

IMAGES IN EMERGENCY MEDICINE**Cardiovascular**

Woman with epigastric pain

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1 | PATIENT PRESENTATION

A 68-year-old woman presented to the emergency department with epigastric pain and nausea for half a day. Because the patient displayed signs of peritoneal irritation with stable hemodynamic status (blood pressure, 134/51 mm Hg; pulse rate, 62 bpm) at initial examination, an acute abdomen was suspected and contrast-enhanced computed tomography (CECT) scanning was undertaken. The patient's clinical condition soon deteriorated. She went into cardiopulmonary arrest and could not be resuscitated despite immediate cardiopulmonary resuscitation efforts. CECT images revealed intramyocardial extravasation (Figure 1). Retrospective examination of electrocardiographic strip revealed ST elevation. Postmortem imaging revealed a pericardial effusion.

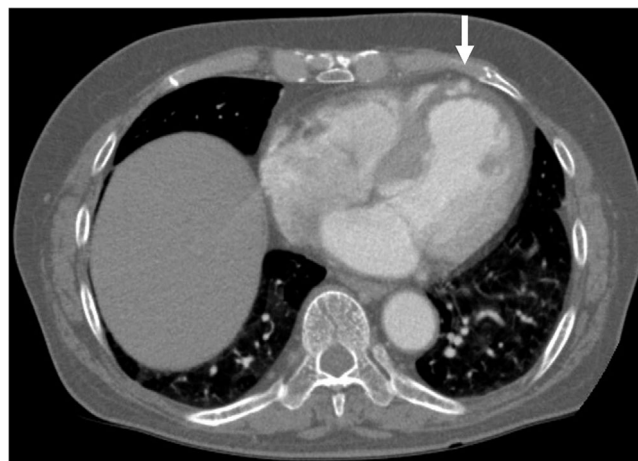


FIGURE 1 Contrast-enhanced computed tomographic scanning showed an intramyocardial extravasation (arrow)

2 | DIAGNOSIS

2.1 | Left ventricular free wall rupture

Left ventricular free wall rupture (LVFWR) is observed in 2% to 4% of patients with acute myocardial infarction (AMI), and 40% to 50% of these cases occur within 48 hours following the onset of AMI.¹ In our patient, persistent symptoms and delayed hospital presentation resulted in a LVFWR.¹ When the CECT unexpectedly indicated signs of LVFWR, myocardial unloading through the administration of vasodilators or beta-blockers should have been immediately under-

taken under strict monitoring.¹ After the hemodynamic status became compromised, the patient should have undergone an echocardiogram and cardiocentesis should have been performed, if cardiac tamponade was confirmed.¹ In refractory cardiac arrest, an emergent thoracotomy should be undertaken or an extracorporeal circuit should be established to facilitate definitive surgical repair.² Epigastric pain is a crucial symptom in patients with AMI and can induce sudden deterioration of the clinical condition in an emergency.

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