ESOPHAGEAL PERFORATION MASQUERADING AS POSTERIOR MI: A DIAGNOSTIC CHALLENGE

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Background

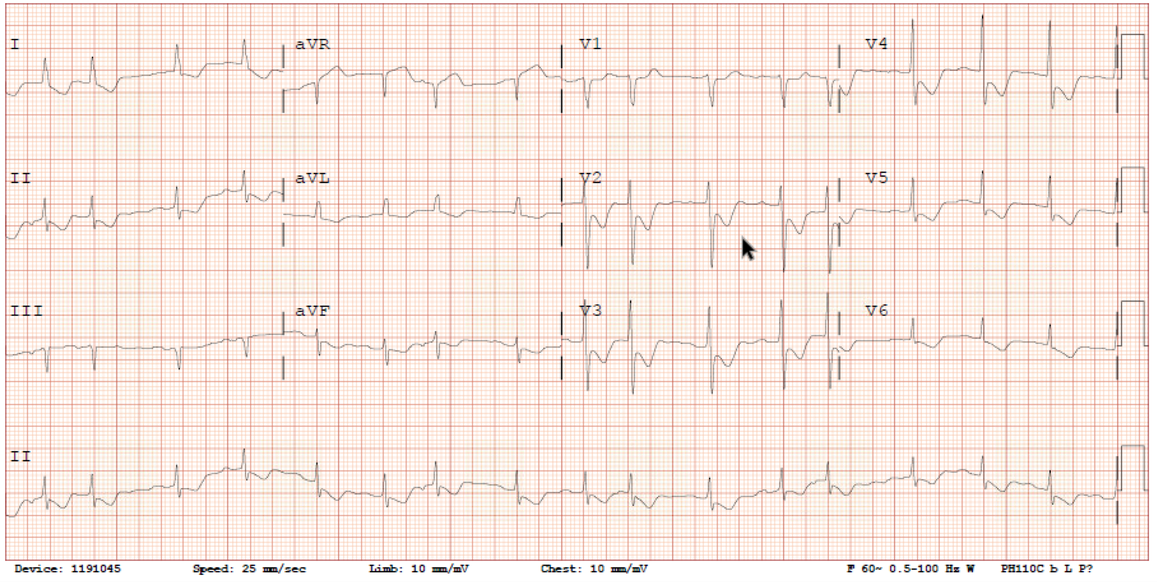
Esophageal perforation is a rare, life-threatening condition (~3/100,000 in the U.S.), with intrathoracic cases comprising 54% which can mimic acute myocardial infarction (MI), risking inappropriate treatment.

Case

A 76-year-old female with a significant cardiac history, including prior CABG, presented with acute chest Pain, epigastric pain and vomiting. A recent stress test showed a small, reversible inferior defect. Initial echocardiogram (ECG) showed non-specific T-wave changes, serial tracings revealed evolving ST depressions and tall R waves in V1-V3, suggestive of posterior MI.

Decision Making

Anticoagulation was started. Due to worsening pain, computed tomography angiogram (CTA) was done to rule out other causes which revealed extensive pneumomediastinum, suspicious for esophageal perforation, with no aortic pathology. Troponin were negative, acute coronary syndrome (ACS) was ruled out, anticoagulation was discontinued, and cardiothoracic surgery was consulted for repair. Patient's ECG changes were likely due to mediastinal inflammation and pericardial irritation. While initial ACS therapy was appropriate, but timely imaging clarified a non-cardiac cause and guided appropriate management.



Conclusion

Careful history and timely imaging are crucial in evaluation of chest pain. In patients with evolving ECG changes but negative biomarkers, non-cardiac, causes such as esophageal perforation, should be considered and ruled out.