ACUTE ST-SEGMENT ELEVATED MYOCARDIAL INFARCTION SECONDARY TO DIFFUSE VASOSPASM INDUCED BY TRAUMATIC HEMOPERICARDIUM

Poster Contributions
Poster Hall B1
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Background: Diagnosis of ST-segment elevated myocardial infarction (STEMI) can be challenging when alternative causes of ST-segment elevation coexist. Patients with hemopericardium with acute pericarditis frequently exhibit ST-segment elevations on electrocardiogram (ECG). However, recognition of coronary ischemia in the setting of pericarditis is essential for timely coronary revascularization.

Case: 67 year old male underwent catheter ablation for refractory ventricular arrhythmia complicated by chest pain and traumatic hemopericardium without tamponade. On day two, he developed progressive chest pain and hemodynamic instability.

Decision Making: ECG demonstrated dynamic ST-segment elevations in the anterior leads. Bedside echocardiogram demonstrated acute severe left ventricular systolic dysfunction with anterior wall hypokinesis and tamponade. Given the concern for STEMI, an emergent coronary angiogram was obtained prior to pericardiocentesis which demonstrated profound multi-vessel vasospasm (Images A, B) that resolved with intracoronary nitroglycerin (Image C). Subsequent pericardiocentesis (Image D) resulted in resolution of tamponade and hypotension. Acute left ventricular wall motion returned to normal.

Conclusion: This case demonstrates the importance of rapid clinical recognition of STEMI due to hemopericardium-induced coronary vasospasm.