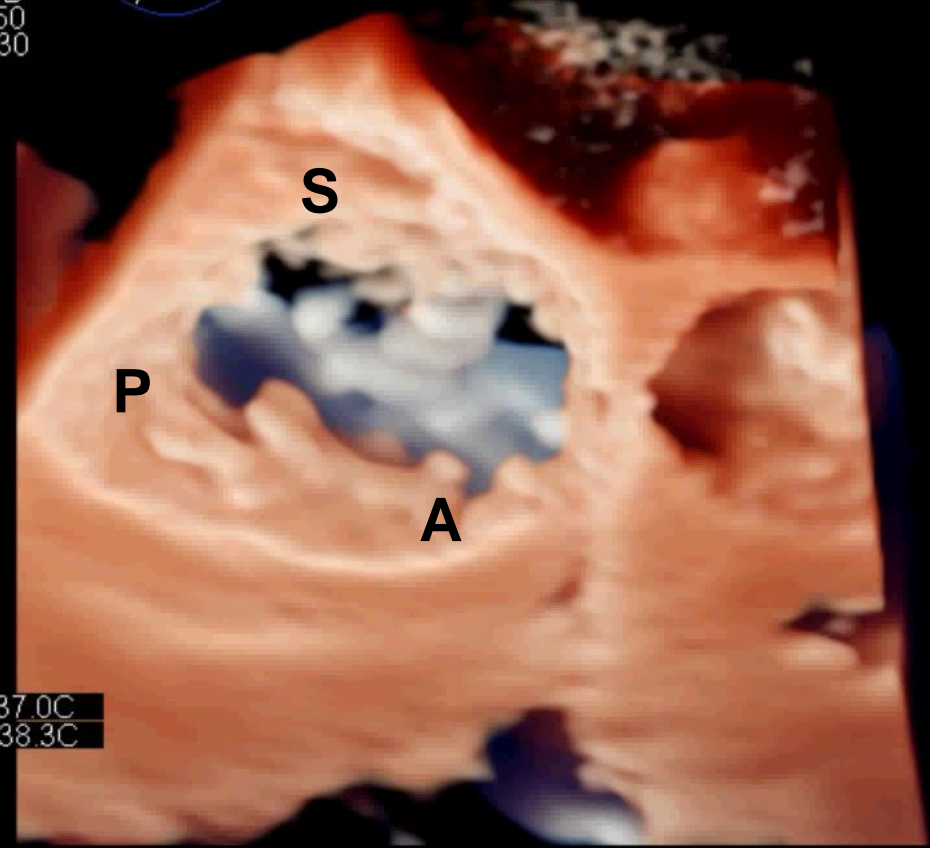
0 65 180

Live 3D
2D / 3D
% 54 / 50
C 50 / 30
HGen



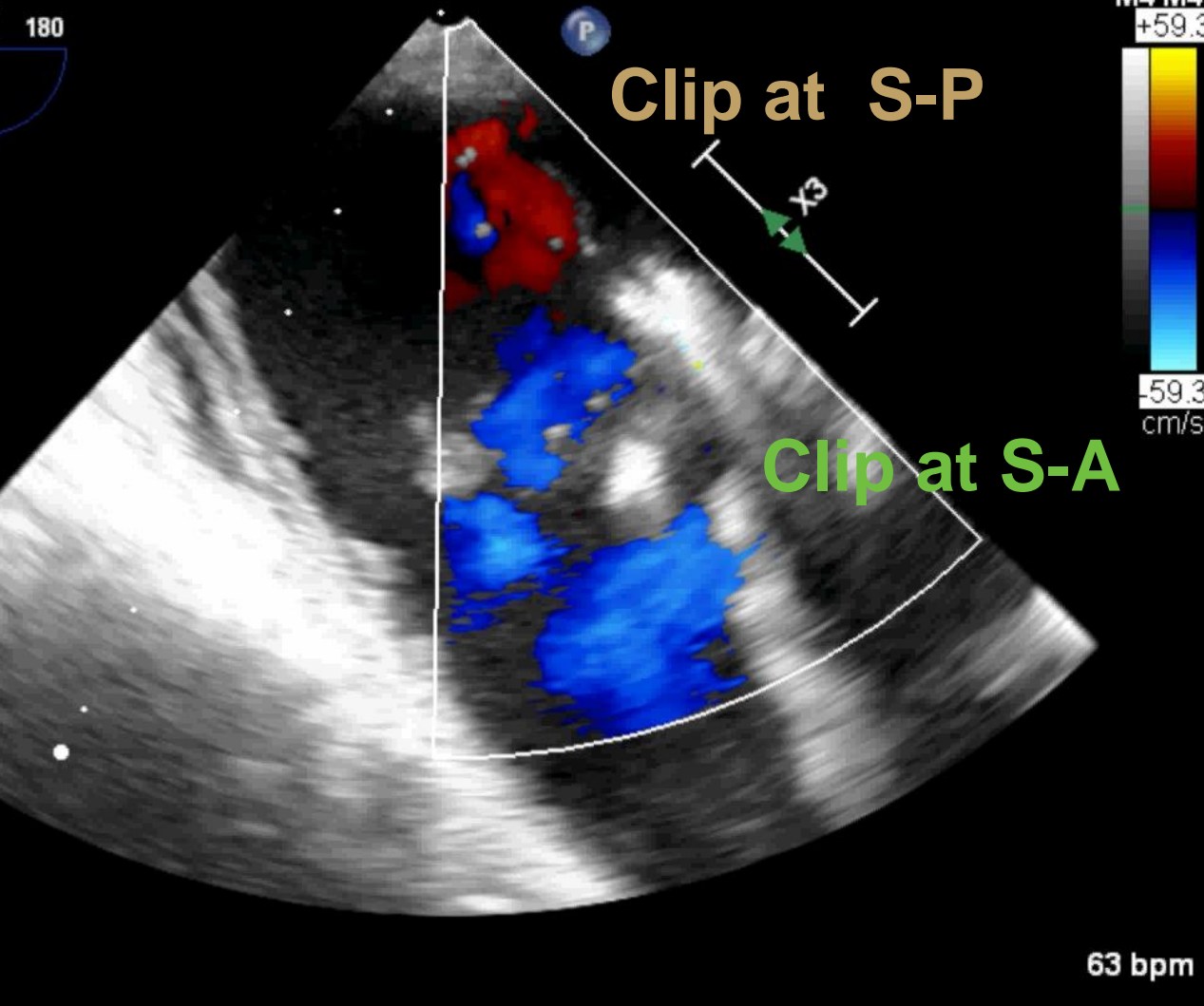
PAT T: 37.0C
TEE T: 38.1C

Live 3D
2D / 3D
% 54 / 50
C 50 / 30
HGen

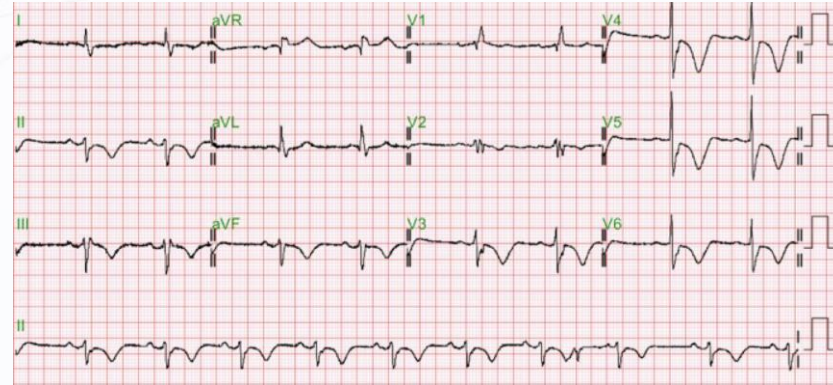


PAT T: 37.0C
TEE T: 38.3C

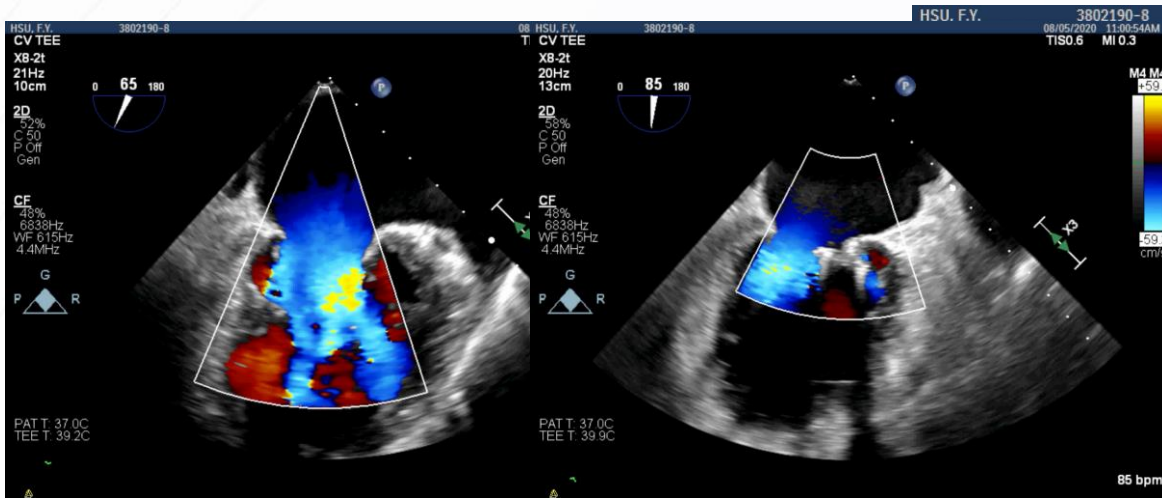
180



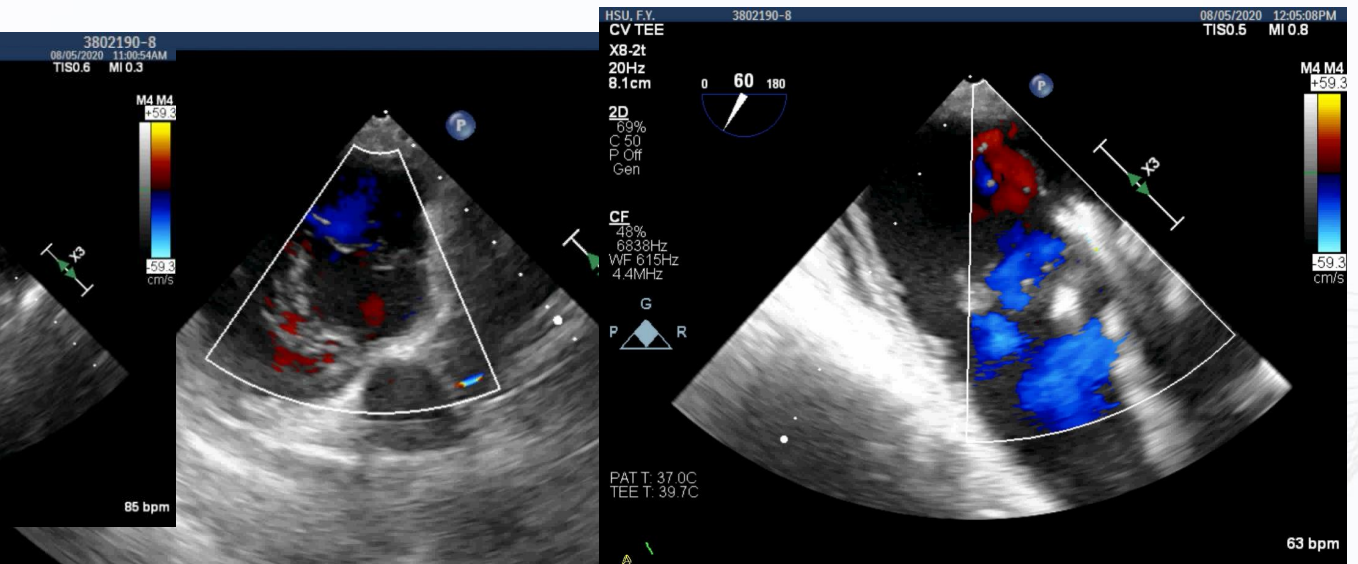
DC cardioversion



Fix MR

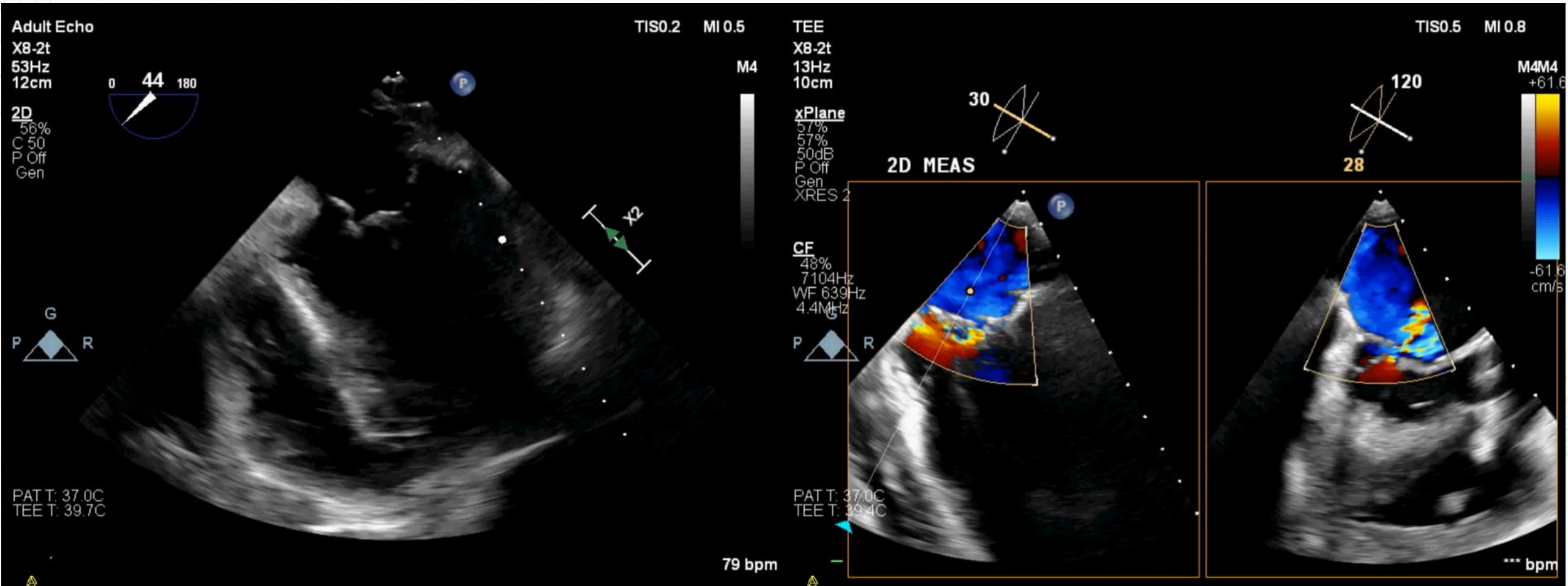


Fix TR



A nightmare case

82 years gentleman, presented with respiratory failure

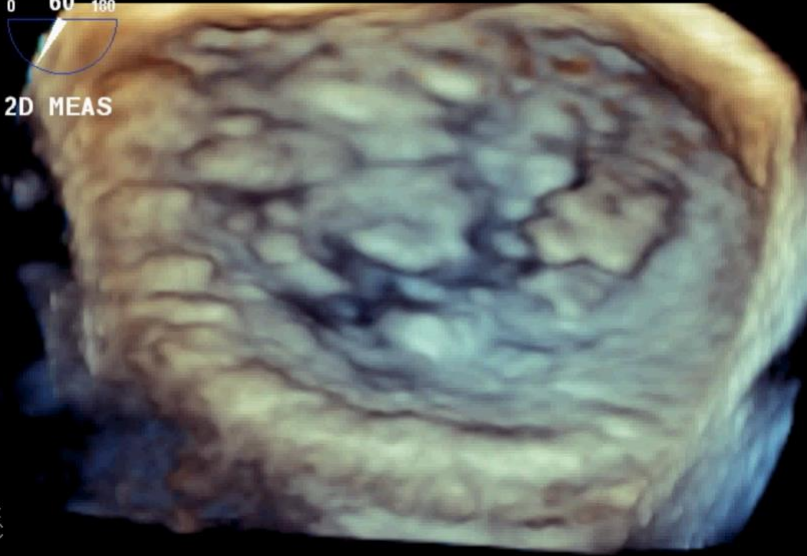


TEE
X8-2t
5Hz
4.7cm
3D Zoom
2D/3D
% 51/45
C 50/30
Gen
XRES ON

3D Beats 1

0 60 180

2D MEAS



PAT T: 37.0C
TEE T: 39.1C

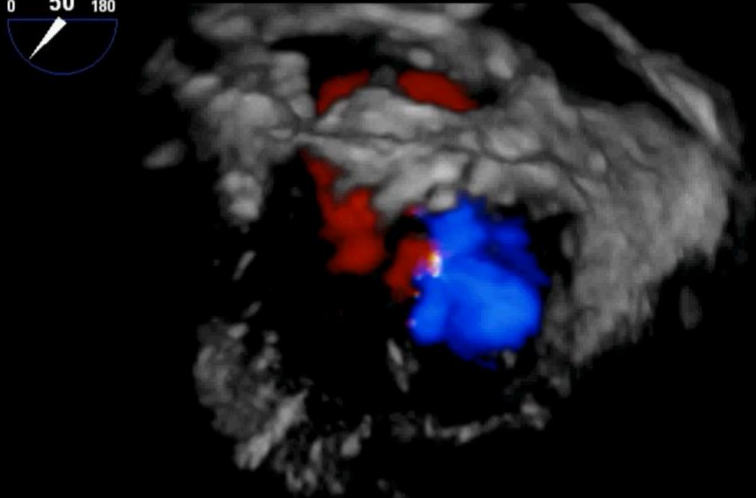


Adult Echo
X8-2t
6Hz
6.3cm
3D Zoom
2D/3D
% 59/45
C 50/30
Gen
XRES ON

3D Beats 1

0 50 180

CF
% 51/50
7104Hz
WF 710Hz
4.4MHz



PAT T: 37.0C
TEE T: 39.7C



TIS0.1 MI 0.7

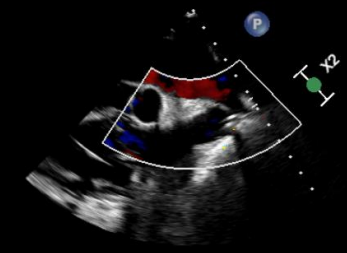
Adult Echo

X8-2t
14Hz
12cm

0 142 180

2D
58%
C 50
P Off
Gen

CF
48%
7104Hz
WF 639Hz
4.4MHz
PW
50%
WF 150Hz
SV4.0mm
2.2MHz
5.6cm



PAT T: 37.0C
TEE T: 39.6C

*** bpm



TIS0.5 MI 0.3

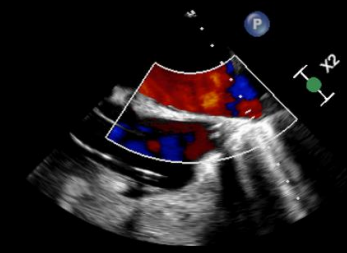
Adult Echo

X8-2t
14Hz
12cm

0 142 180

2D
58%
C 50
P Off
Gen

CF
48%
7104Hz
WF 639Hz
4.4MHz
PW
50%
WF 150Hz
SV4.0mm
2.2MHz
6.1cm



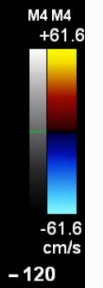
PAT T: 37.0C
TEE T: 39.6C

83 bpm



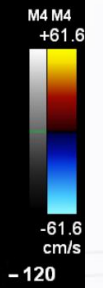
TIS0.2 MI 0.2

LSPV

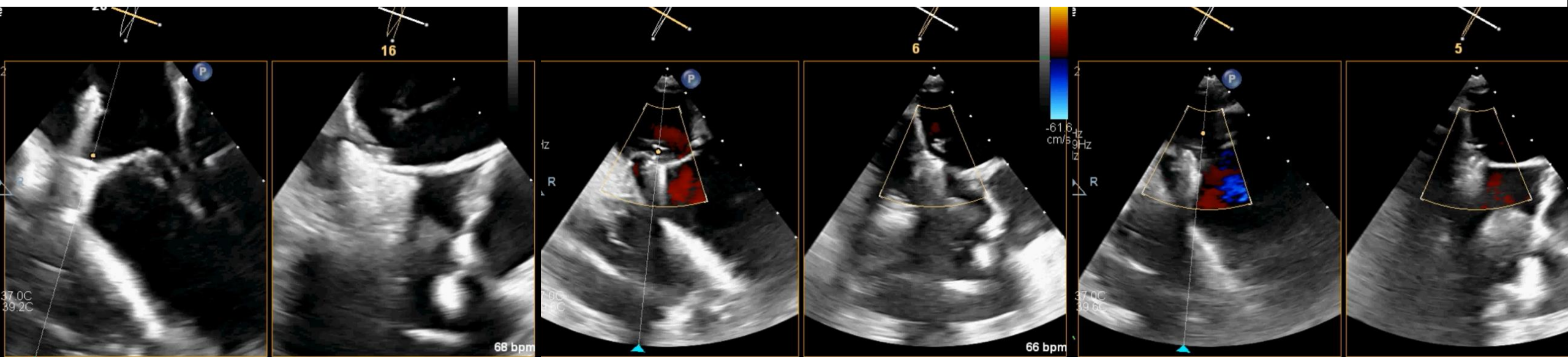


TIS0.2 MI 0.2

RSPV

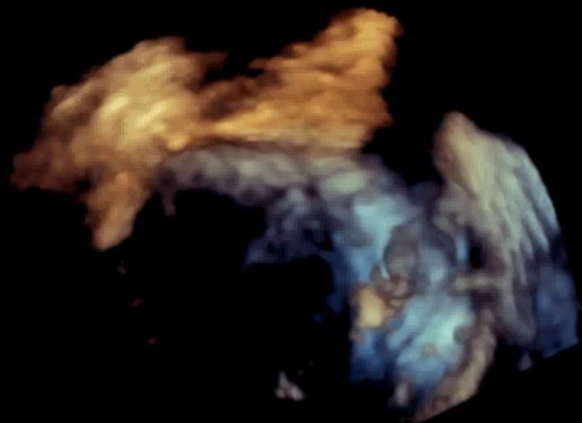


Grasping with NTW



Adult Echo
X8-2t
14Hz
4.9cm
3D Zoom
2D / 3D
% 48 / 45
C 50 / 30
Gen
XRES ON

3D Beats 1
0 20 180



TIS0.2 MI 0.3

Adult Echo
X8-2t
7Hz
5.2cm
3D Zoom
2D / 3D
% 65 / 45
C 50 / 30
Gen
XRES ON

3D Beats 1
0 30 180



CF
% 51 / 50
7104Hz
WF 710Hz
4.4MHz

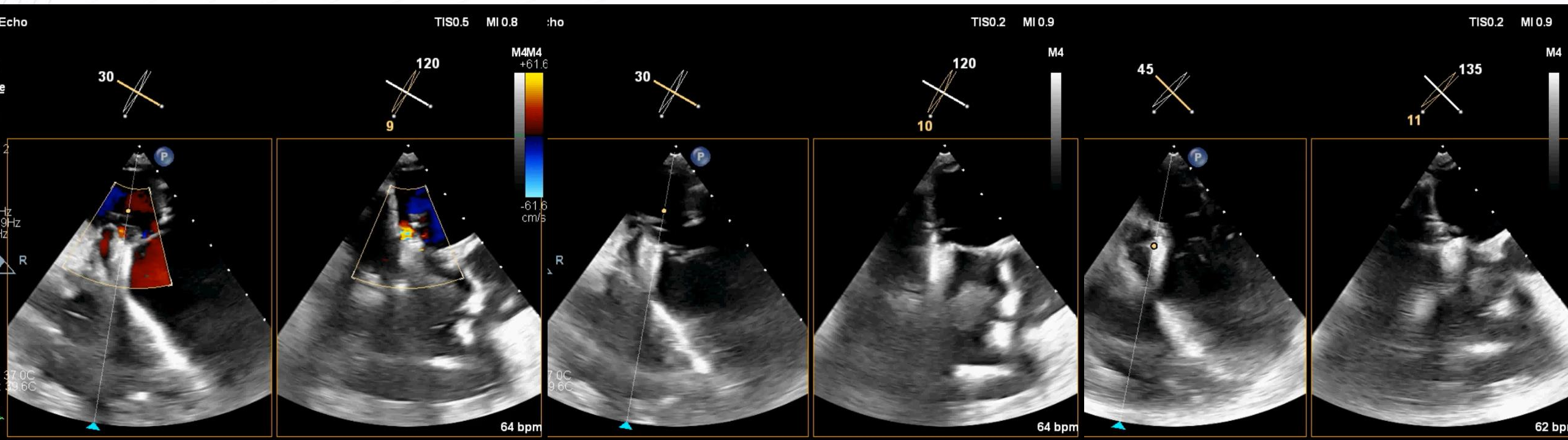
TIS0.5 MI 0.2

M4M4
+61.6
-61.6

PAT T: 37.0C
TEE T: 39.2C

PAT T: 37.0C
TEE T: 39.2C

Device malfunction



How to rescue?

1 40

Adult Echo
X8-2t
32Hz
9.0cm

xPlane
62%
62%
50dB
P Off
Gen
XRES 2

TISO.2 MI 0.9

2D
55%
C 50
P Off
Gen

CF
48%
7104Hz
WF 639Hz
4.4MHz

65 bpm

PAT T: 37.0C
TEE T: 39.5C

2 85

Adult Echo
X8-2t
13Hz
10cm

2D
55%
C 50
P Off
Gen

CF
48%
7104Hz
WF 639Hz
4.4MHz

74 bpm

PAT T: 37.0C
TEE T: 40.0C

3 130

Adult Echo
X8-2t
13Hz
10cm

2D
55%
C 50
P Off
Gen

CF
48%
7104Hz
WF 639Hz
4.4MHz

74 bpm

PAT T: 37.0C
TEE T: 40.0C

M4 M4, 444 cm
+61.6
-61.6 cm/s

M4 M4, 444 cm
+61.6
-61.6 cm/s

3D Zoom
3D Beats 1
TISO.5 MI 0.3

Adult Echo
X8-2t
6Hz
6.3cm

CF
51/50
7104Hz
WF 710Hz
4.4MHz

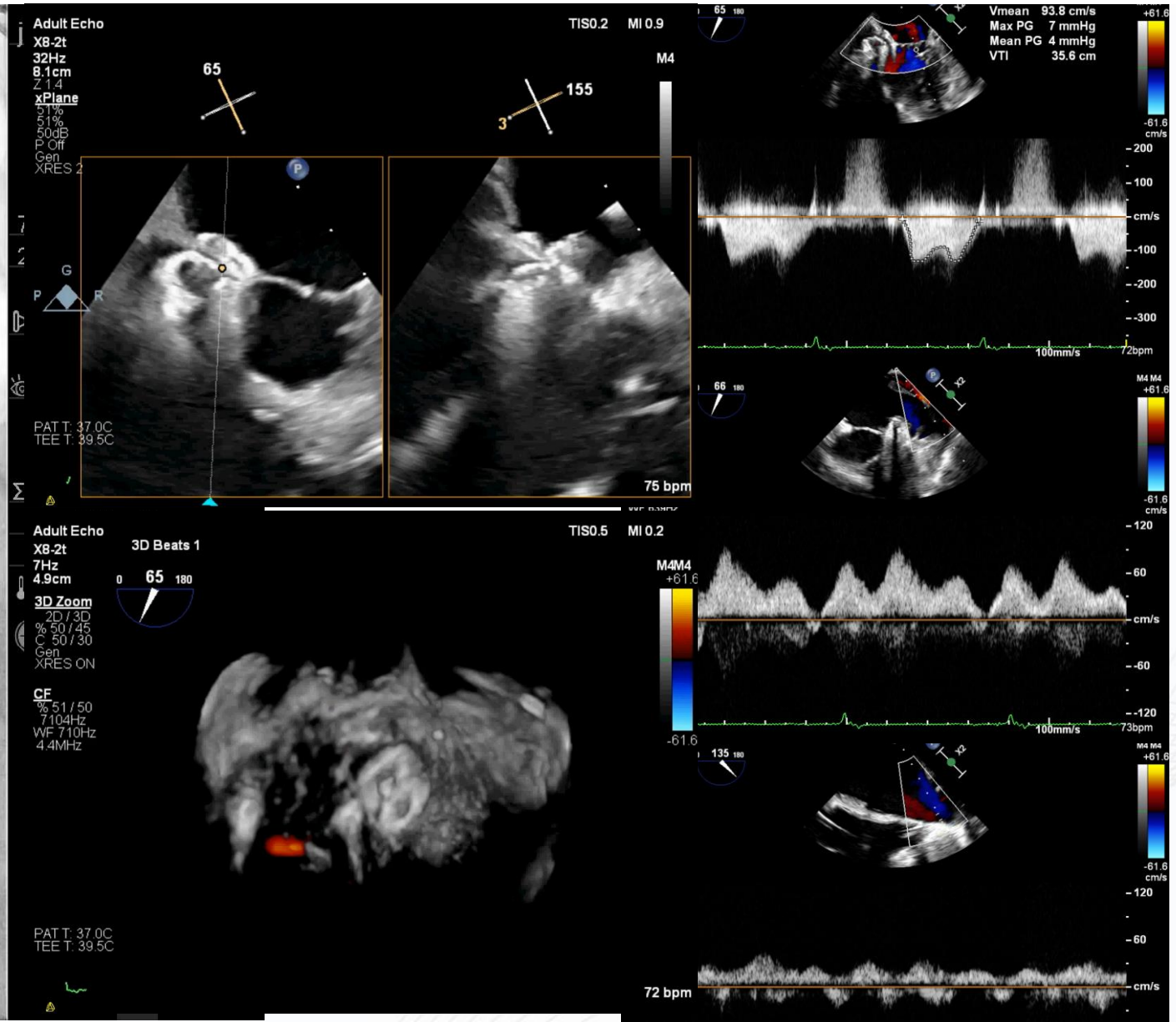
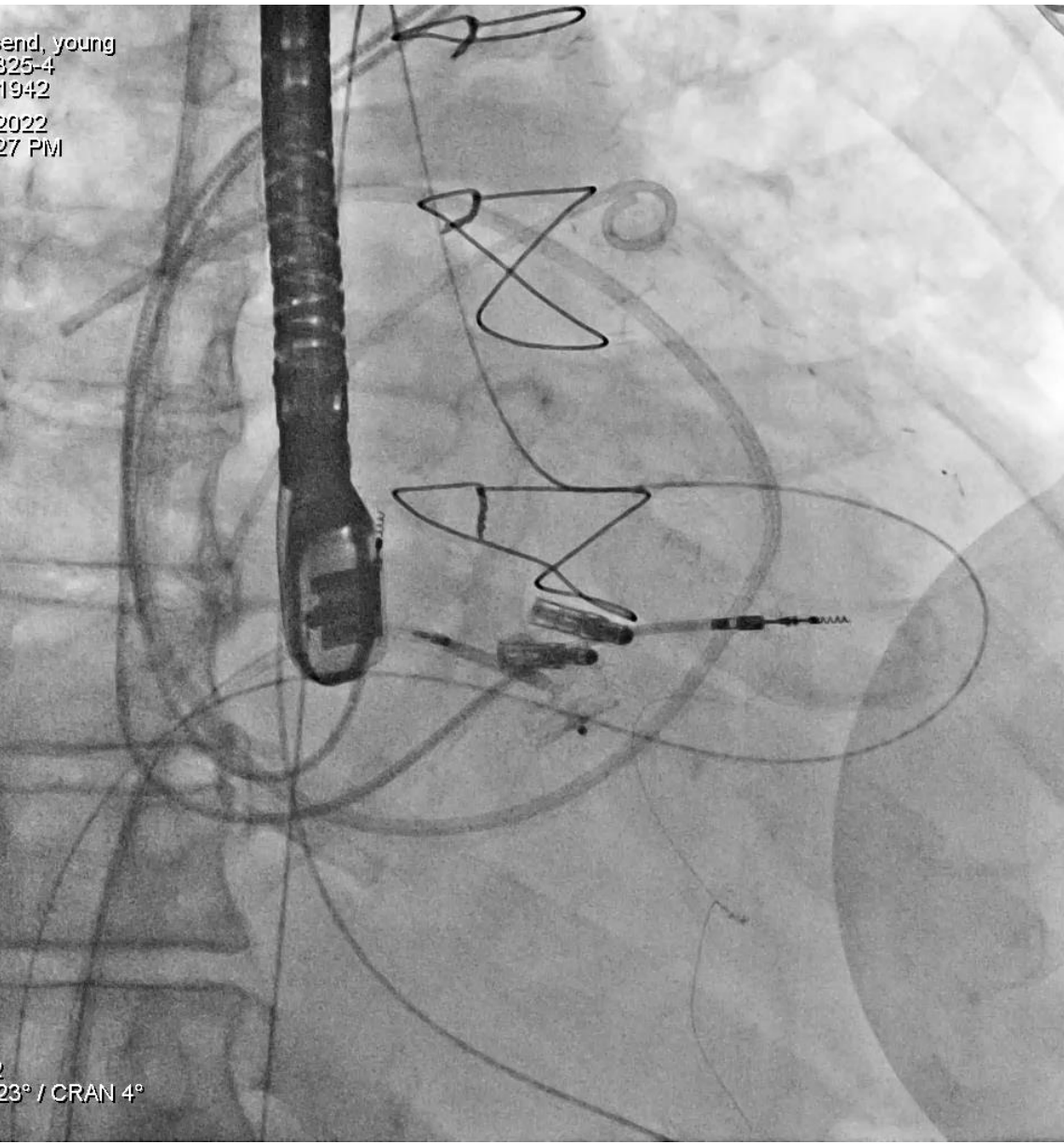
83 bpm

PAT T: 37.0C
TEE T: 39.7C

baseline

CVRF

Final results



Conclusion

- Mitral cleft is not suitable for TEER procedure.
- Vascular plug could be a bailout procedure for failed commissural clipping.