ST-ELEVATION MYOCARDIAL INFARCTION IN A YOUNG FEMALE, PRESENTING WITH ELECTROCARDIOGRAM FEATURES SUGGESTING PERICARDITIS

Poster Contributions
Hall C
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Session Title: FIT Clinical Decision Making: Interventional Cardiology and Acute Coronary Syndrome
Abstract Category: Acute Coronary Syndromes
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Background: In the modern era of Acute Coronary Syndrome (ACS) therapy, minimal door to balloon time is essential for optimal treatment. In patients with an atypical presentation of ST-Elevation Myocardial Infarction (STEMI), one must strive for timely activation of the cath lab, while avoiding unnecessary procedures by ruling out alternative diagnoses.

Case: A 46 year old female, ten years removed from chemotherapy and radiation therapy for breast cancer, presents with 1 hour of substernal chest pressure. She is a non-smoker with no other significant past medical or family history. She had an upper respiratory tract infection for the past week, which was improving. The day prior to presentation she had chest pain which felt like indigestion that improved with ambulation. However, an hour before presentation to the emergency department (ED), she developed chest heaviness while walking, with discomfort radiating to both arms and her jaw, along with nausea and diaphoresis. In the ED, she was mildly hypertensive, with a heart rate in the 70s, and oxygenating well on room air. Electrocardiogram showed diffuse ST elevations with PR depressions, consistent with pericarditis. Physical exam was unremarkable without rub or murmur, and her chest discomfort was not positional. Bedside chest wall ultrasound in the ED did not show wall motion abnormalities. However, the patient remained uncomfortable with “crushing” chest pressure, and was diaphoretic and actively vomiting.

Clinical Decision Making: Medical therapy for ACS was initiated, and prior to obtaining an official echocardiogram or cardiac enzymes, the cath lab was activated. The patient was found to have a 100% occlusion of the mid-LAD which was successfully stented, as well a ventriculogram showing severe anterior and apical akinesis.

Conclusion: This case demonstrates the importance of bedside clinical evaluation of a patient’s symptoms when evaluating for STEMI, as objective data is not always straightforward. The morphology and degree of the ST elevations in the anterior leads were out of proportion to the remaining leads, and potentially more concerning for STEMI than pericarditis.