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## Diagnosis, treatment, and long-term follow up of a patient with a hydatid cyst of the left ventricle

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An 18 year old woman was admitted with fever and atypical chest pain. A hydatid cyst had been removed from her liver 13 years before. A 2/6 systolic heart murmur was audible in the mitral valve area. The electrocardiogram showed deep negative T waves in leads I, II, III, aVF, and V3-V6. A chest x ray showed a calcified cyst adjacent to the left ventricle. The echocardiogram showed a spherical calcified cyst (4 cm) containing multiple intracystic trabeculations (fig 1). It was attached to the free wall of the left ventricle near the apex and occupied three quarters of the chamber. Computed tomography and magnetic resonance imaging confirmed the diagnosis of hydatid cyst and showed a second cyst in the liver (fig 2). The intact intracardiac cyst was surgically removed and the patient made an uneventful recovery. The postoperative echocardiogram was normal and the electrocardiogram returned gradually to normal over the next two years.

Interesting aspects of this case are the unusual site,<sup>1</sup> young age of the patient, and the successful removal of the intact cyst. The most dangerous complication of cardiac hydatid cysts is early rupture, which can induce embolism or lifethreatening anaphy-

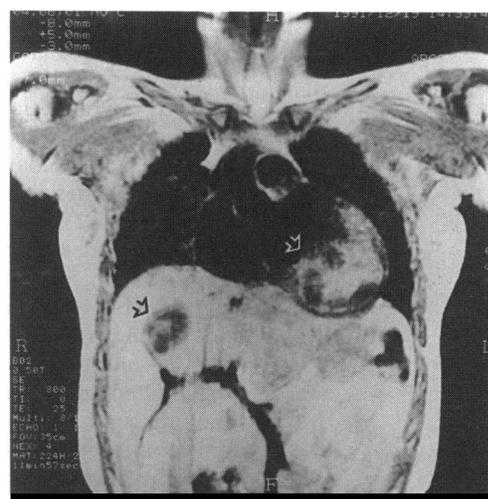


Figure 2 Magnetic resonance imaging of thorax and abdomen showing two hydatid cysts, one in the left ventricle and another in the liver (arrows).

lactic shock.<sup>2</sup> Echocardiography is the most reliable diagnostic method,<sup>3</sup> but computed tomography and magnetic resonance imaging can also show cysts elsewhere in the body.<sup>4</sup> We would like to emphasise the importance of the negative T waves in the electrocardiogram that led to further investigation and diagnosis.

We believe that all patients with echinococcosis should have echocardiography to exclude cardiac involvement and to prevent subsequent lifethreatening complications.

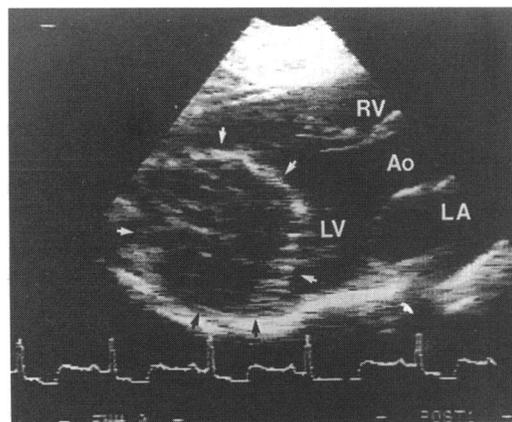


Figure 1 Cross sectional echocardiogram showing a hydatid cyst in the left ventricle. It contained daughter cysts, arose from the free wall of the ventricle, and occupied three quarters of its chamber.

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