

ST(omach) Elevation MI: Gastric Volvulus as a Cause of Acute Injury Pattern

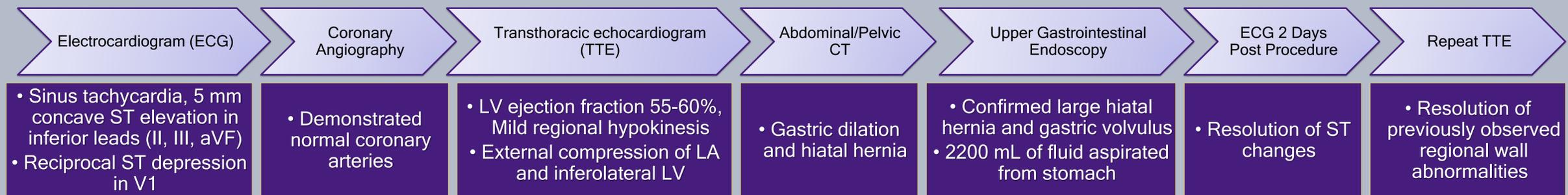
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Introduction

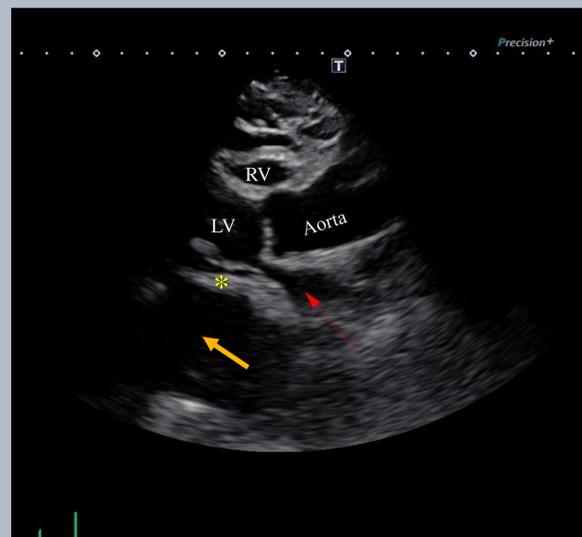
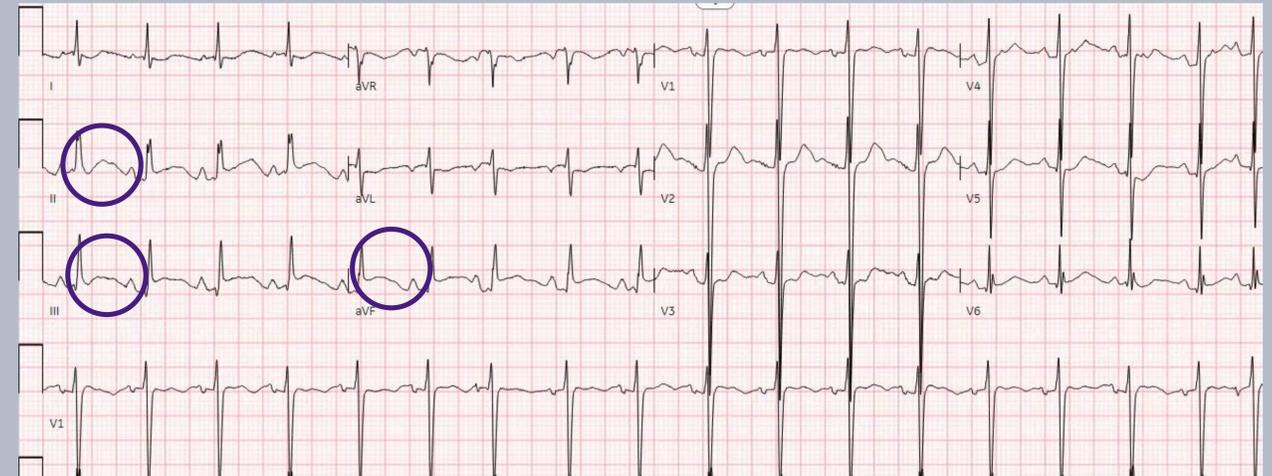
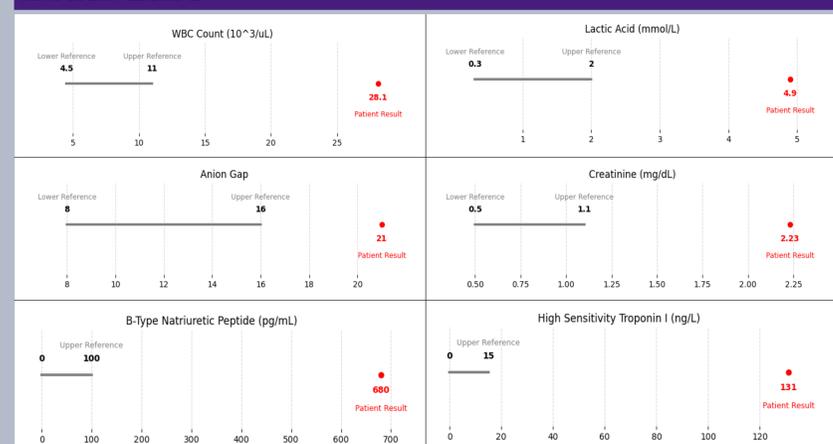
- An 83-year-old woman with hypertension, hyperlipidemia, and dementia presented to the emergency department with abdominal pain, altered mental status described as increased fatigue. Her medications upon presentation included amlodipine, anastrozole, aspirin, and rosuvastatin.

- Upon presentation, blood pressure was 138/93 mmHg, heart rate was 111 bpm, respiration rate was 18/minutes, and SpO2 was 93%. Her abdomen was distended and mildly tympanic upon percussion. Decreased breath sounds were noted bilaterally. Cardiac rhythm and rate were regular.

Clinical Course



Initial Labs



Transthoracic echocardiogram showing parasternal long axis view demonstrating compression of left atrium (red arrow) and inferolateral segment of left ventricle (*) by external structure (orange arrow), later determined to be related to hiatal hernia.



Sagittal view of thoracic CT showing stomach (*) protruding through hiatal hernia (orange arrow) into the thoracic cavity, adjacent to inferolateral segment of left ventricle (red arrow).

Discussion

ST elevation is concerning for acute coronary syndrome and total coronary artery occlusion, but upon exclusion of ACS, other etiologies should be considered.

- We have proposed the following etiologies for this patient's presentation:
 - Coronary compression syndrome
 - ECG localized the occurrence to the inferior myocardium
 - Hernia resulted in close proximity of the stomach and the inferior myocardium
 - Ciofani et al, Narala et al., and Rossington et al. have reported similar cases.
 - Pericarditis
 - Mild pericardial effusion indicates the possibility of her presentation resulting from pericarditis.
 - Vasospastic angina
 - Microvasculature spasm causes angina and ST-segment elevation.

Obtaining an in-depth history and a careful review of all diagnostic findings allow clinicians to maintain a broad differential

Keep an open mind when evaluating even common symptom presentations