An 80-year-old woman with hypertension and a double aortocoronary bypass 20 years previously was hospitalized with a diagnosis of subacute infarction. At 24 hours after hospitalization, she experienced an onset of heart failure symptoms. Transthoracic color Doppler echocardiography in apical four-chamber view showed features of a neocavity in the laterobasal region (delimited by arrows), with end-diastolic flow in the interior, a communication with the cardiac chamber, and no evidence of pericardial effusion (Figure 1. LA, left atrium; LV, left ventricle; MV, mitral valve). Multidetector chest computed tomography with electrocardiogram gating was performed, with contrast enhancement in the arterial phase. The study showed a collection communicating with the ventricular chamber, with extravasated contrast in the interior and an ascending course lateral to the left atrium, consistent with myocardial rupture in the laterobasal region (Figures 2 and 3). A decision was made to perform percutaneous closure of the ventricular wall defect by placement of an Amplatzer device, which failed. The procedure was converted to open surgery, which revealed pericardial adhesions and an intramyocardial cavity that did not communicate with the pericardium. Plication of the left ventricular border and tip was performed. Unfortunately, the patient experienced multiorgan failure in the postoperative period and died 72 hours later. Intramyocardial dissection is an uncommon condition that usually occurs in inferoposterior infarctions. Echocardiography and computed tomography are the imaging modalities used for the diagnosis. It is difficult to evaluate the prognosis of these cases or the appropriate management, which should be individualized according to the clinical situation and the experience of the surgical or interventional teams.