

Coronary compression by supposed cardiac hydatid cyst: an unusual cardiac mass

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A 55-year-old female patient with a history of hepatic hydatid cyst presented with chronic stable angina. Echocardiography showed a cardiac mass. Her technetium-99m stress test was positive, so it was decided to perform coronary angiography (CAG). Coronary angiography performed on the next day revealed a chronic total

occlusion of the proximal left anterior descending artery (LAD) with retrograde filling via collaterals from the right coronary artery (Figure 1 A). Cardiac magnetic resonance imaging (MRI) and multislice computed tomography (CT) angiography confirmed a myocardial hydatid cyst which involved the anterobasal wall of the left ventricle

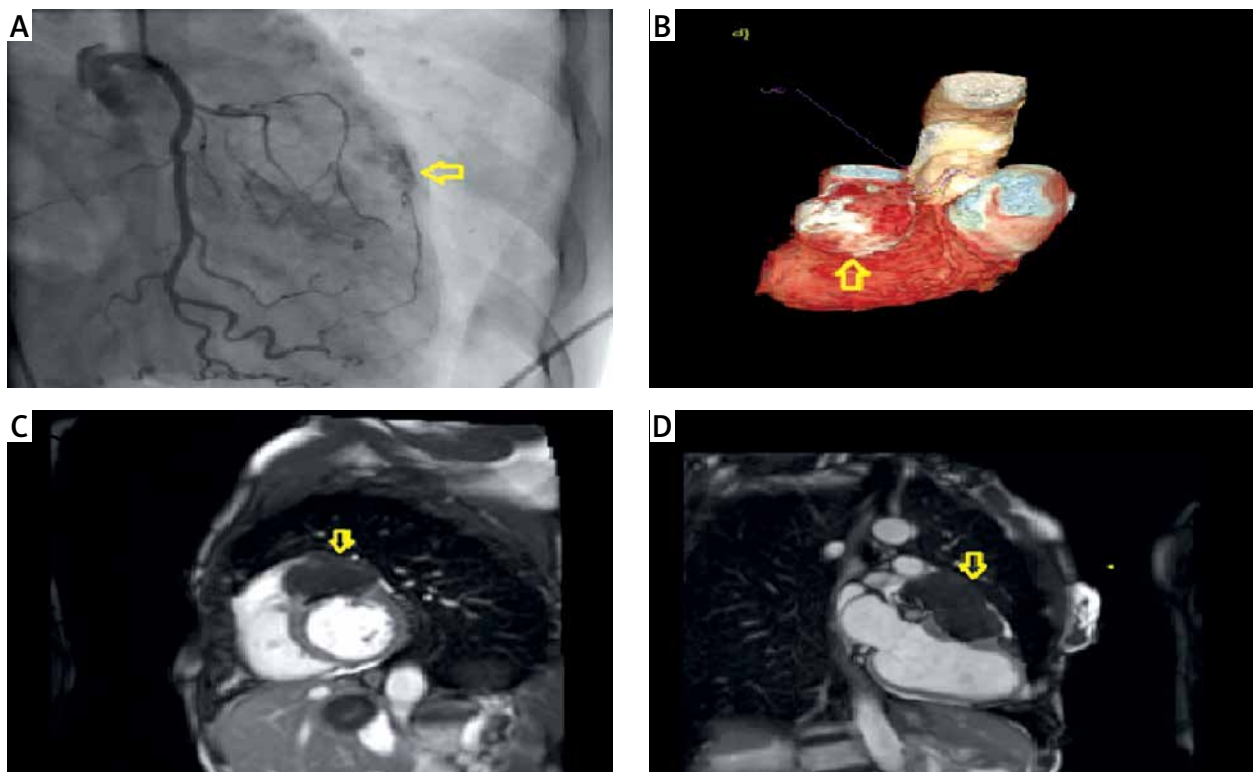


Figure 1. A – Left coronary angiography (right anterior oblique caudal view) demonstrating chronic total occlusion of the left anterior descending artery (LAD) and a mass next to the LAD (arrow). B – 3D computed tomography image showing the hydatid cyst (arrow). C, D – Magnetic resonance images of the hydatid cyst (arrows) in short axis

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and compressed the proximal LAD (Figures 1 B–D). An enzyme-linked immunosorbent assay (ELISA) was performed to confirm the diagnosis and it was positive for *Echinococcus* antibodies. The patient was offered surgery but she refused it. We initiated albendazole 800 mg/day and also metoprolol 100 mg/day and trimetazidine 60 mg/day to reduce ischemia and symptoms. At the 3-month follow-up visit, she was almost asymptomatic. However, her follow-up cardiac MRI showed no reduction of the cyst size.

Hydatid disease (cystic echinococcosis) is a rare parasitic infestation caused by the metacestode stage of *Echinococcus granulosus* that usually involves the liver and lungs [1]. Cardiac involvement is very rare (0.5–2%). Although most patients with a cardiac hydatid cyst are asymptomatic, large myocardial hydatid cysts may compress the surrounding heart muscle and cause myocardial ischemia [2]. Echocardiography, CT and cardiac MRI are sensitive for diagnosis of cardiac hydatid cyst. Surgical excision is the preferred treatment [3, 4].

In conclusion, cardiac hydatid disease, although very rare, should be considered in the differential diagnosis of chest pain and myocardial ischemia, particularly in patients with a prior history of cystic echinococcosis.

Conflict of interest

The authors declare no conflict of interest.

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