As previously described, bleeding into the pericardium after a blunt chest trauma can initiate a process of inflammation, calcification and scarring that can eventually result in constrictive pericarditis.

We present the case of a 36-year-old man who was referred to our hospital from another institution for cardiac MRI study with echocardiographic suspicion of constrictive pericarditis.

He had suffered a blunt chest trauma several months before while working. At that time, echocardiographic analysis revealed a moderate pericardial effusion which was treated with anti-inflammatory drugs. His clinical evolution was good but echocardiographic study revealed signs of constriction. Cardiac MRI was performed 11 months after the chest trauma and revealed an intrapericardial diaphragmatic mass which was compatible with an organized pericardial hematoma (Figure 1, panels A and B, arrows) with no signs of pericardial constriction. As the patient was asymptomatic, it was decided to perform periodic follow-up only.

Control cardiac MRI 18 months later (Figure 1, panels C and D) revealed considerable improvement, with complete resolution of the hematoma and with slight pericardial thickening as a residual lesion.
Figure 1  Panels A and B: short- and long-axis views, T1: double IR with contrast sequence; panels C and D: short- and long-axis views, T1: double IR with contrast sequence.

This is a case of transient pericardial hematoma after blunt chest trauma with satisfactory resolution. Cardiac MRI is a good technique for diagnosis and follow-up of this uncommon entity.

Conflicts of interest

The authors have no conflicts of interest to declare.