

Image in medicine

## Left ventricular pseudoaneurysm as a complication of myocardial infarction



Pseudoaneurisma del ventrículo izquierdo como complicación de infarto de miocardio

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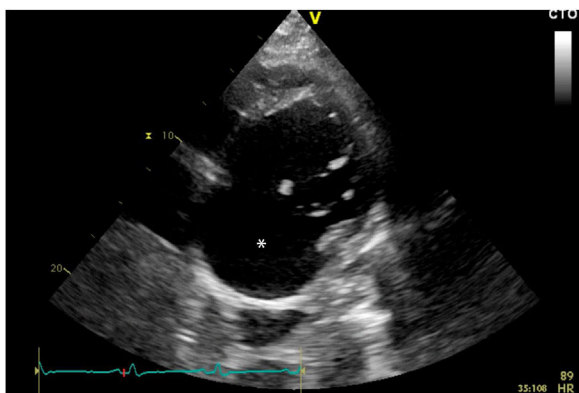


Fig. 1.

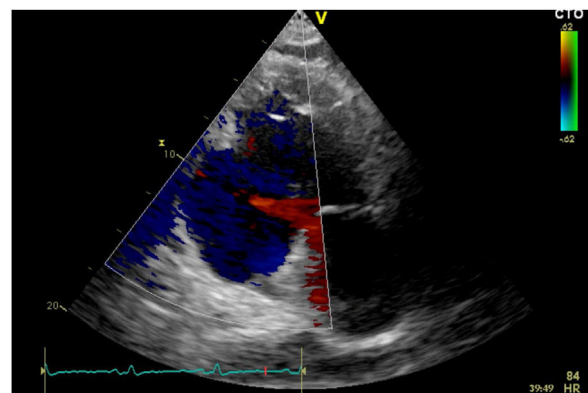


Fig. 2.

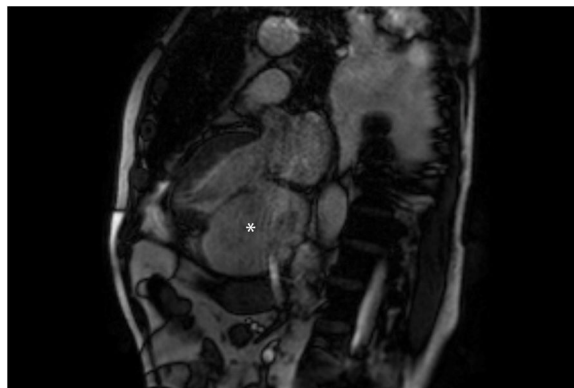


Fig. 3.

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A 60-year-old man with no known relevant medical history was admitted to the Emergency Department for fatigue and dyspnea with one month of evolution. ECG revealed inverted T waves in DII, DIII, aVF, V5 and V6 and pathologic Q waves in DII, DIII and aVF. Laboratory tests showed a NT-pro BNP of 2897 pg/mL. Heart failure was diagnosed with a probable ischemic etiology (old inferior myocardial infarction) and the patient was admitted to the cardiology ward. The transthoracic echocardiography revealed a severe depression of ejection fraction, a severe mitral regurgitation and a sacculiform image at the level of the infero-posterior wall of the left ventricle, with expansion in systole and an apparent loss of wall thickness, suggesting pseudoaneurysm (Figs. 1 and 2, Video 1). Cardiac MRI confirmed that it was a pseudoaneurysm of the infero-posterior wall of the left ventricle (Fig. 3, Video 2).

Left ventricular pseudoaneurysm is a rare mechanical complication of myocardial infarction resulting from myocardial rupture contained by the adjacent pericardium and is associated with high mortality.<sup>1</sup> In the present case, the patient had a pseudoaneurysm with an indefinite evolution time, was submitted to cardiac surgery to exclude the pseudoaneurysm and mitral valve replacement and presented a good clinical evolution, having slight limitation of physical activity (class II of the New York Heart Association Functional Classification).

#### Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at [doi:10.1016/j.mcpsp.2021.100245](https://doi.org/10.1016/j.mcpsp.2021.100245).

#### Reference

1. Frances C, Romero A, Grady D. Left ventricular pseudoaneurysm. *J Am Coll Cardiol* 1998;**32**:557–61, [http://dx.doi.org/10.1016/s0735-1097\(98\)00290-3](http://dx.doi.org/10.1016/s0735-1097(98)00290-3).