







A patient with a rare mechanical complication of myocardial infarction - ischemic ventricular septal defect: a case report

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Introduction: Mechanical complications of myocardial infarction are very rare due to reperfusion therapy¹. Postischemic ventricular septal defect (VSD) is the most common mechanical complication occurring in less than 1% of patients, primarily in those with ST-elevation myocardial infarction (STEMI)². This is an emergency condition with high mortality, which requires urgent cardiac surgery³.

Case report: We present 63-year-old female patient, smoker with obesity who at the Emergency Department with non-specific symptoms such as vomiting, diarrhea and upper abdominal pain which radiates to the back. Later it was revealed that she had chest pain and dyspnea during physical activities for the past 15 days. Clinical examination showed systolic precordial murmur (III/VI) with symptoms of heart failure with tachypnea (26/min). Electrocardiographic findings were subacute myocardial infarction with ST elevation in the anteroseptal region. Laboratory tests confirmed elevated cardiac-specific enzymes with a downward trend after one hour. Also liver lesion was found. Chest X-ray showed acute congestion changes and right pleural effusion. Urgent echocardiography showed normal sized of concentric hypertrophic left ventricle with hypokinesis of middle segment of anteroseptal wall and akinesia of apex. In distal segment of interventricular septum was found VSD (9 mm in diameter) with left to right shunt. Ejection fraction was estimated 40-45% without significant valvular disease with high probability of pulmonary hypertension. Patient was immediately transported to clinical institution with cardiac surgery capacity. VSD was repaired using pericardial patch. Patient recovered.

Conclusion: This case shows the importance of clinical examination and electrocardiographic with patients with non-specific symptoms. Mechanical complications of myocardial infarction are rare and unexpected particularly in patients who presents with non-specific symptoms. However, echocardiography, essential method for diagnosing mechanical complications, showed life threatening state of the patient.

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