left ventricular apex rupture in STEMI

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Abstract

Mechanical complications of myocardial infarction are rare. However, the consequences are catastrophic if missed; here, we present a case highlighting the red flags that can guide the diagnosis of mechanical complications of MI.

Title : left ventricular apex rupture in STEMI

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A 56-year-old male with a past medical history of diabetes presented with chest pain of 23-hour duration. His BP was 150/80, pulse 120, SO2 89%. His examination was remarkable for congested neck veins but no murmurs. Chest auscultation showed bubbling crepitation.

EKG revealed anterior STEMI. Because of acute severe heart failure, we performed a bedside echocardiogram. It showed ejection fraction(EF) of 20%, perforated LV apex with apical pseudoaneurysm. There was effusion around the right ventricle (RV) with tamponade. Emergency coronary angiography revealed total proximal left anterior descending(LAD) artery occlusion. Emergency cardiac surgery was performed to reconstruct the LV apex and revascularize the LAD by venous graft. The rest of the hospital course stay was uneventful.

The critical clinical message is to know that Mechanical complications are rare. A high index of suspicion facilitates diagnosis. The presence of acute heart failure should ring an alarm. Other red flags are cardiogenic shock, new murmur, or evidence of hypoperfusion.

Ethical statement

Patient verbal consent had been obtained to use the video material

Figure legend

The video shows a transthoracic echocardiogram, apical four-chamber view showing EF of 20%, perforated LV apex with apical pseudoaneurysm. There is effusion mainly around the right ventricle with tamponade in the form of RV diastolic collapse.

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`output(crop-video.com).mp4` available at https://authorea.com/users/387272/articles/515640-left-ventricular-apex-rupture-in-stemi