Intramyocardial dissecting haematoma of the left ventricle apex after an anterior myocardial infarction

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We report the case of a 75-year-old man admitted to the intensive care unit with a cardiogenic shock. He had a history of anterior ST elevation myocardial infarction, 2 weeks ago, which was successfully treated with fibrinolysis 45 min after the first symptoms. Upon admission, the ECG showed an atrial fibrillation and a large anterior Q-wave without ST-segment modification. Transthoracic echocardiography showed left ventricular dysfunction with a left ventricle ejection fraction of 20%, extensive akinesia the anterior, antero-septal and inferior-septal walls with a lesion in the apex of the left ventricle characterized by a regular mobile hyperechoic edge and heterogeneous content with circular echo-free spaces within intermediate echodensity sludge (Panel A and see Supplementary material online, Movie S1). Neither colour Doppler nor contrast-enhanced ultrasonography using sulfur hexafluoride microbubbles showed any circulating flow within the lesion (Panel B and see Supplementary material online, Movie S2). An intramyocardial dissecting haematoma was confirmed by gadolinium-enhanced magnetic resonance imaging, which showed an apical lesion of the left ventricle with liquid intensity separated from the left ventricular cavity by a flaccid edge (Panel C and see Supplementary material online, Movie S3). T2-weighted images documented a hyper-intense lesion compatible with liquid content. Late imaging showed an enhancement of the whole lesion contrasting with the healthy myocardium (Panel D) and confirmed the blood content of the lesion. Unfortunately, the patient presented with refractory cardiogenic shock and died the next day despite intensive reanimation care.

Supplementary material is available at European Heart Journal online.