Presented by Laith Ayman Derbas, MD
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Rush University Medical Center

On behalf of Ajoe Kattoor, MD and Fareed Collado, MD

Disclosures:

Nothing to disclose

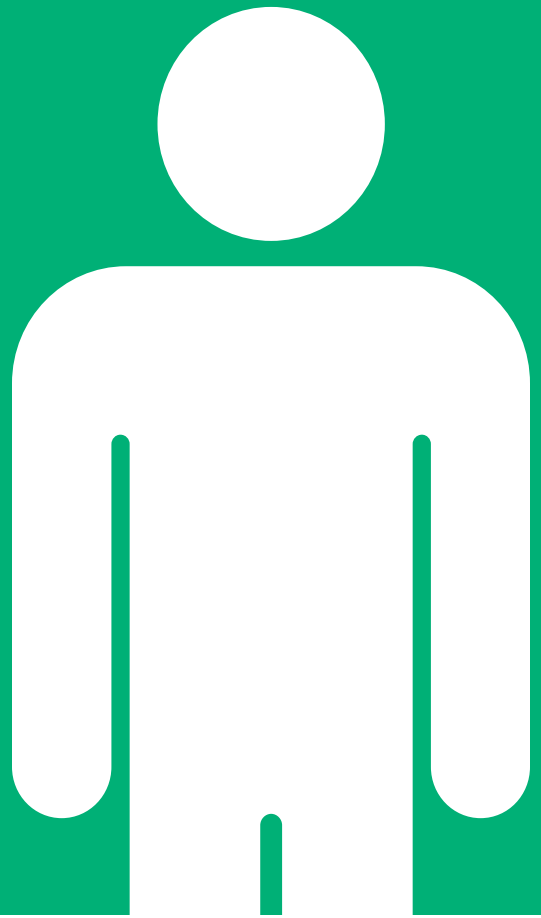
History of Presenting Illness

Profile:

- ***Age*****:** 85 Years
- ***Sex*****:** Male

Symptoms:

- Left sided chest pain that started 12 hours prior to presenting to the emergency department.
- Pain was described as pressure that radiates to the left upper extremity.



History:

- Prior history of PCI “15 years ago”
- Complete heart block status post dual chamber pacemaker 2020
- Myelodysplastic syndrome.

Review of Systems

Positive	Negative
Fatigue	*Fevers, Chills, Night sweats,*
Chest pain/pressure	*Palpitations, Orthopnea, PND*
Shortness of breath	*Wheezing*
Lower extremity edema	*Abdominal swelling*
Cough	*Lightheadedness*

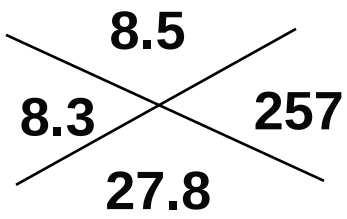
Physical examination

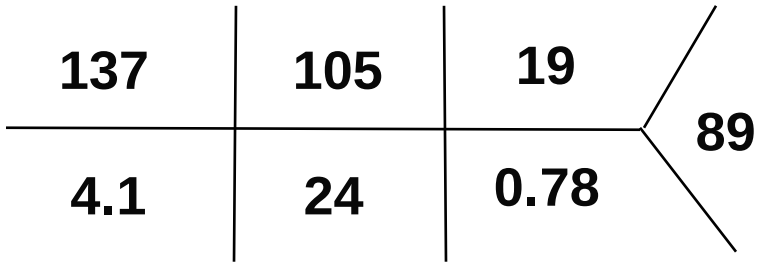
- **Vitals: BP 91/52, HR 85, Temperature 98.2 F, RR 17, SpO2 95%.**
- **CONSTITUTIONAL: In moderate distress.**
- **NECK: No carotid bruit or jugular vein distension.**
- **LUNGS: Clear breath sounds bilaterally**
- **CARDIOVASCULAR: Regular rate and rhythm. Normal S1 and S2, no gallop and no murmurs.**
- **MUSCULOSKELETAL: Trace lower extremity edema.**

PSH	No pertinent history No available records regarding previous PCIs
FH	No significant history of premature heart disease
Social Hx	Former smoker No alcohol No illicit drugs

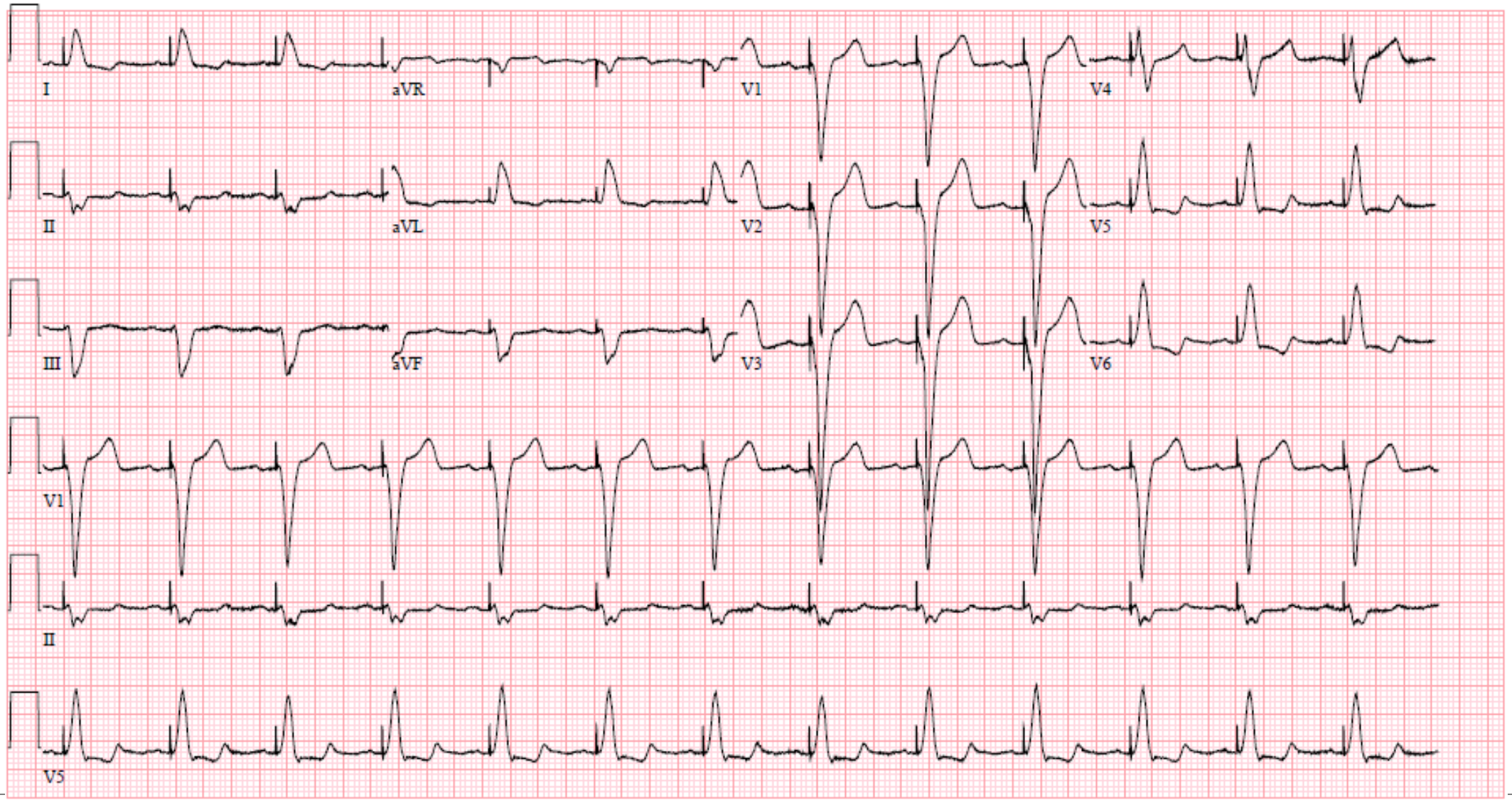
Lab Results

- COVID negative
- BNP 1225
- High Sensitivity Troponin 33.7

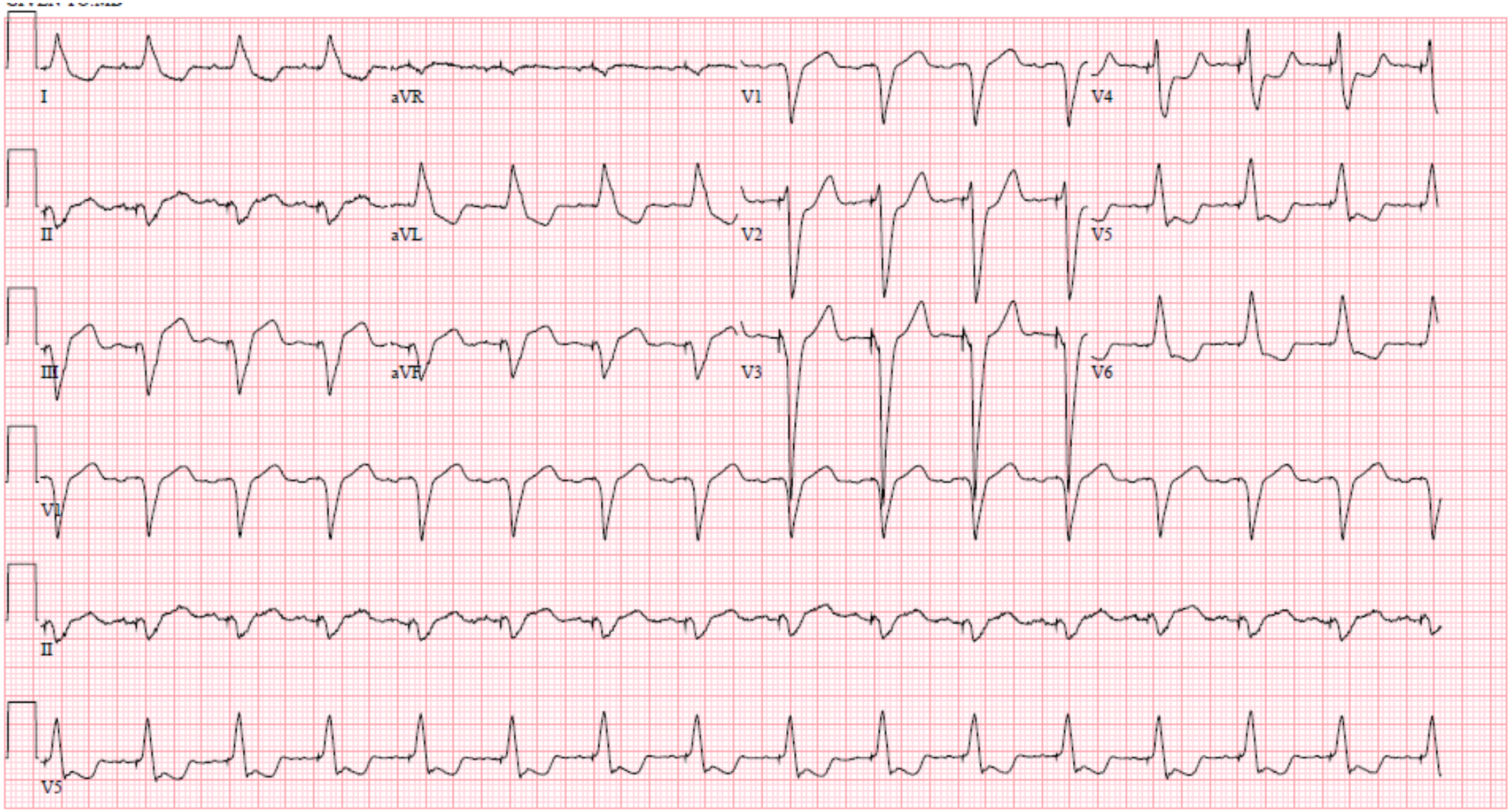




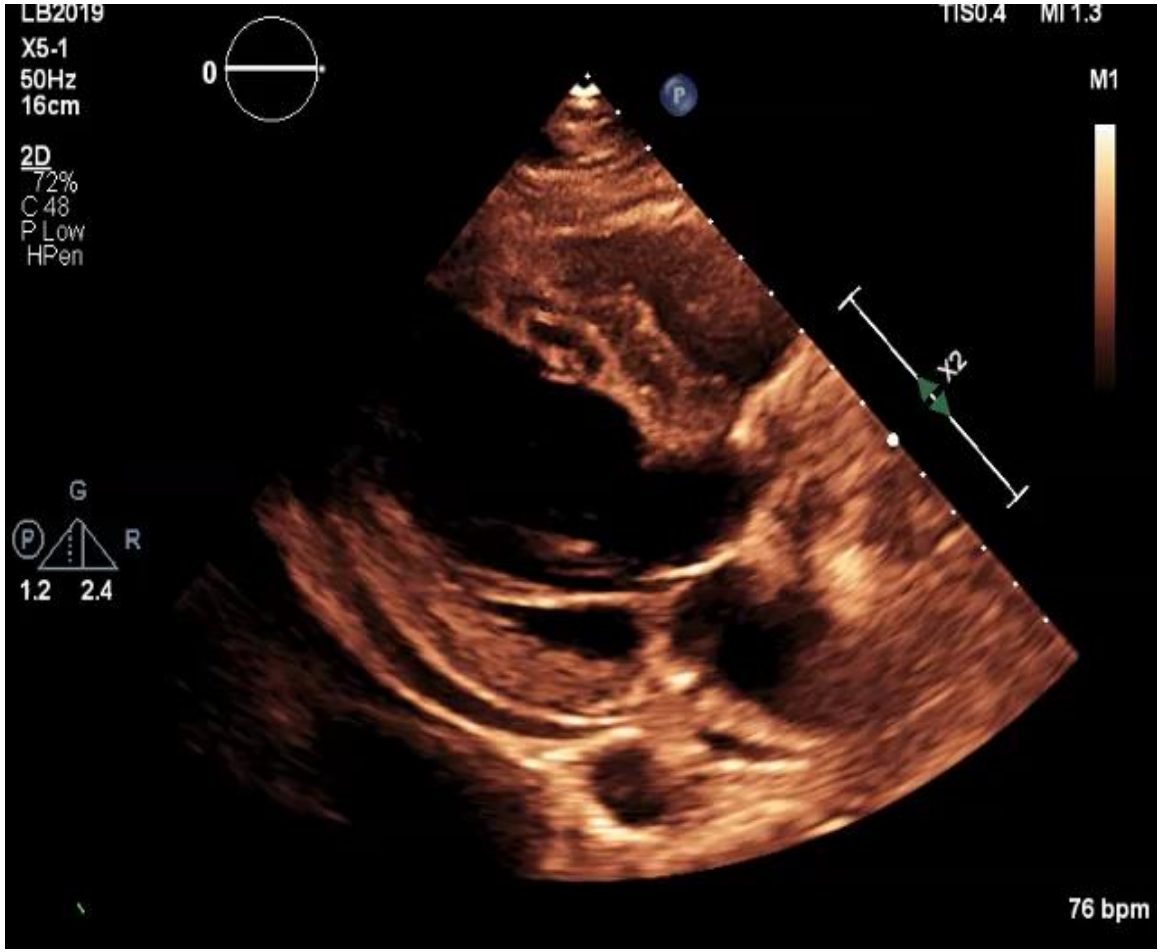
Baseline ECG one month ago

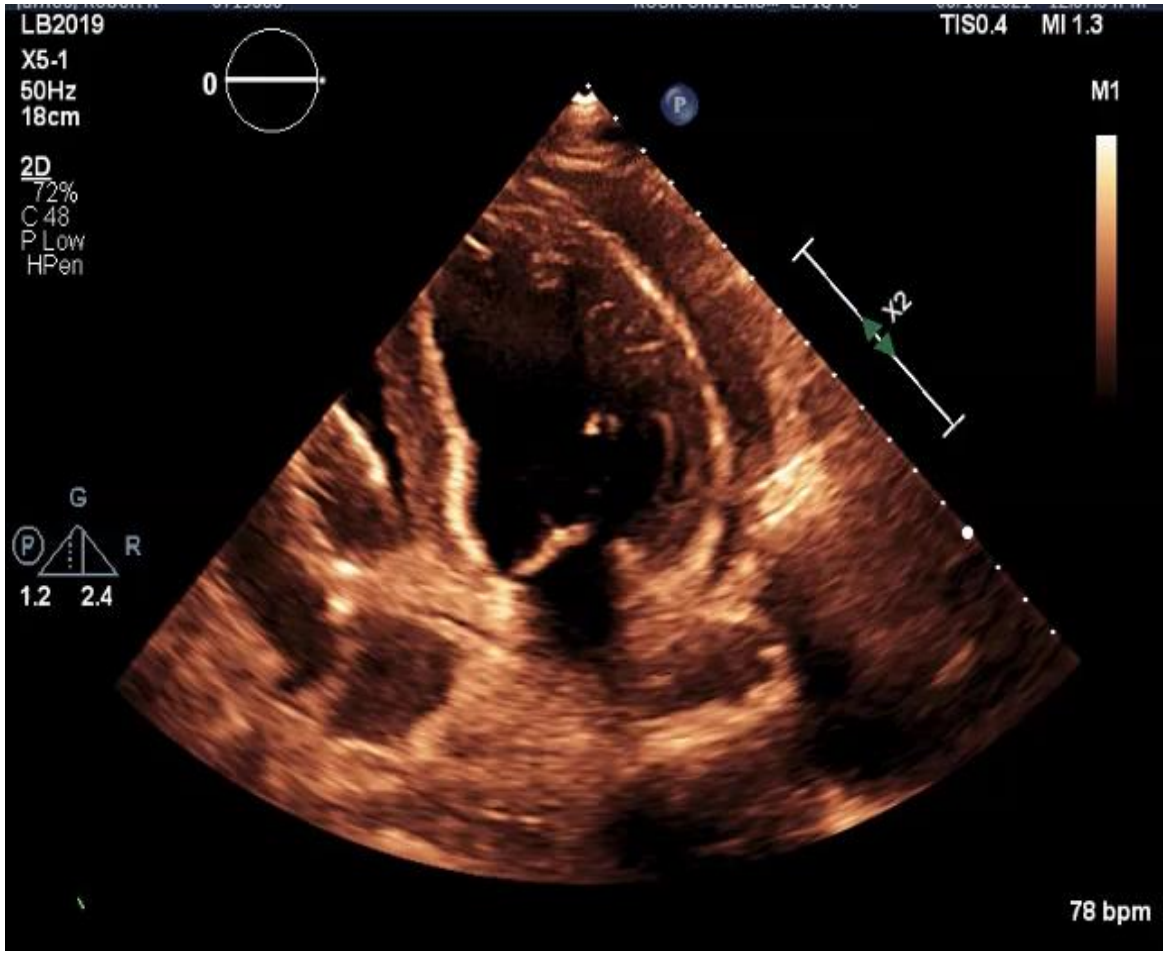


ECG in the Emergency Department was unchanged from baseline

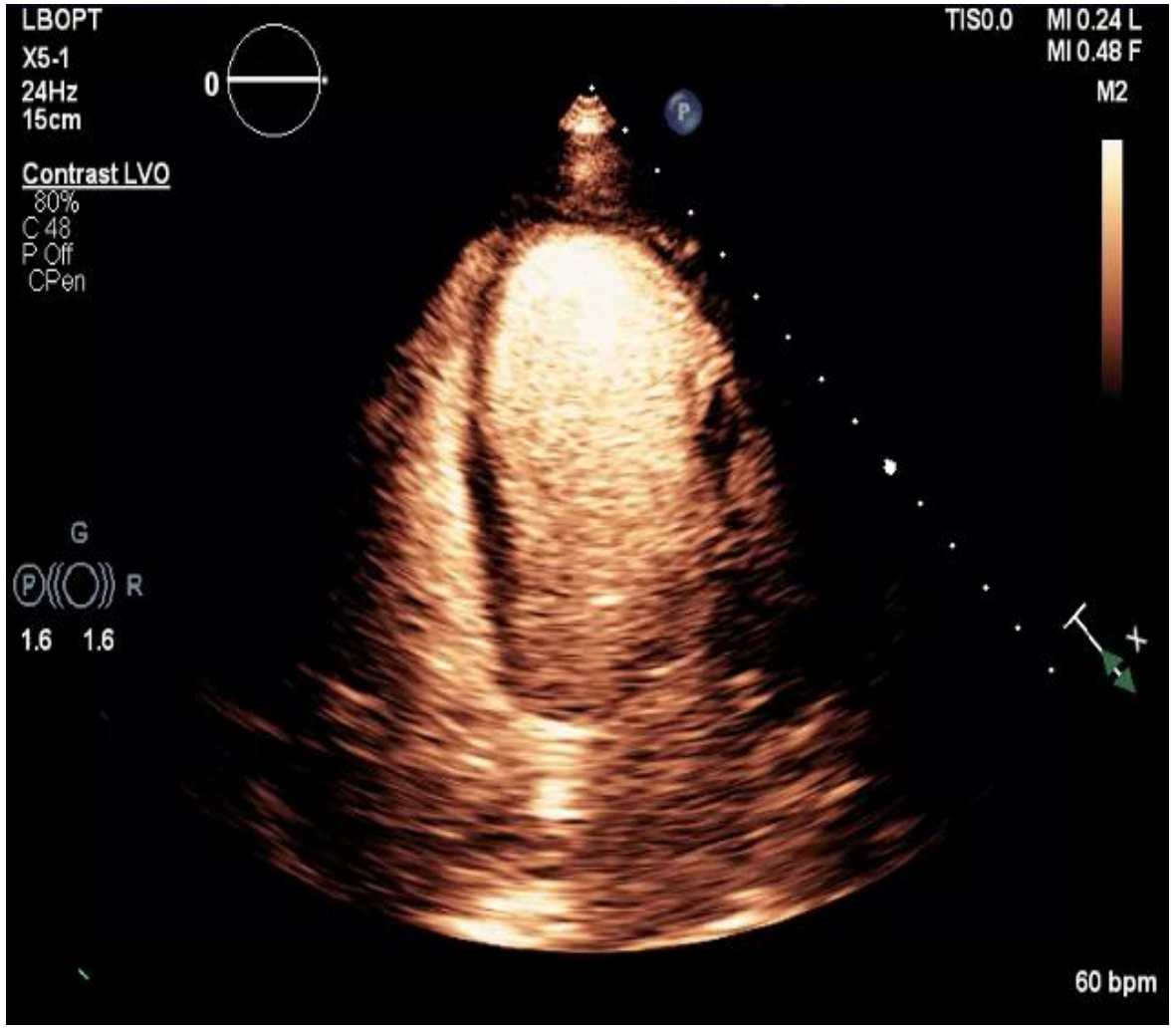


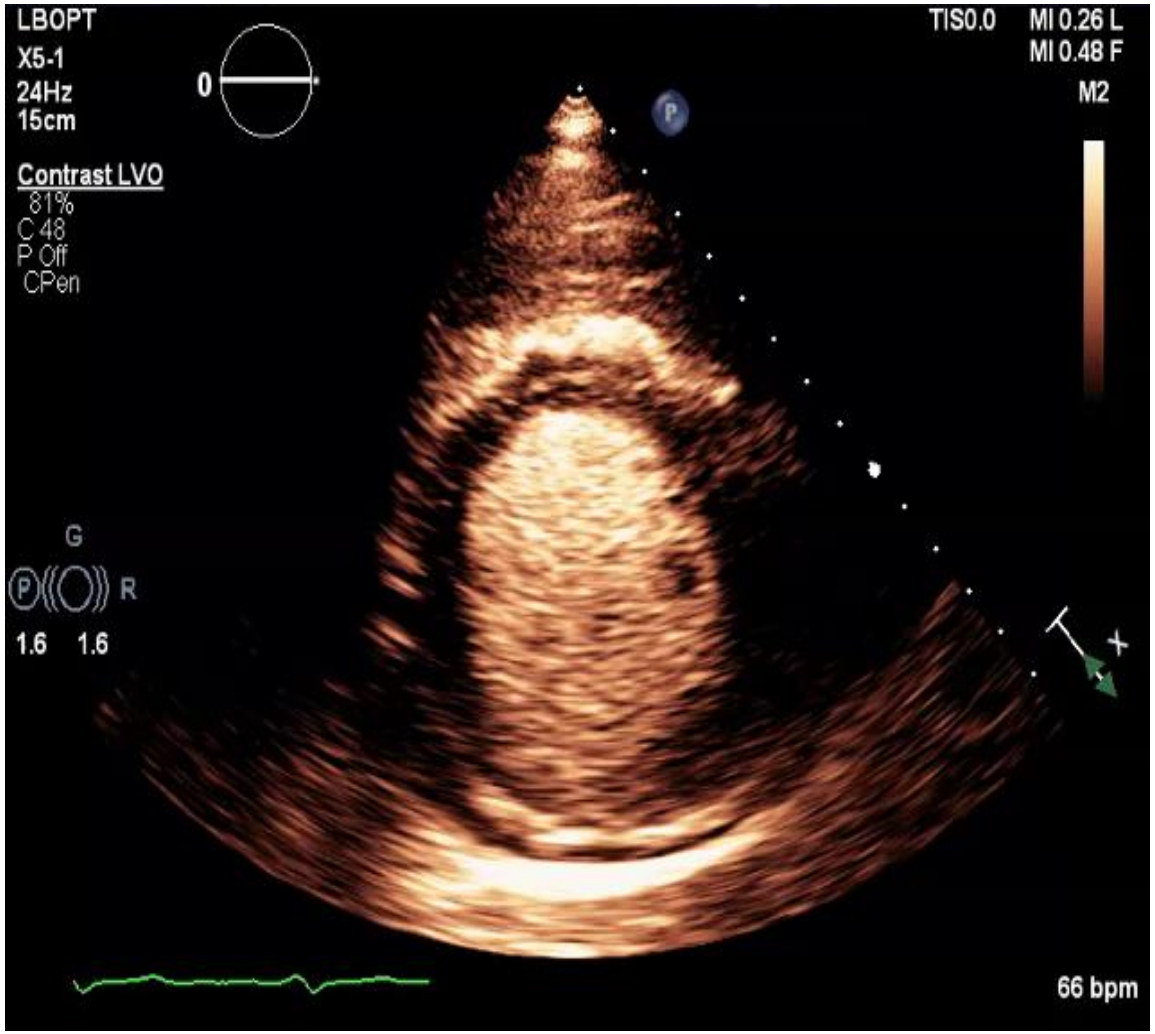
Echocardiogram





LV systolic function “30-35%”
Diffuse hypokinesis with regional variations


LBOPT
X5-1
24Hz
15cm
Contrast LVO
80%
C 48
P Off
CPen
TIS0.0
MI 0.24 L
MI 0.48 F
M2
G
R
1.6 1.6
60 bpm


LBOPT
X5-1
24Hz
15cm
Contrast LVO
81%
C 48
P Off
CPen
TIS0.0
MI 0.26 L
MI 0.48 F
M2
G
R
1.6 1.6
66 bpm

Interval history

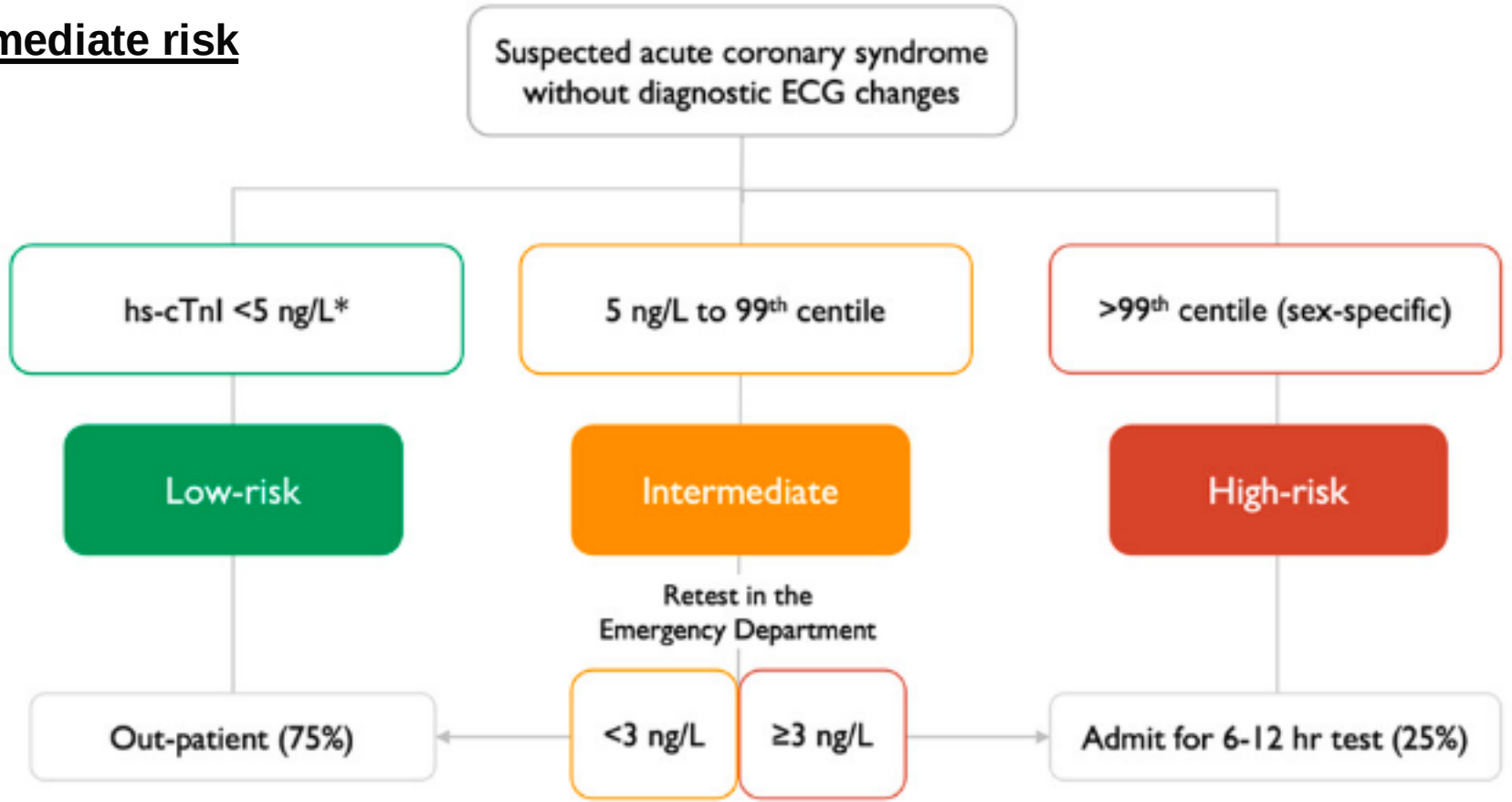
One week prior to presentation, patient was noted to have lower extremity edema in the clinic. He underwent an echocardiogram that showed newly reduced LV EF 30-35% with diffuse hypokinesis and regional variations.

Device interrogation: Total accumulative RV pacing is 100%. Plan was to upgrade his device to CRT-D in the near future.

What would you do next?

1. **Start heparin drip, repeat hs troponins in 2 hours, do serial ECGs**
2. **Activate Cath Lab**
3. **Low suspicion for ACS (admit to general medicine floor)**

Our patient was intermediate risk

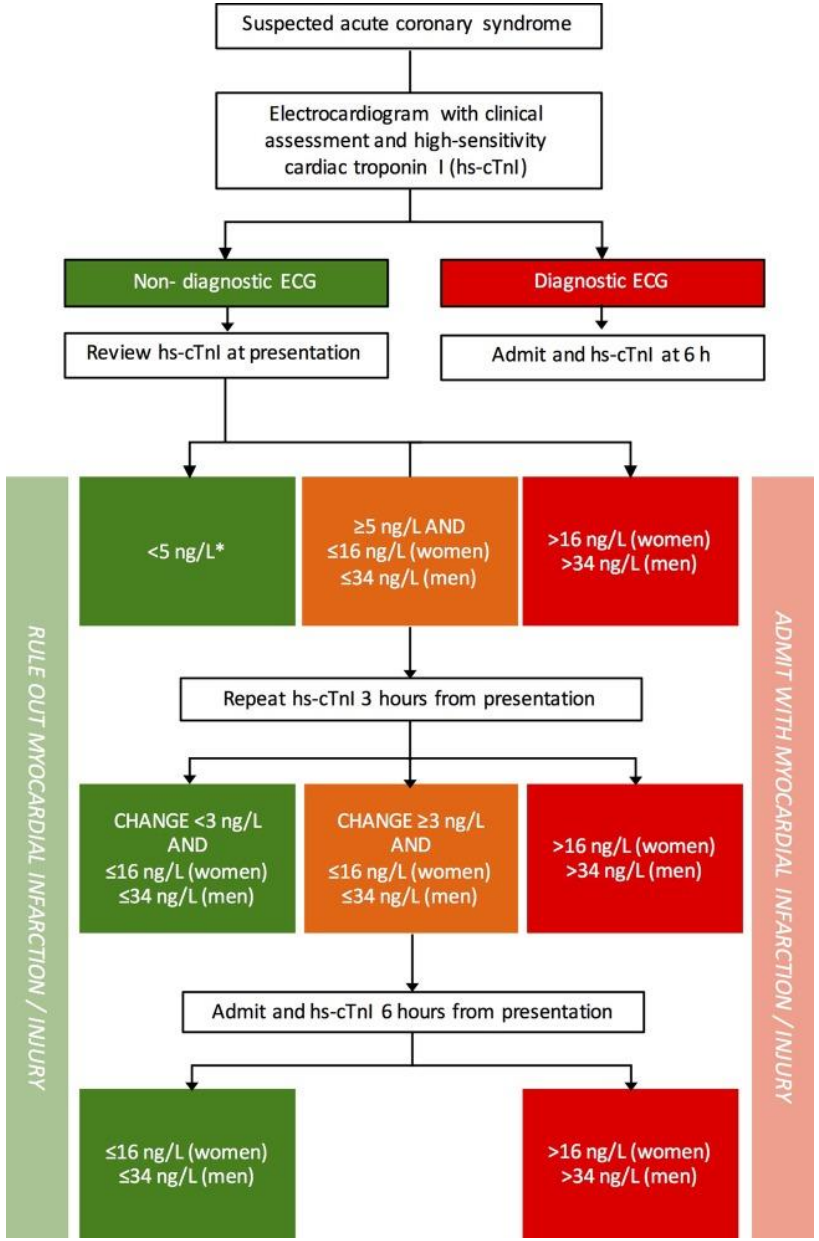


High-Sensitivity Cardiac Troponin on Presentation to Rule Out Myocardial Infarction: A Stepped-Wedge Cluster Randomized Controlled Trial . Circulation 2021

Cut offs:

>34 Males

> 16 Females

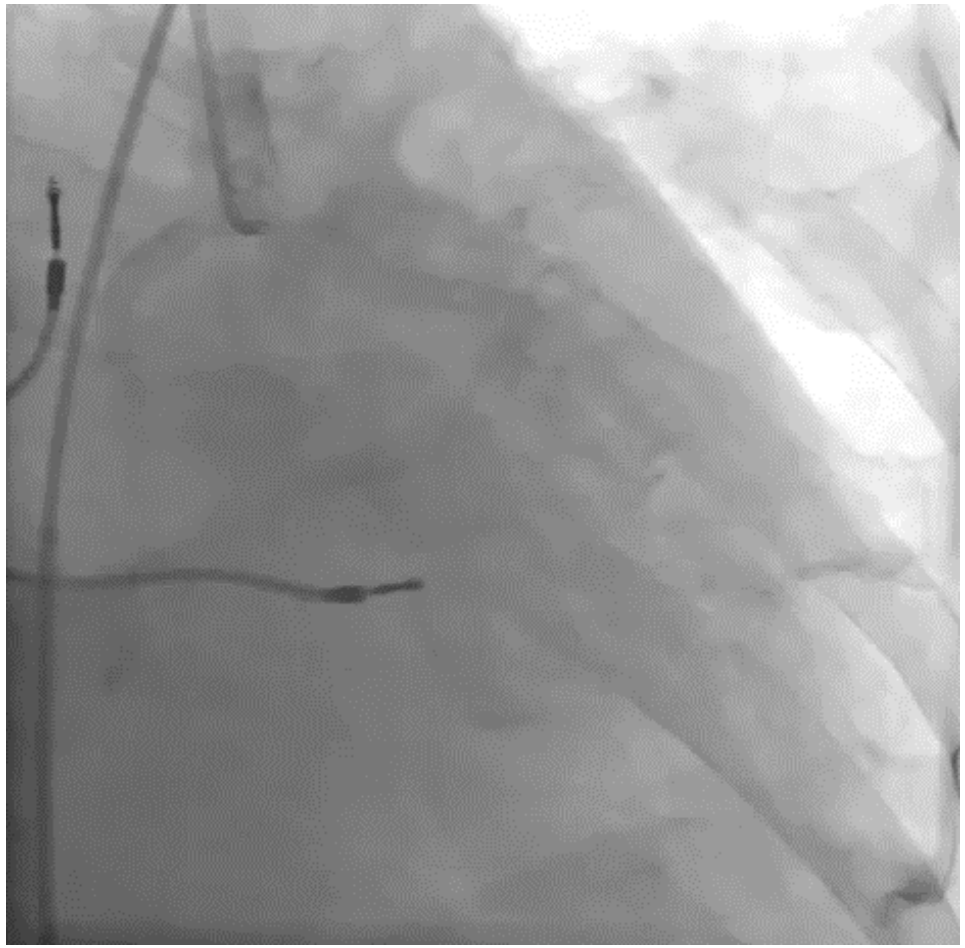


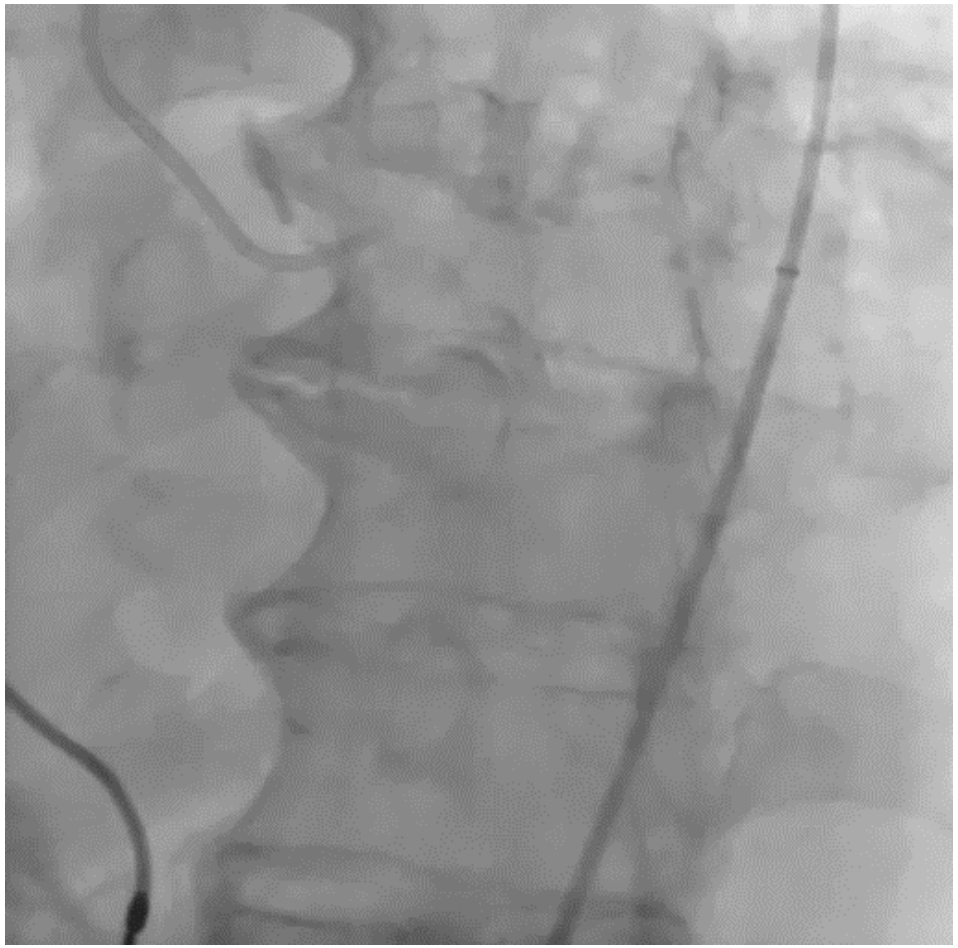
Comparison of the Efficacy and Safety of Early Rule-Out Pathways for Acute Myocardial Infarction Circulation 2017

- Initial high sensitivity troponin 33.7
- Repeat high sensitivity troponin 61
- Case discussed with interventional team
- Cath lab was activated due to high suspicion for ACS

Coronary angiogram

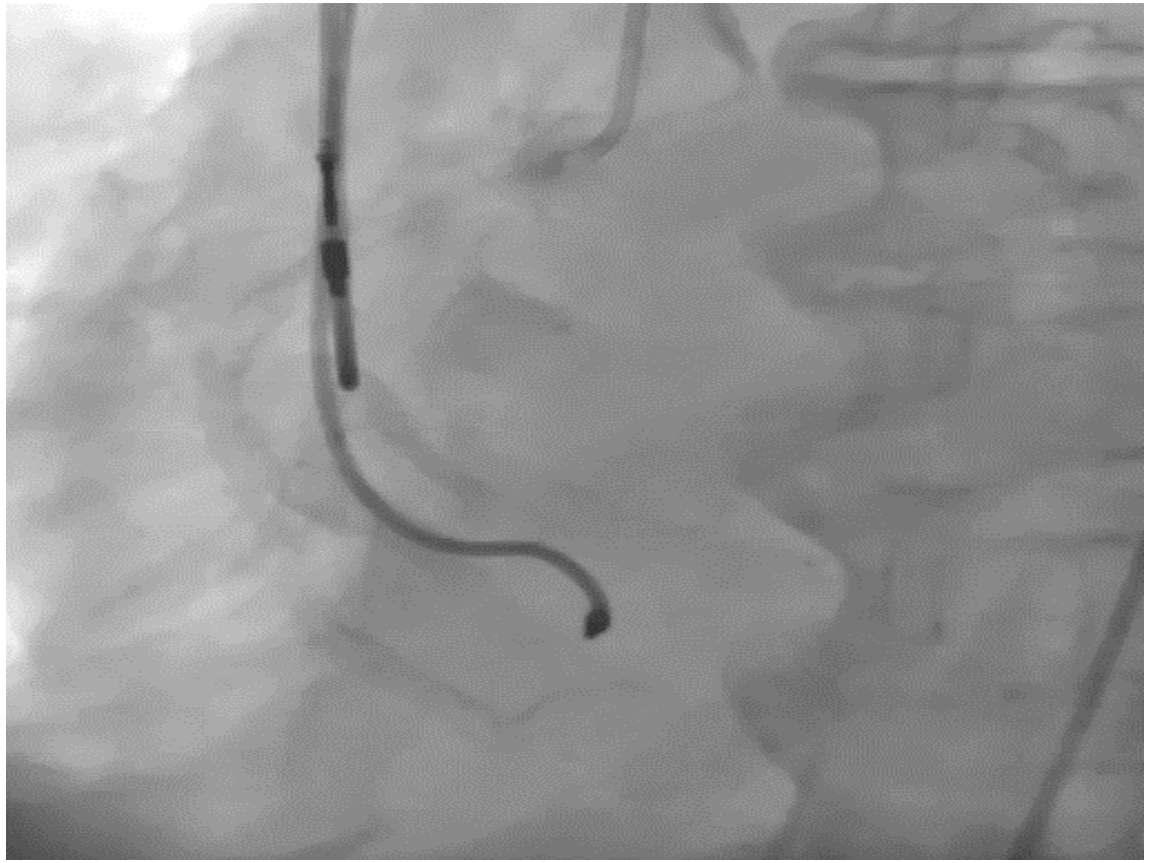
No significant disease in the LAD or LCX



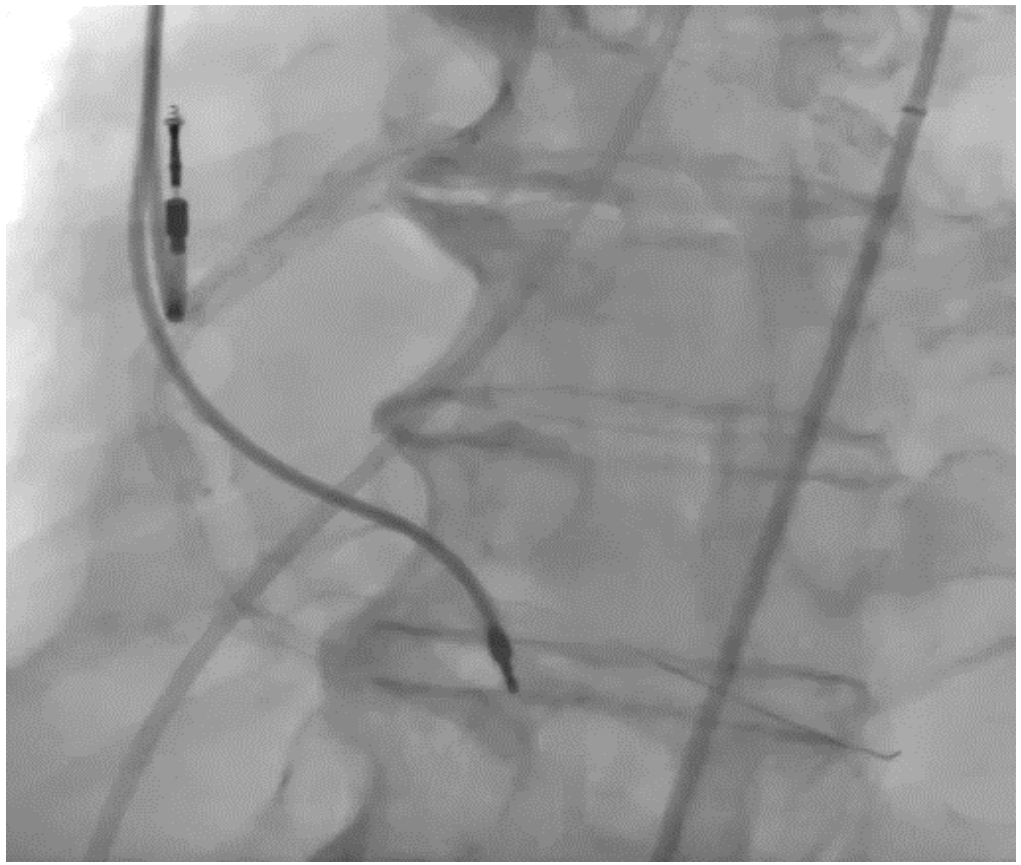


Proximal RCA: ISR and 99% thrombotic occlusion

Balloon angioplasty & Drug eluting stent



Final angiogram after PCI



Hospital course

- Patient was monitored in the CCU and had an uneventful course
- High sensitivity troponin: 33.7 → 61 → > 50,000 → 36,000
- Discharged home in stable condition post PCI day 2
- Medications on discharge: Aspirin, Ticagrelor, Atorvastatin, Metoprolol XL and Losartan.

Follow up

- Patient had no recurrent angina on follow up.

- A week later, he underwent pacemaker upgrade to CRT-D as outpatient as his cardiomyopathy was felt to be secondary to excessive RV pacing.

Thank you.