

4D & STRAIN ANALYSIS OF RV IN PATIENT WITH ISCHEMIC HEART DISEASE

By

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- ▣ 58 years old male with history of IHD 5 years ago
- ▣ Presented with SOB
- ▣ HR: irregular (AF)
- ▣ BP: 100/62

RV function assessment

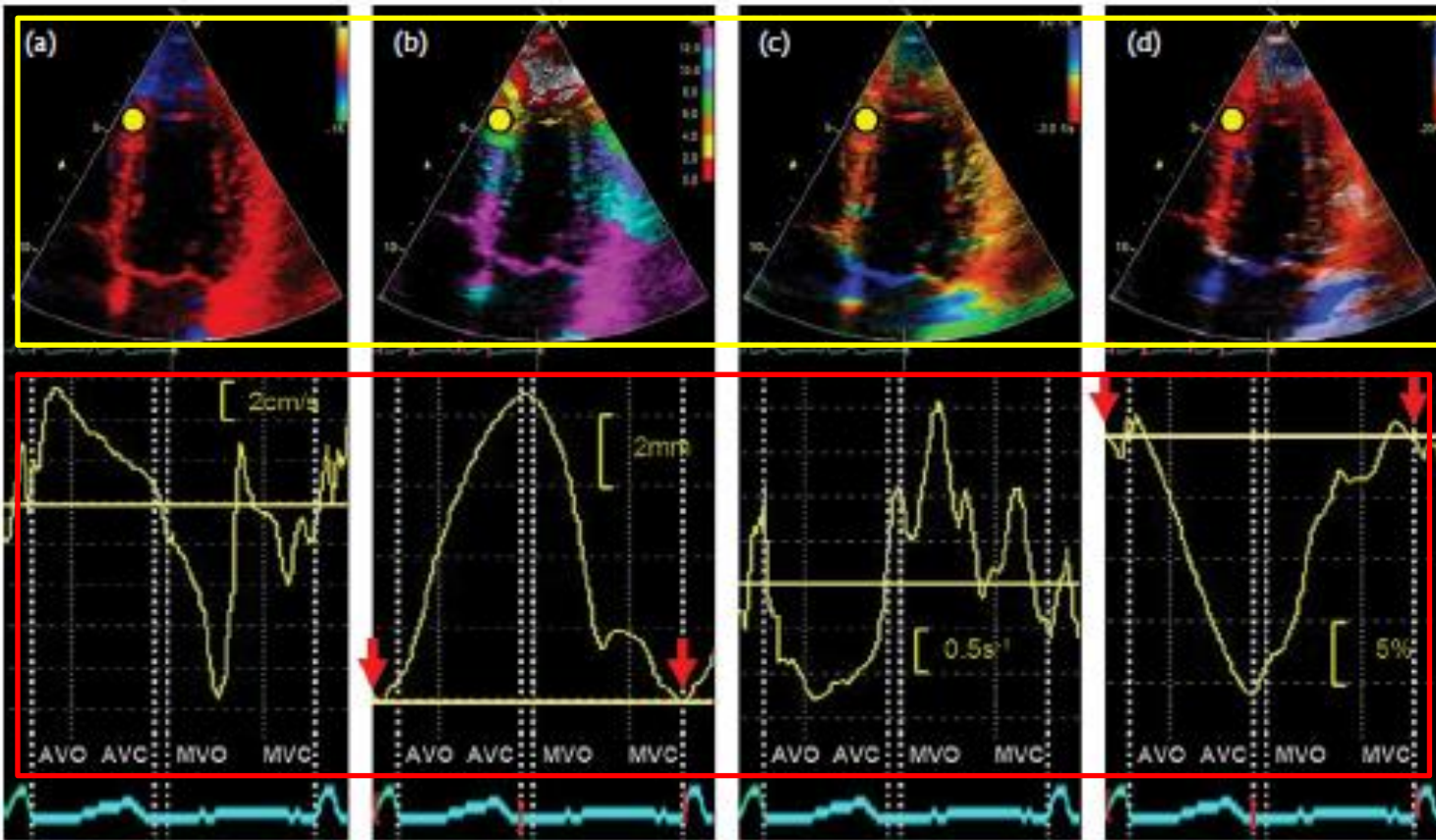
- Important prognostic indicator in patients with heart failure and in postinfarction patients
- Reduced tricuspid annular velocities with TDI have been documented in Post inferior myocardial infarction, chronic pulmonary hypertension, and chronic heart failure.

Tissue velocity
Cm/s

Displacement
velocity* time,
(mm)

SR
(1/s)

Strain
(% or unit less)



Color coded
display

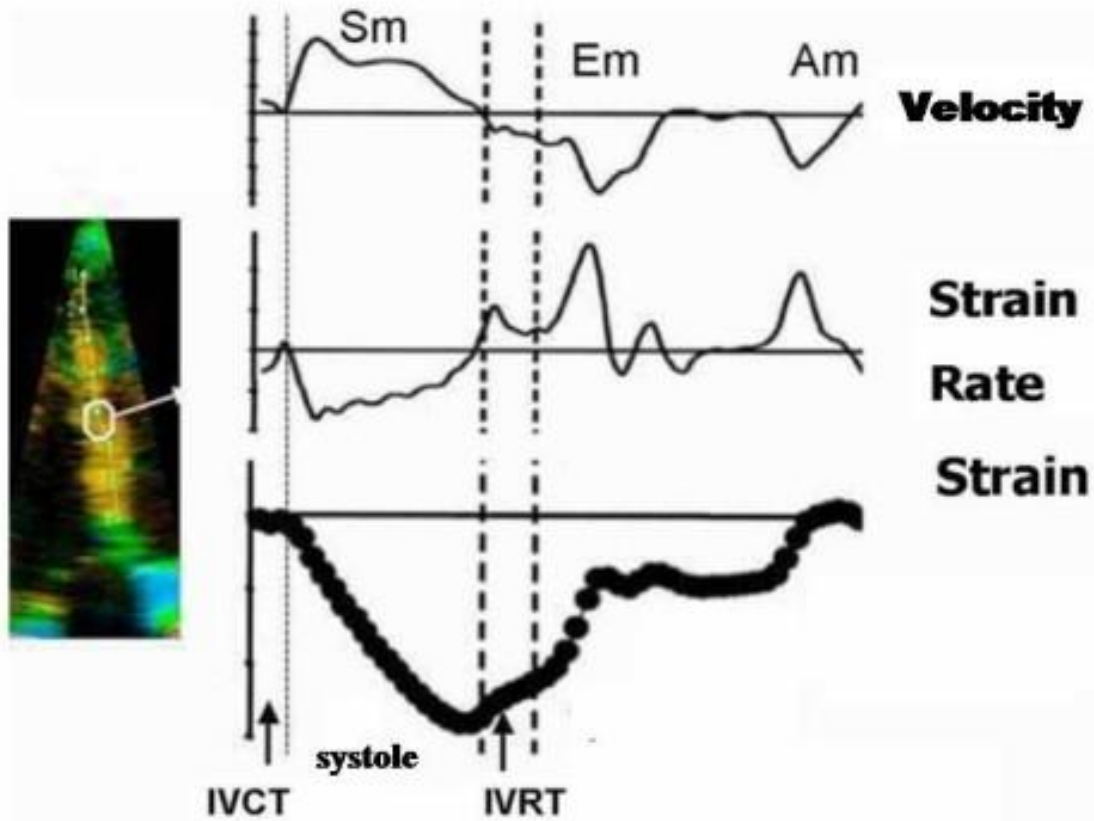
curves

All will arrive, but at varying times and speeds

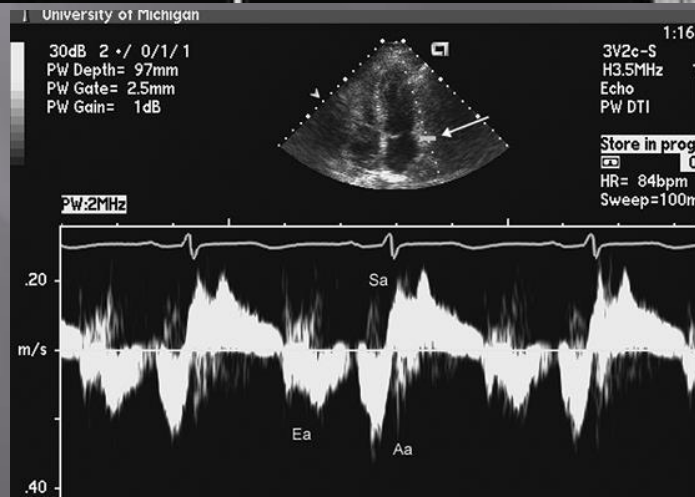
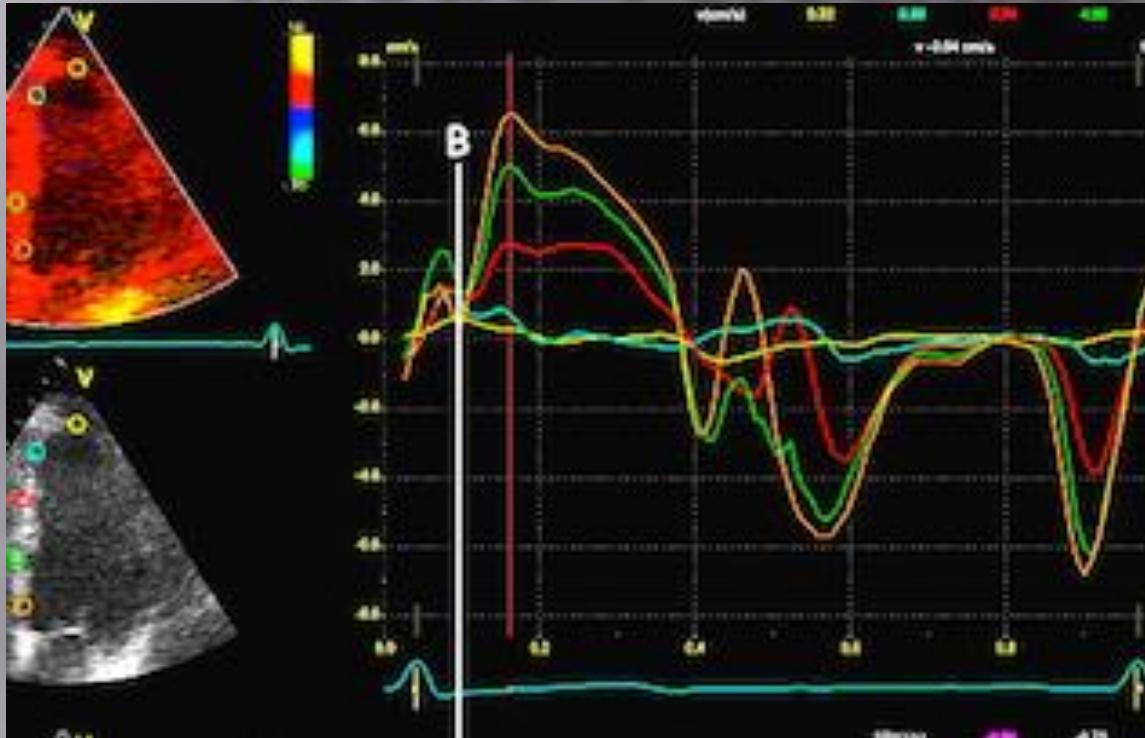


$$SR = S/T$$

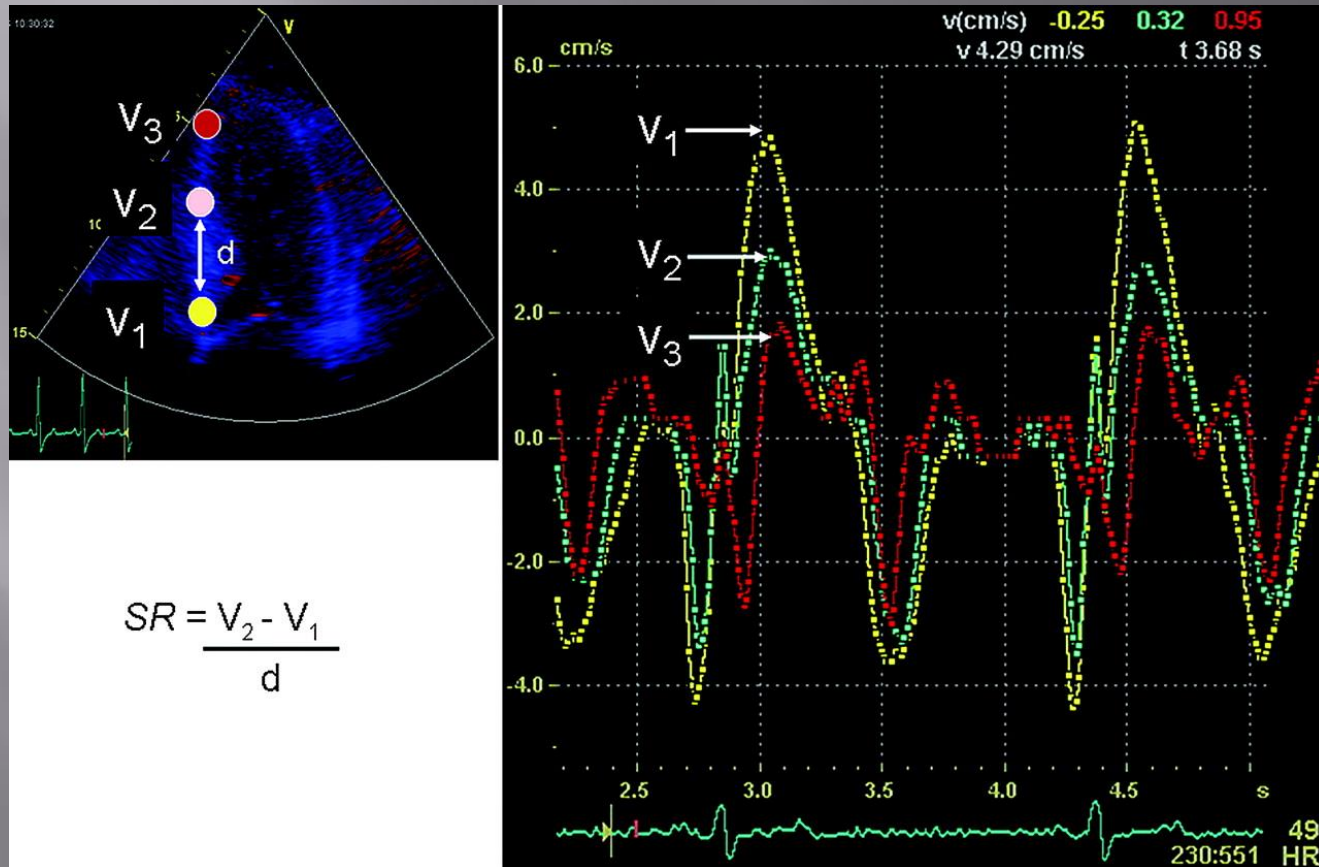
- ▣ SR: measure time course of deformation
- ▣ SR is less preload and afterload dependent than strain



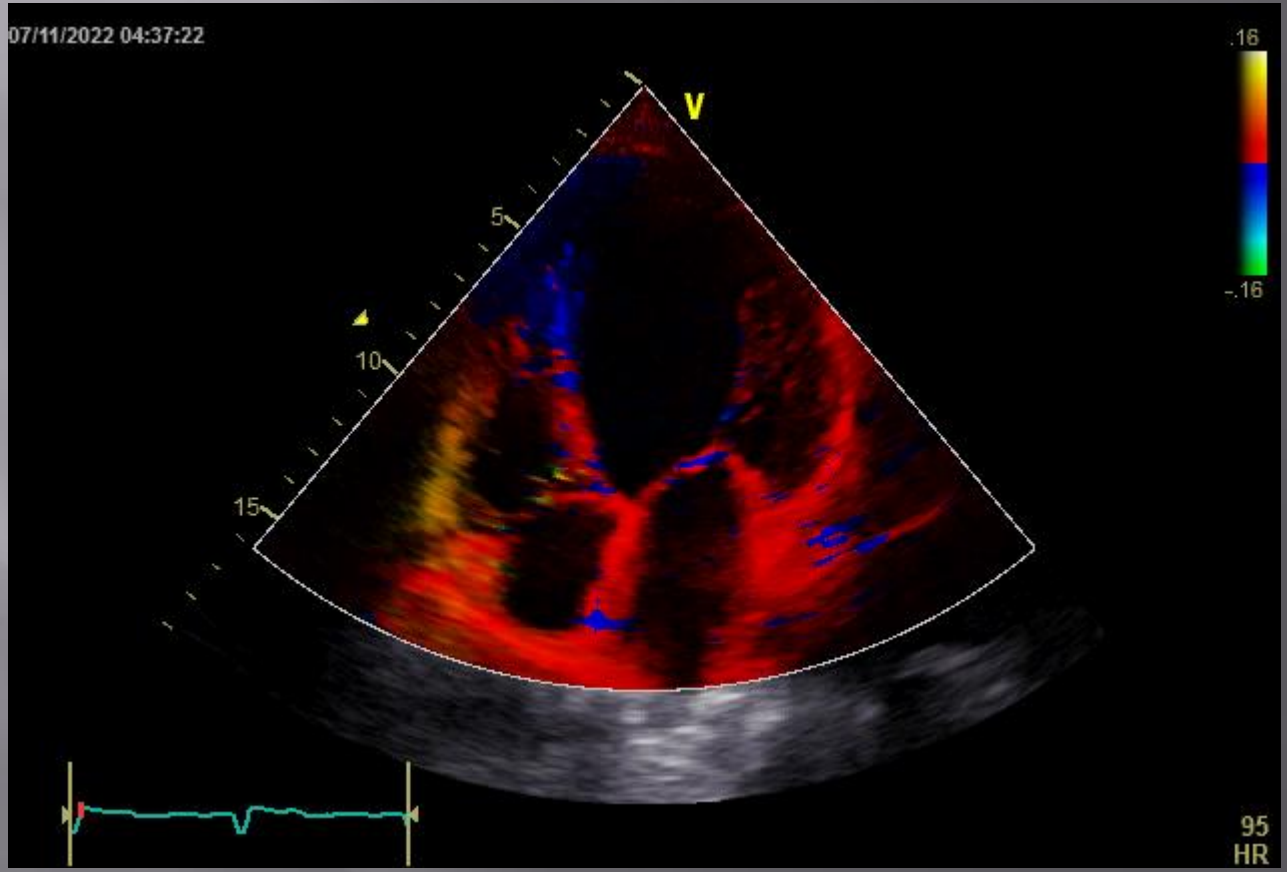
tissue Velocities



Strain derived TDI



07/11/2022 04:37:22



16

-16

V

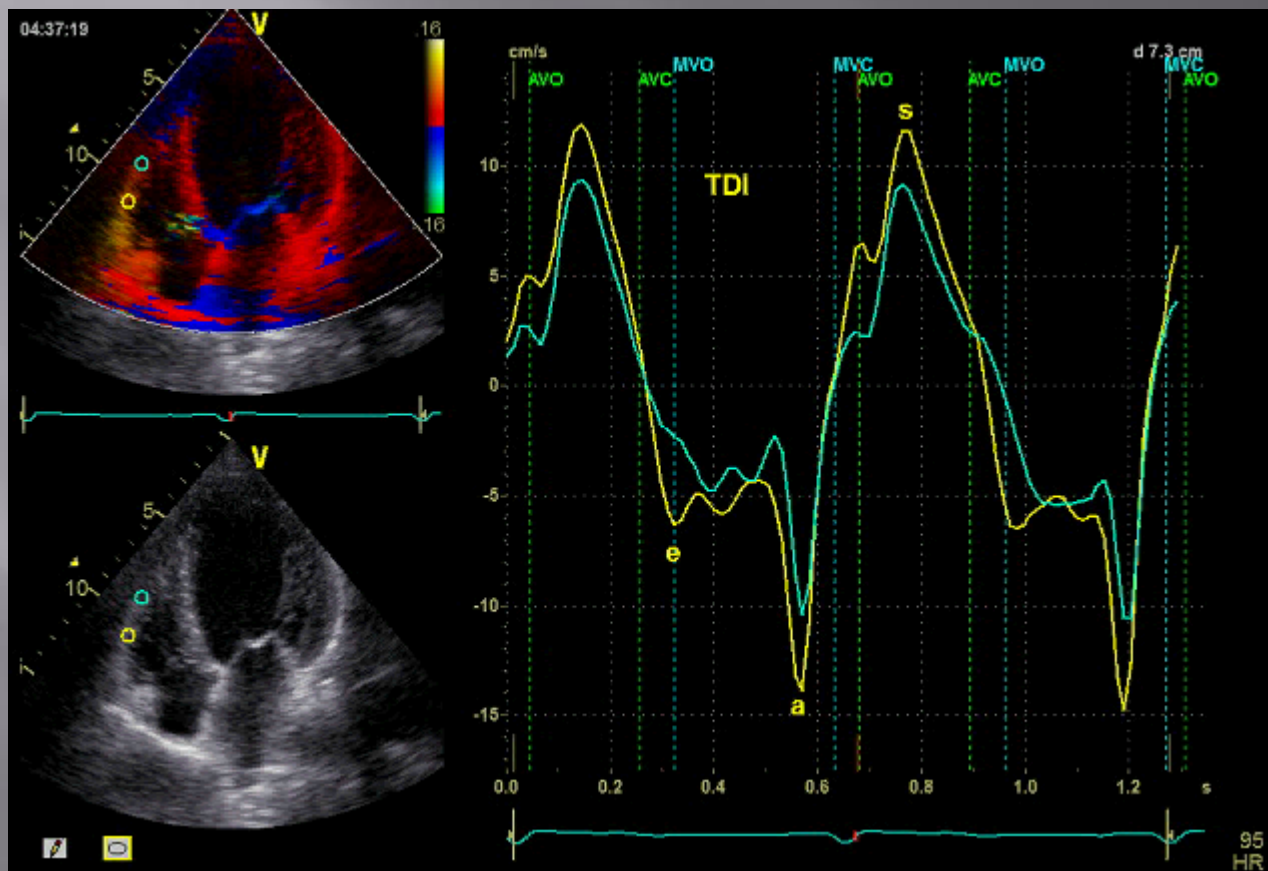
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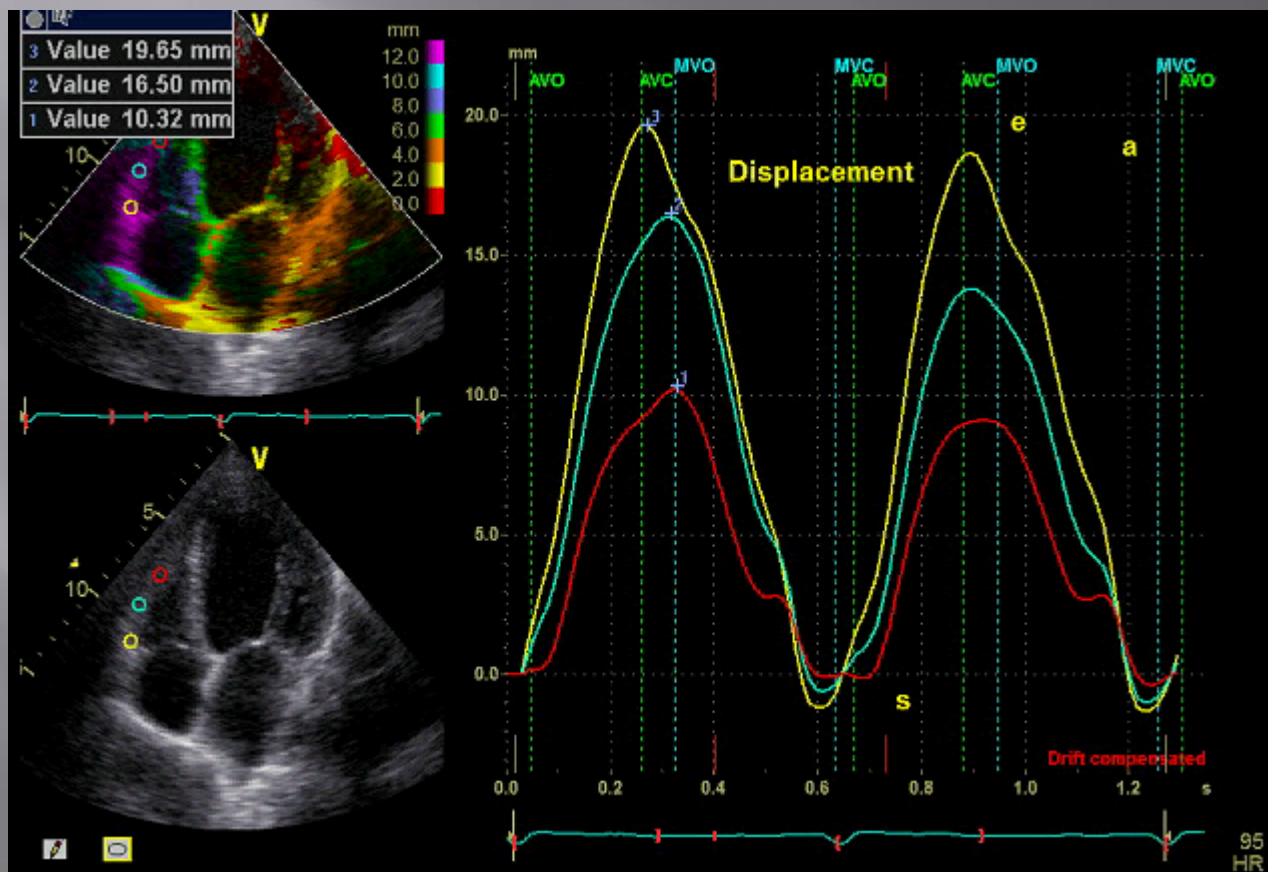
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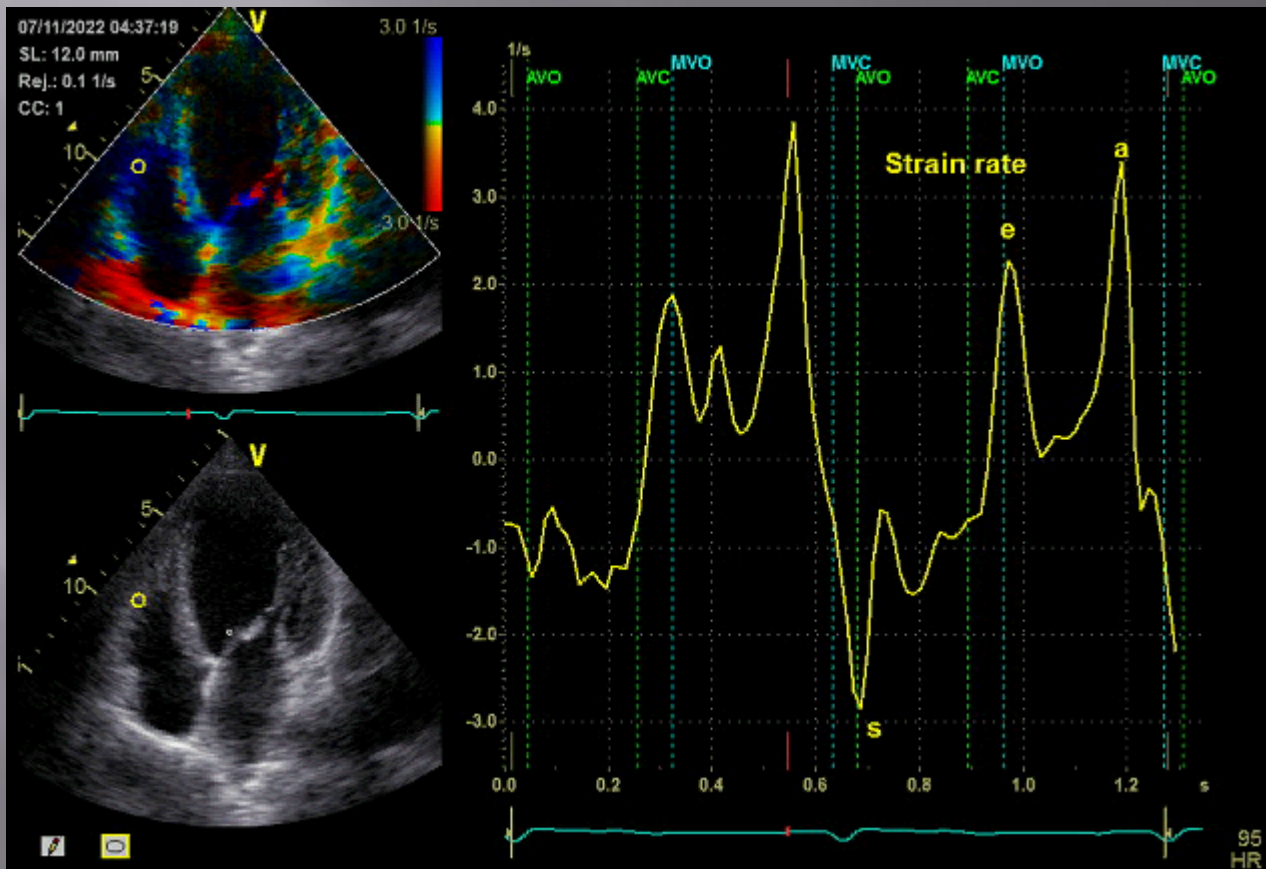
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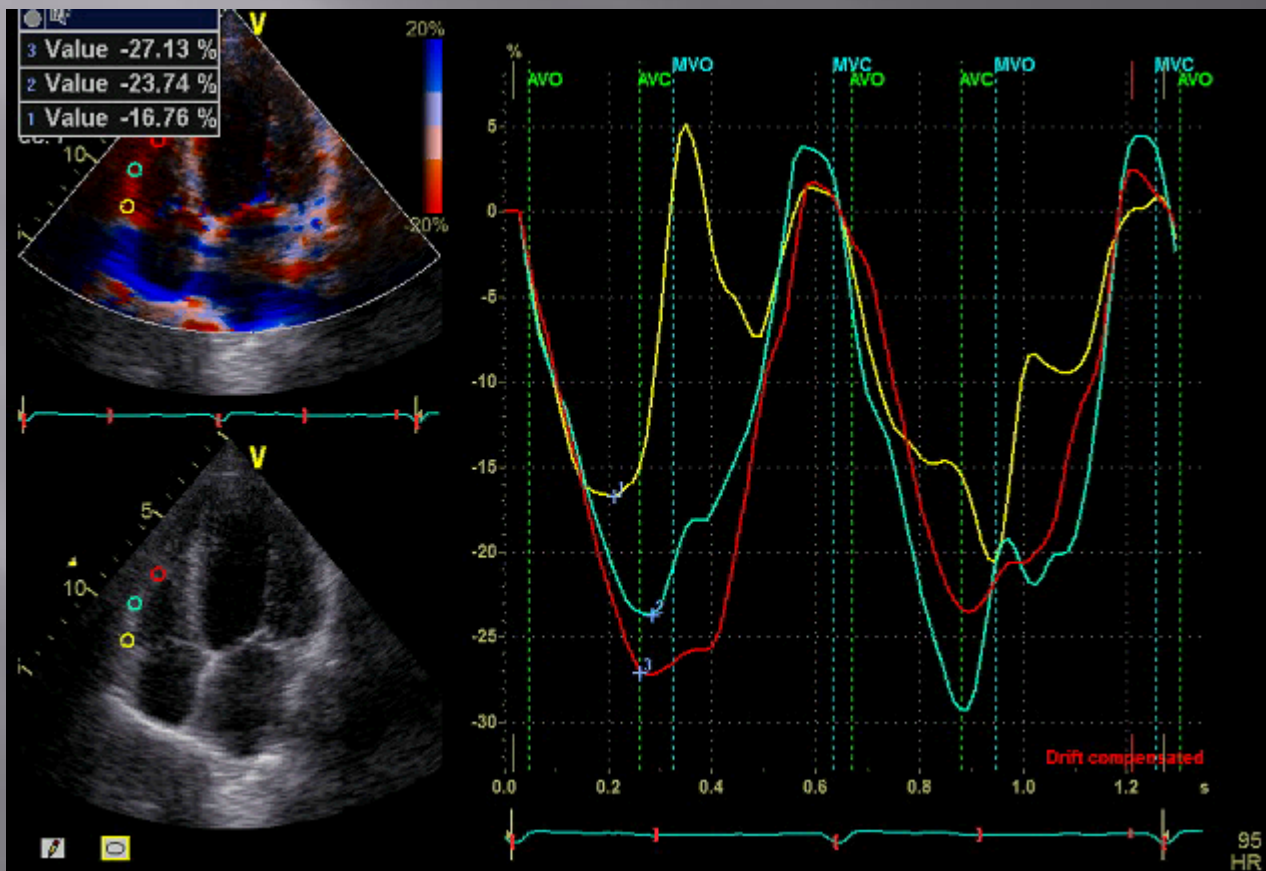
95
HR

RV Tissue tracking

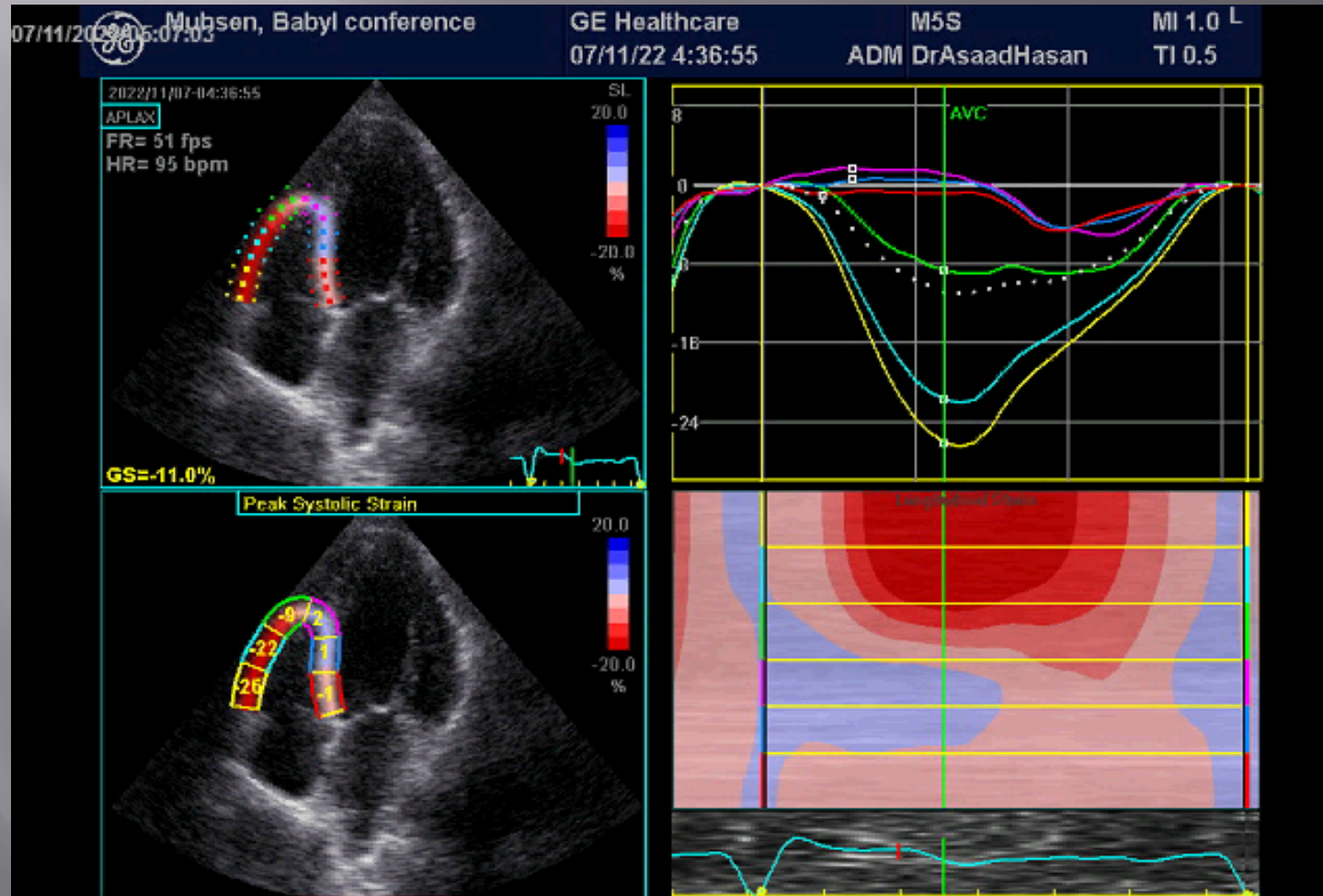


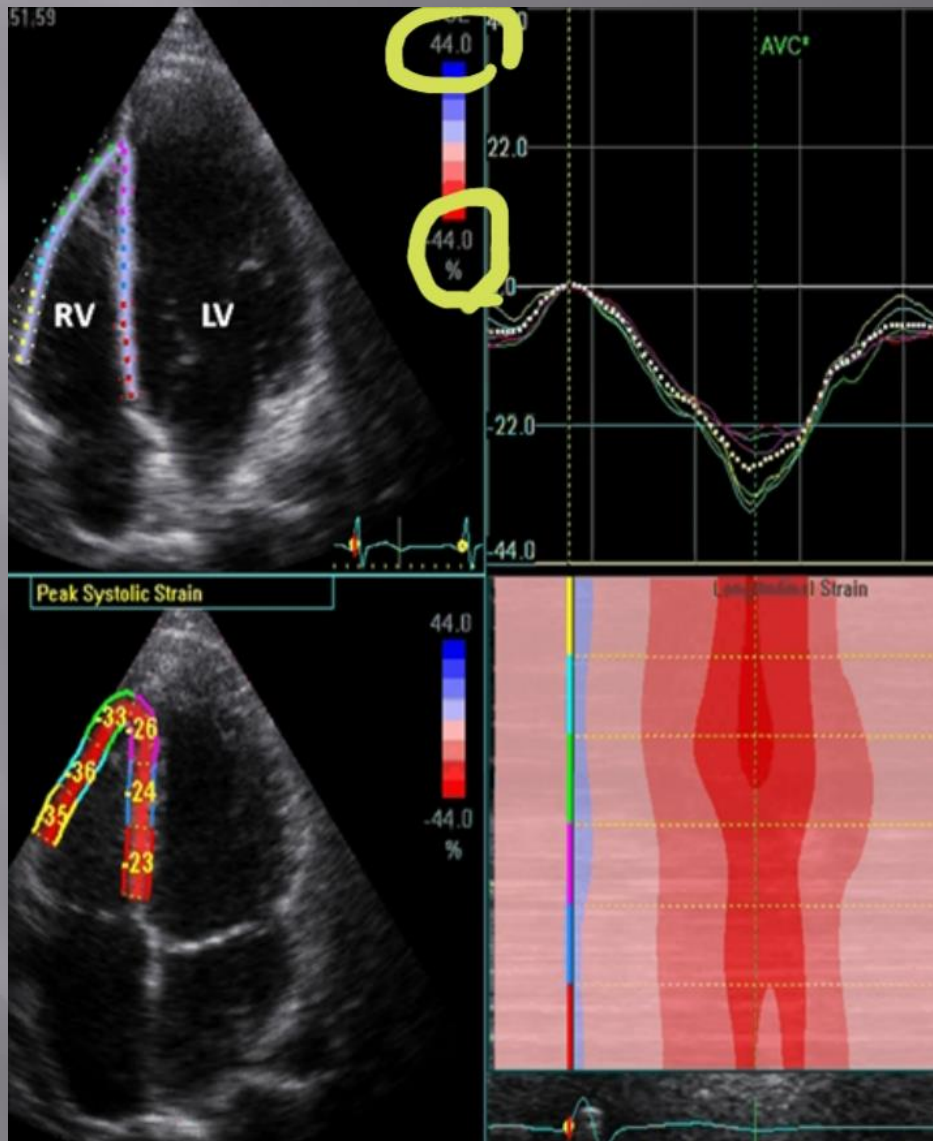


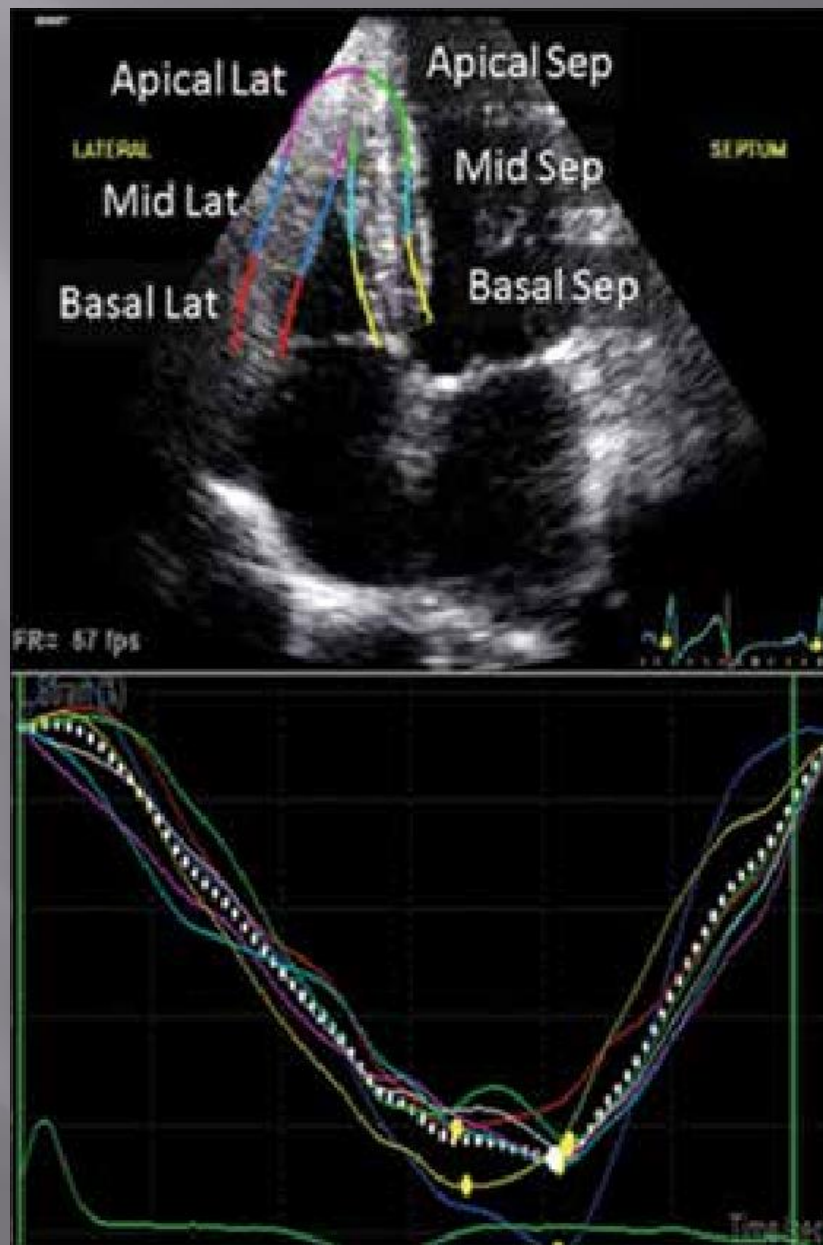




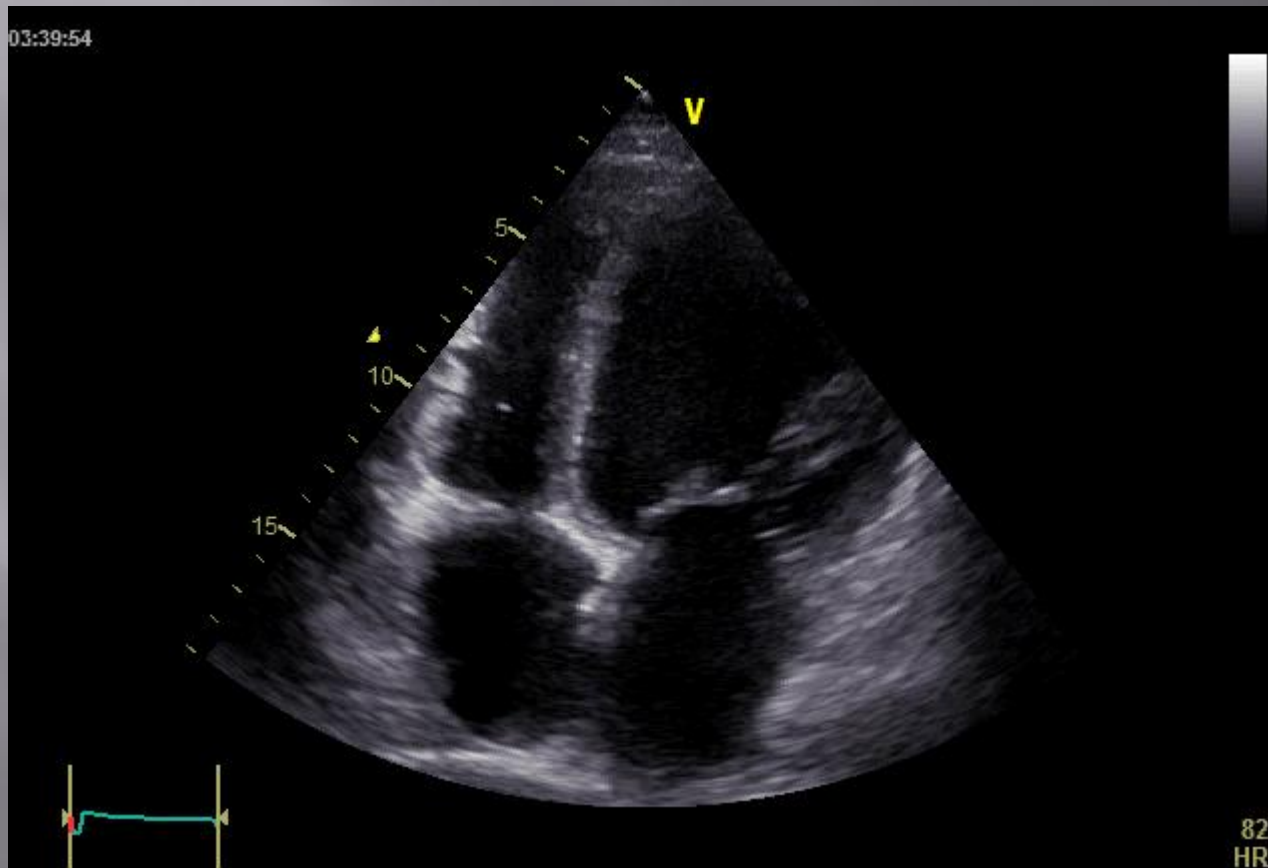
Speckle tracking derived strain



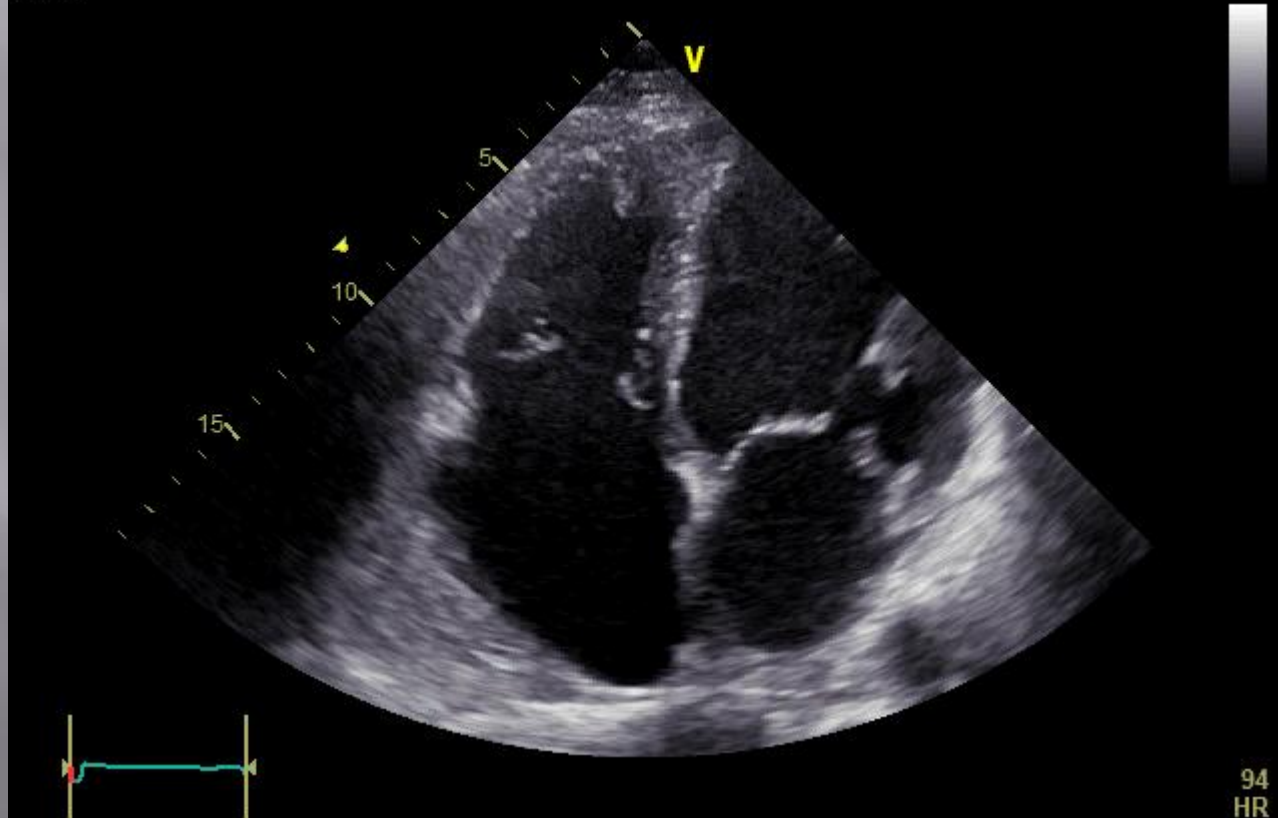




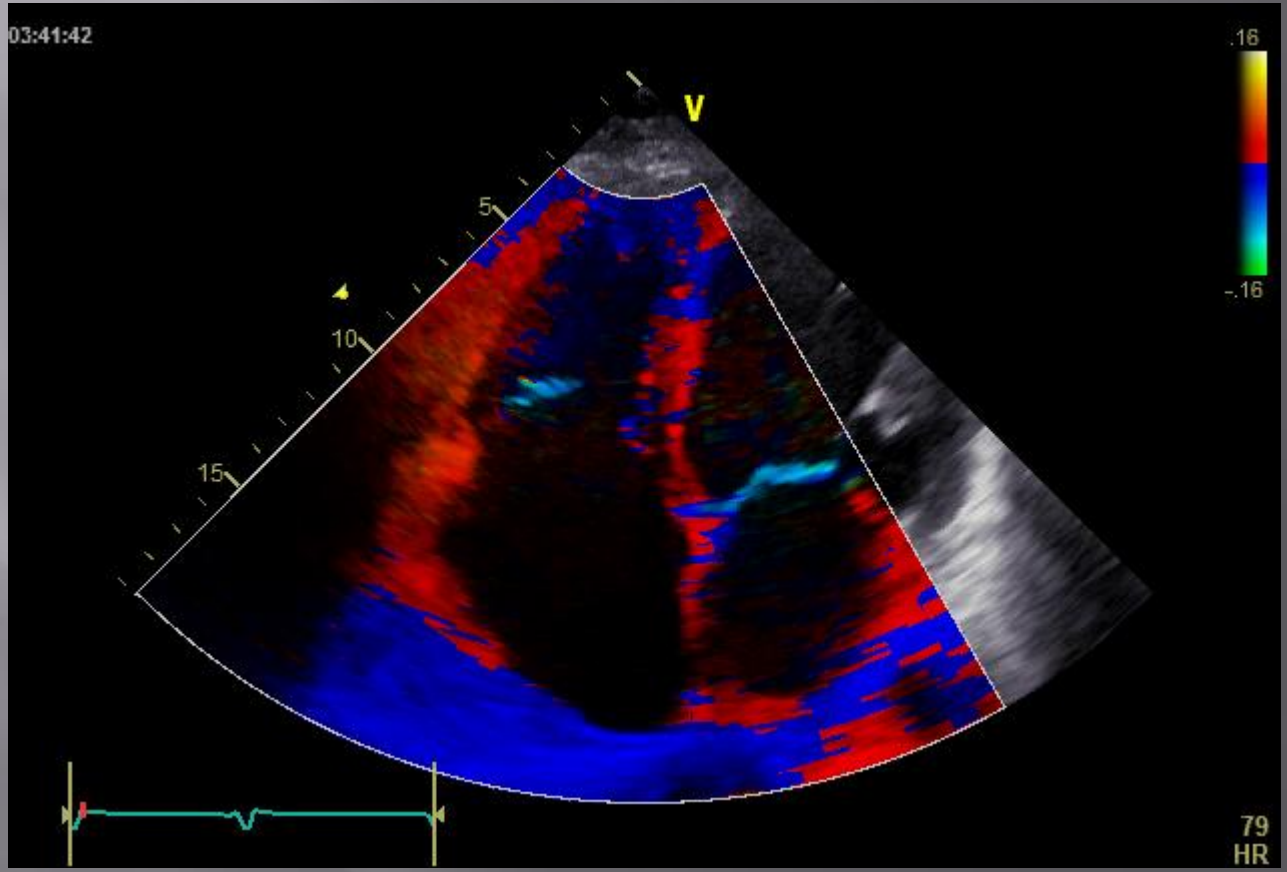
Patient results

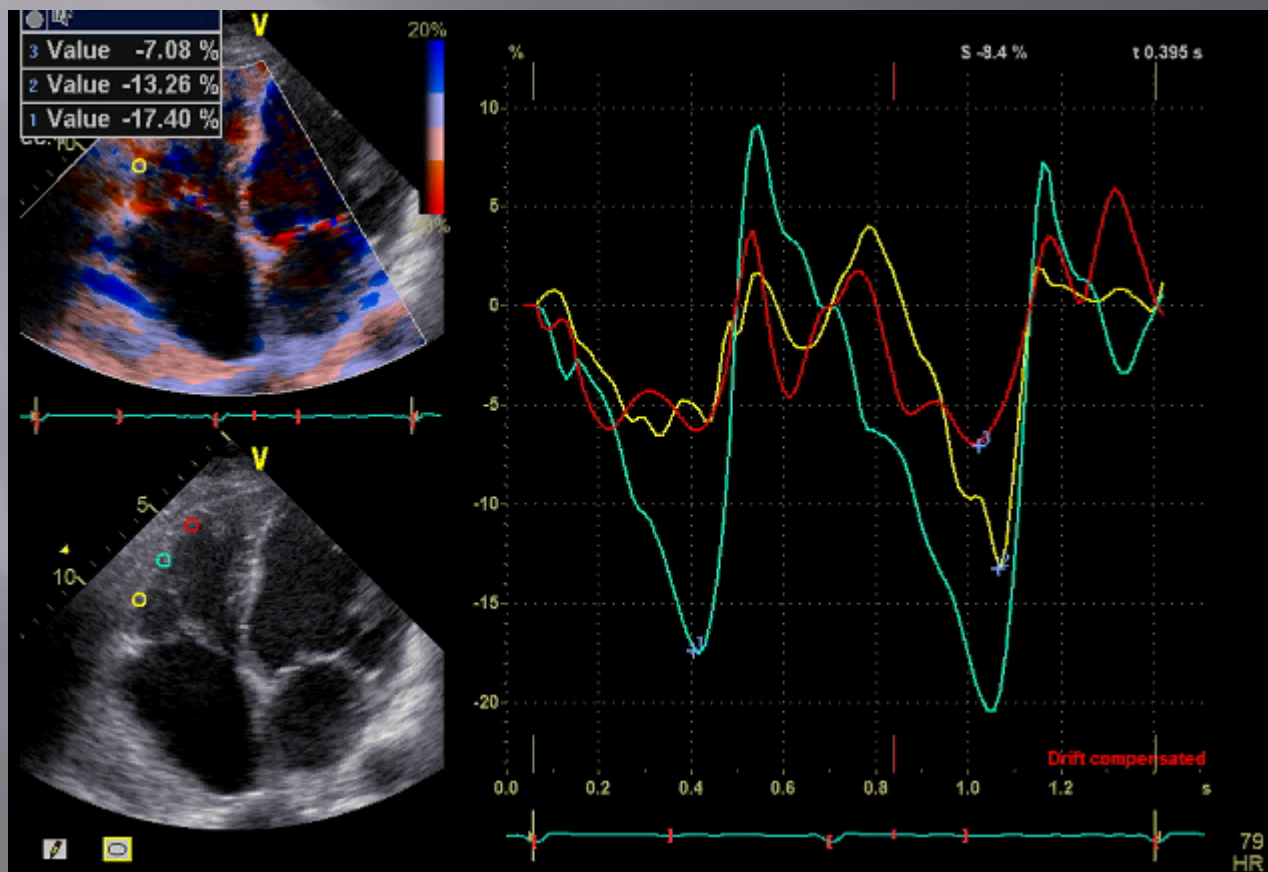


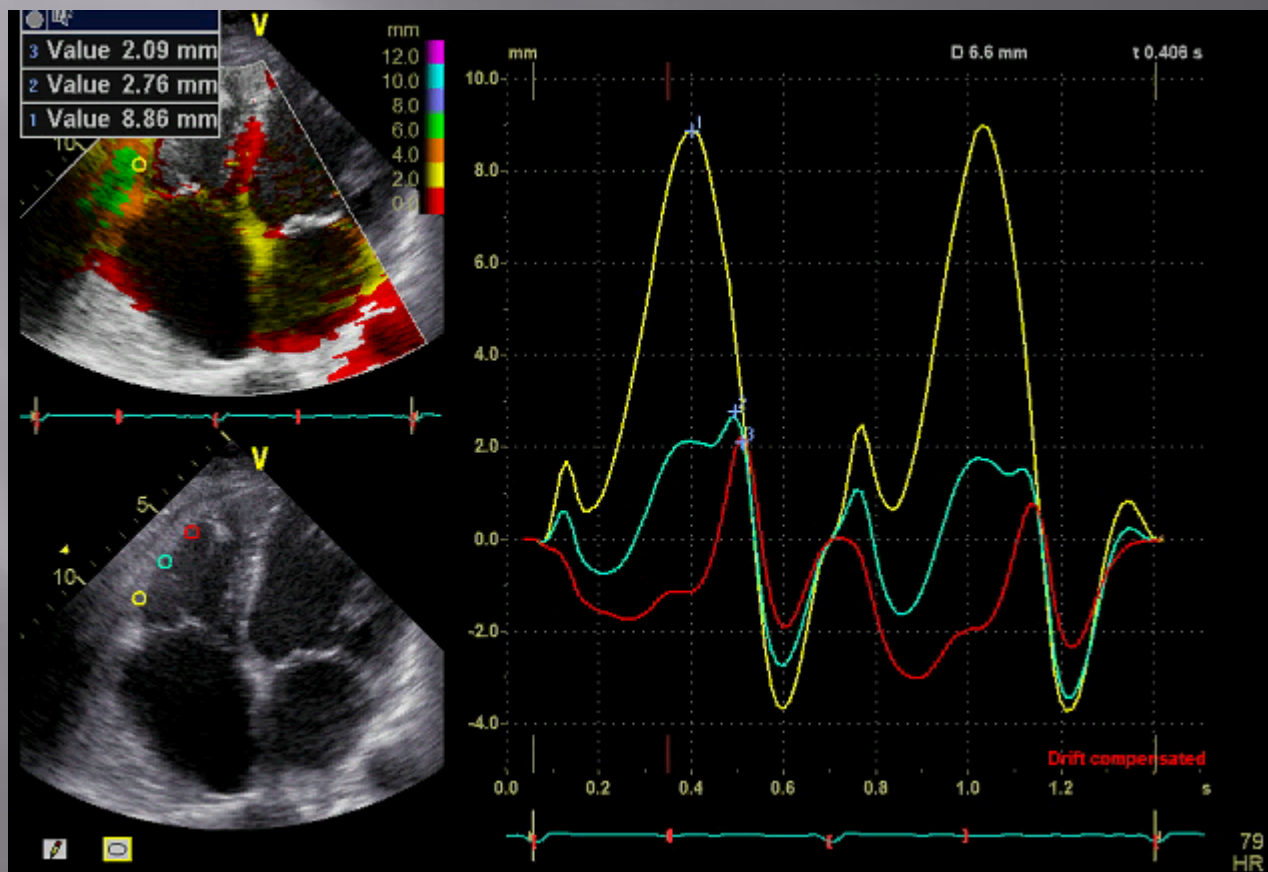
03:41:37



94
HR







03:49:39

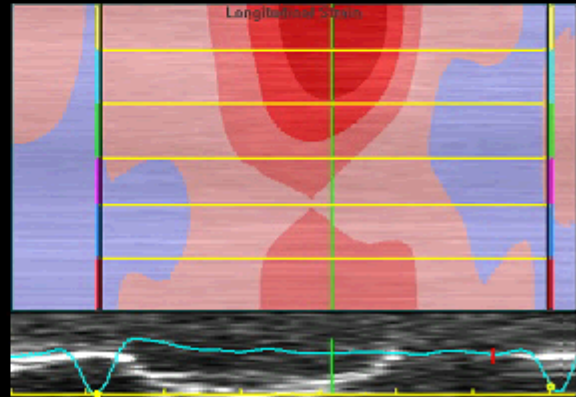
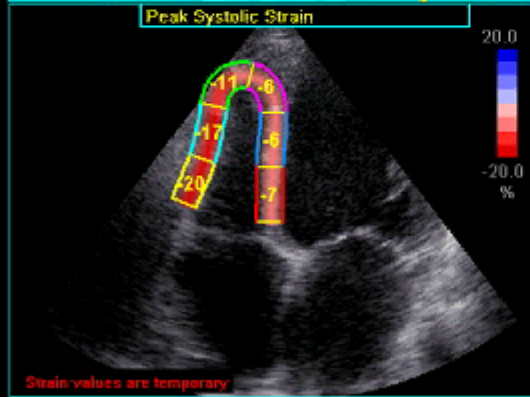
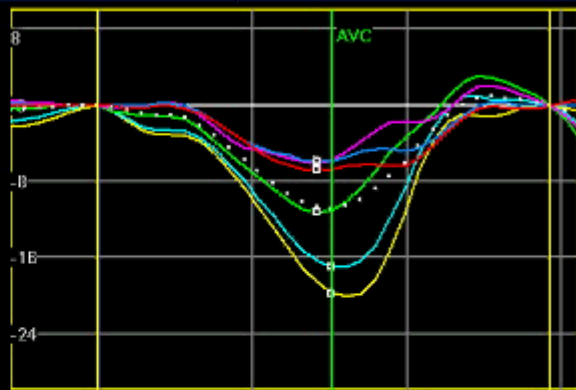
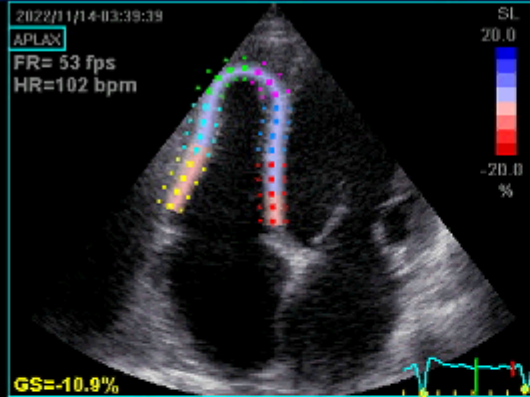


Kadhum Brach, Babil conference
01/01/1964

GE Healthcare
14/11/22 3:39:39

M5S
ADM DrAsaadHasan

MI 1.0 L
TI 0.5



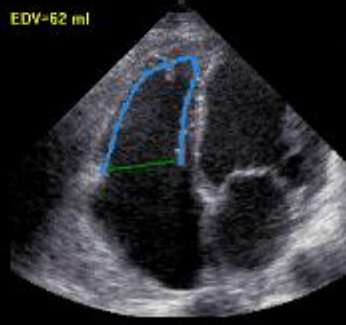
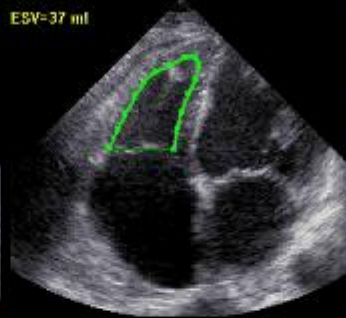
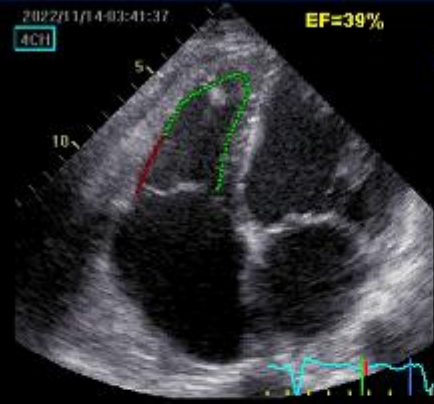
03:55:40



Kadhum Brach, Babil conference GE Healthcare
01/01/1964 14/11/22 3:41:37

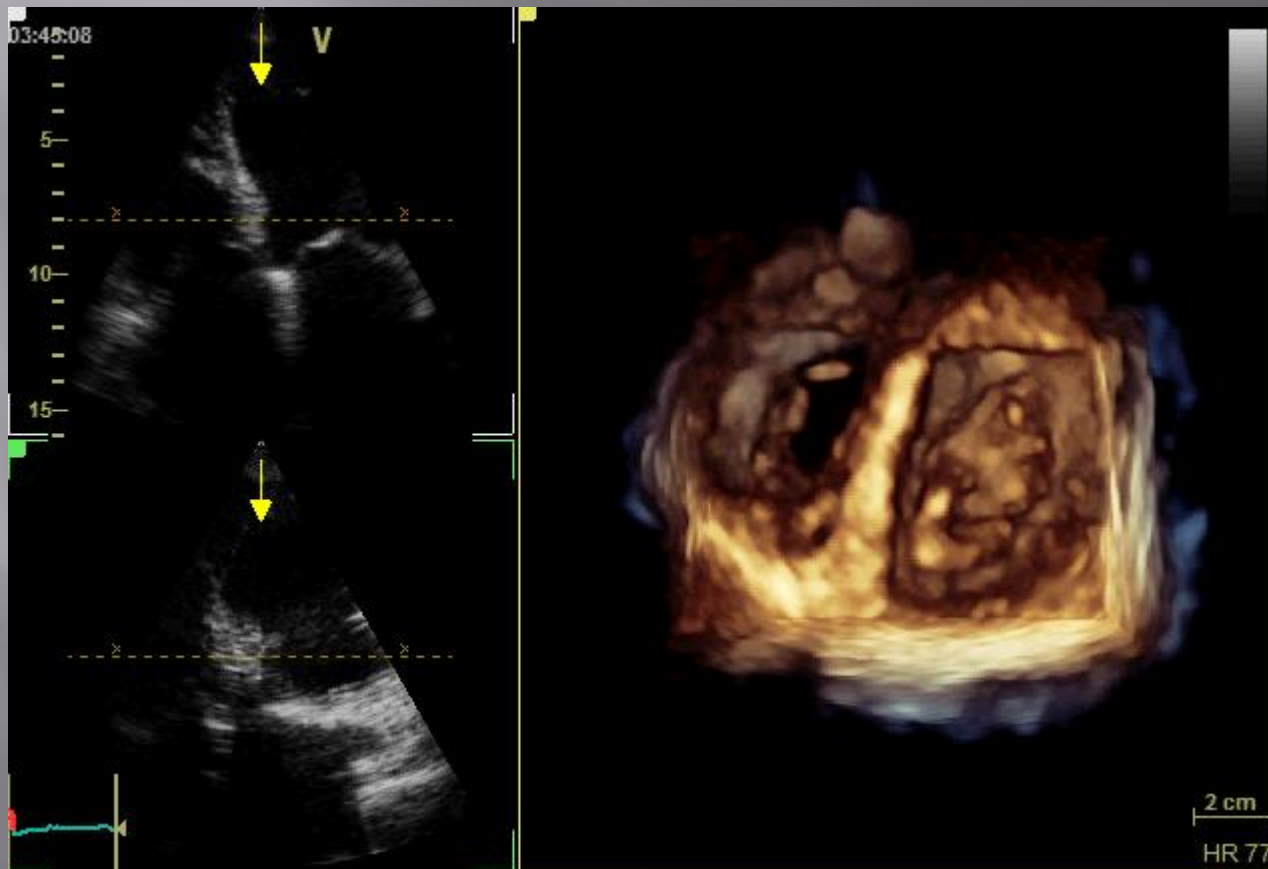
M5S
ADM DrAsaadHasan

MI 1.0 L
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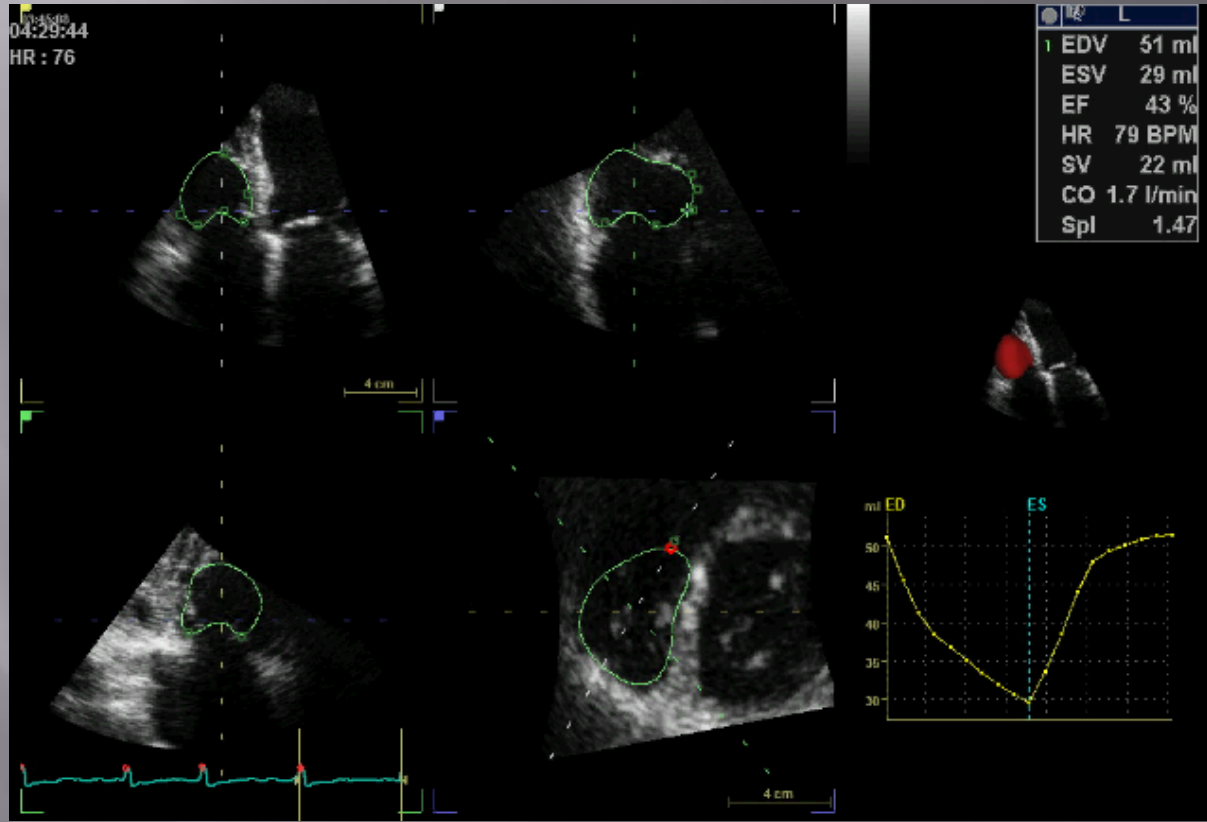


2CH	
BF	
CO	
ESV	
EDV	
SV	
LS	
Ld	
HR	
4CH	
BF	39 %
CO	2.2 l/min
ESV	37 ml
EDV	62 ml
SV	24 ml
LS	6.3 cm
Ld	7.0 cm
HR	91.6 bpm
Options	
EF_BP	
ESV_BP	
EDV_BP	
SV_BP	
LVCO_BP	

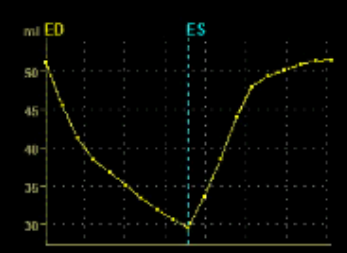
Approve



04:29:44
HR : 76

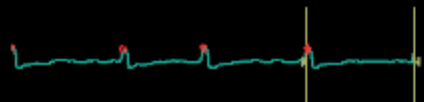
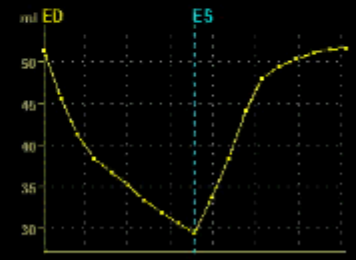


	L
EDV	51 ml
ESV	29 ml
EF	43 %
HR	79 BPM
SV	22 ml
CO	1.7 l/min
Spl	1.47

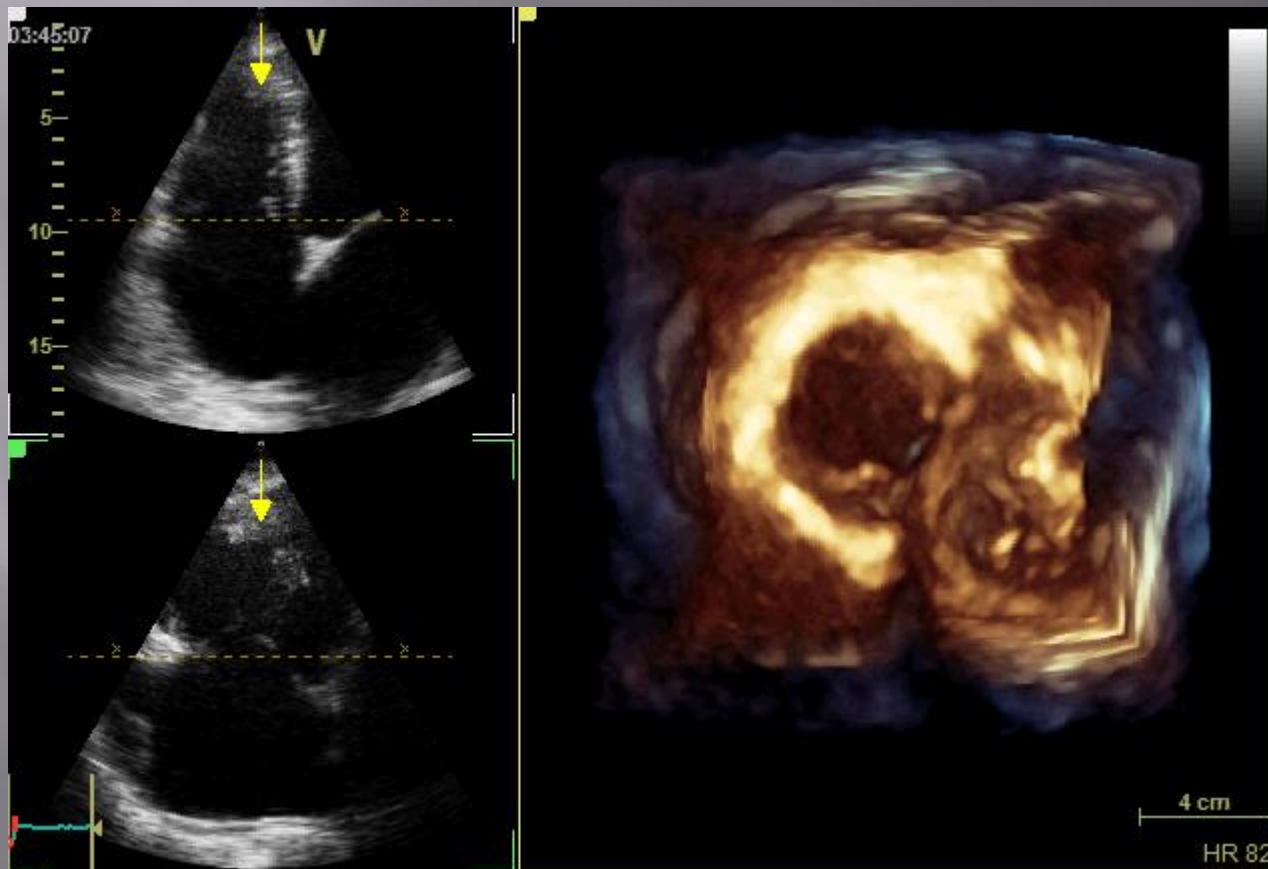


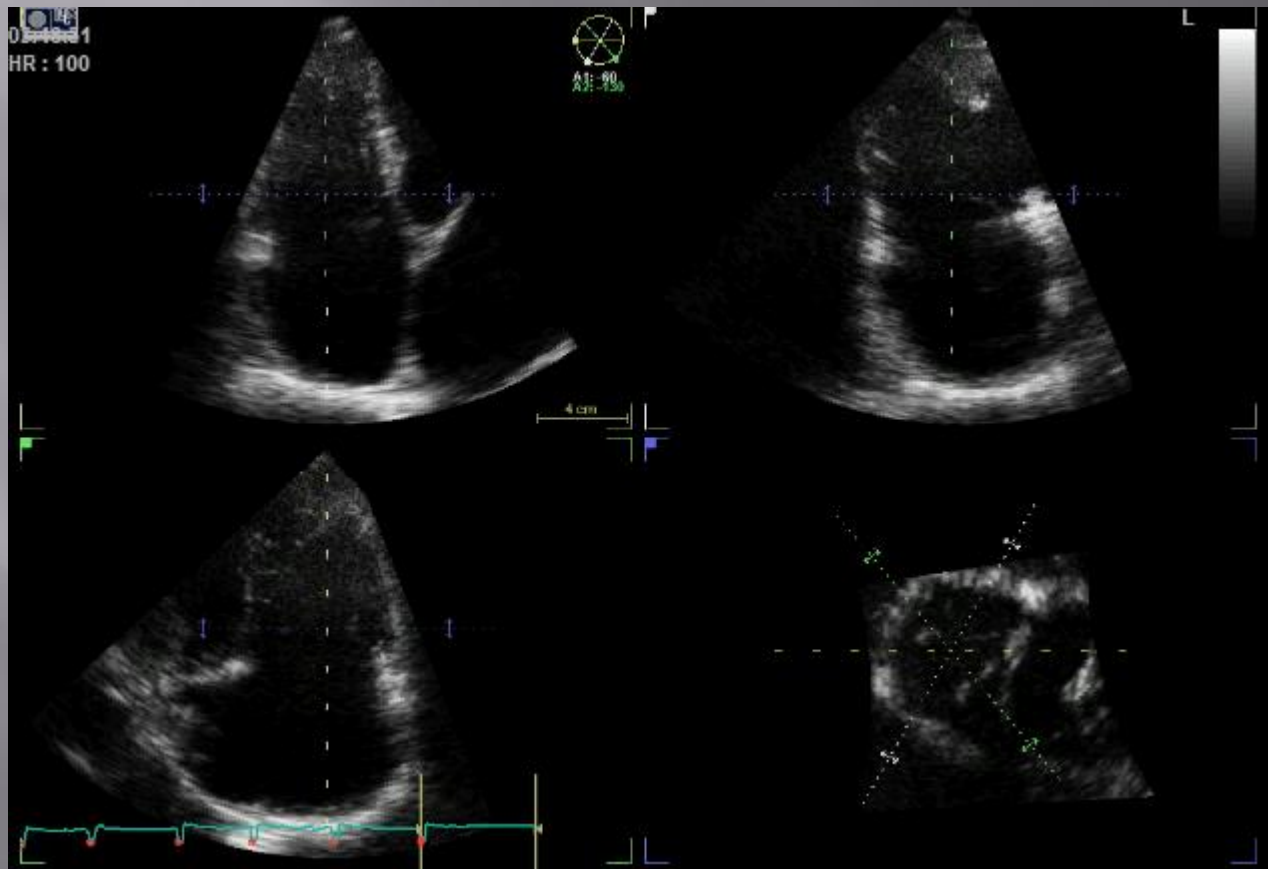
03:45:08
04:30:14
HR : 76

	ME	L
1	EDV	51 ml
	ESV	29 ml
	EF	43 %
	HR	79 BPM
	SV	22 ml
	CO	1.7 l/min
	Spl	1.47

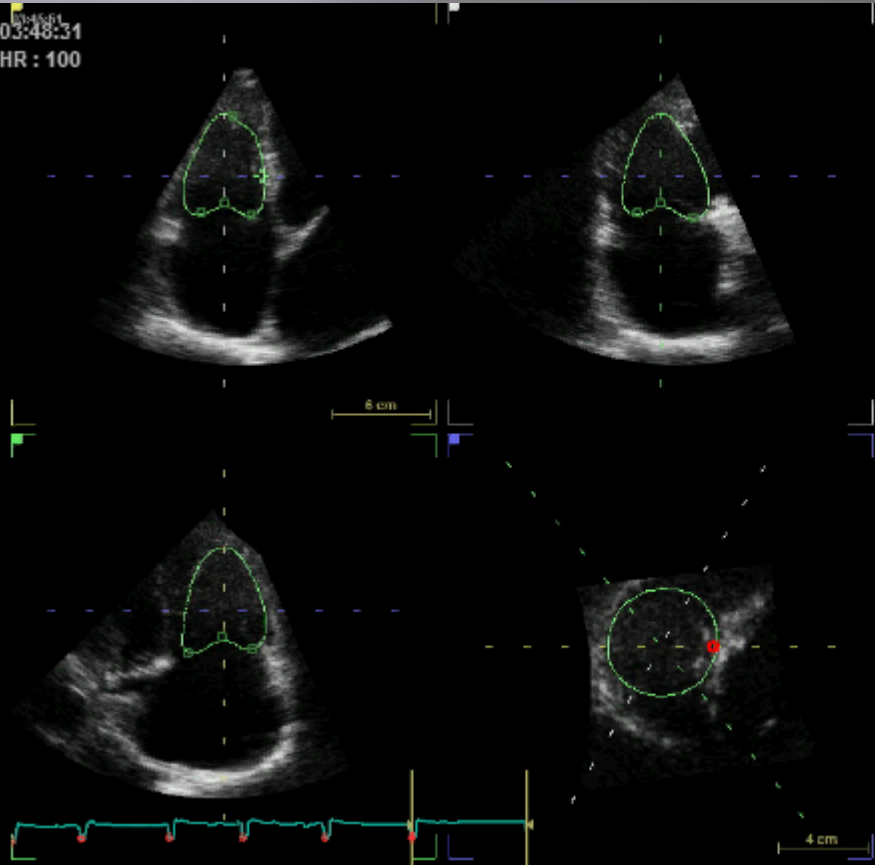


Patient 4D results

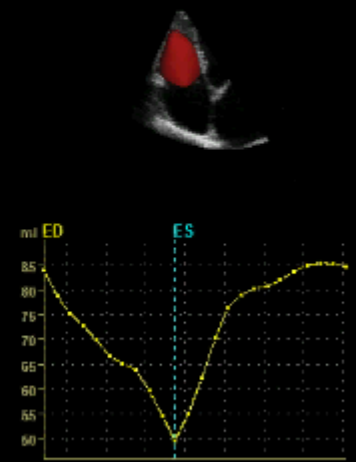


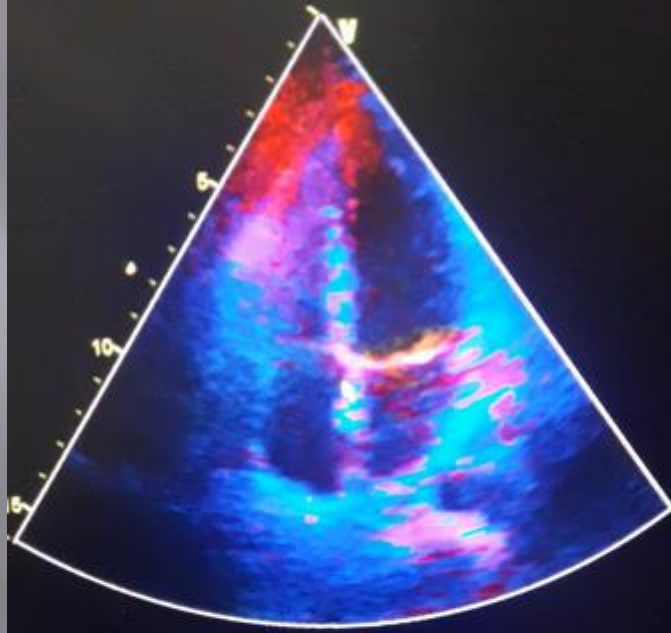


03:48:31
HR : 100



MA	L
1 EDV	84 ml
ESV	49 ml
EF	41 %
HR	73 BPM
SV	35 ml
CO	2.5 l/min
Spl	0.62





28 unfinished job(s) in speaker

Vivid E9

Thank You