Recurrent multiple cardiac hydatidosis

Kenan Iltumur*, Aziz Karabulut, Nizamettin Toprak

Dicle University, Faculty of Medicine, Department of Cardiology, 21280 Diyarbakır, Turkey

Received 29 April 2004; received in revised form 18 October 2004; accepted 25 October 2004
Available online 21 January 2005

Abstract Cardiac hydatid cyst is an uncommon disease. We report on a woman admitted to our clinic with chest pain and palpitations. The ECG showed anterior ischemia, and coronary anatomy was normal. The diagnosis was: multiple cardiac hydatid cysts, for which she had undergone surgery 4 years earlier for a 5×5 cm hydatid cyst and treated with albendazole. Despite this, there was a recurrence of multiple cysts. Recurrence of intracavitary hydatid cyst is rare, and surgical treatment of multiple, small cysts remains controversial.

© 2004 The European Society of Cardiology. Published by Elsevier Ltd. All rights reserved.

Case report

A 40-year-old woman was admitted to our clinic with chest pain and palpitations. She had undergone surgical resection 4 years earlier of an interventricular septal hydatid cyst. On physical examination, no cardiac signs were noted. Chest X-ray was normal, and the electrocardiogram (ECG) showed an intraventricular conduction abnormality and ST depression with negative T waves in leads 1, aVL and V1–V6, suggestive of anterior myocardial ischemia (Fig. 1). These findings were also present 4 years ago. Coronary angiography showed normal coronary anatomy. Serologic tests for hydatidosis were negative.

Two-dimensional echocardiography revealed four cardiac cystic masses. Two cysts were located in the interventricular septum, one of which (1.5 × 1.3 cm) was in the left midventricular part of the muscular septum, protruding into the left ventricle (LV). The other (1 × 0.8 cm) was located in the basal interventricular septum. The third cyst dimension 1.3 × 1 cm was noted in the LV apex and the fourth (1.1 × 1 cm) in the right ventricular apex (Fig. 2). The finding was confirmed by transesophageal echocardiography (TEE) (Fig. 2). We did not detect any other visceral localisation.

* Corresponding author. Tel.: +90 412 2488001 x4952; fax: +90 412 2488264.
E-mail address: kencan@dicle.edu.tr (K. Iltumur).

1525-2167/$30 © 2004 The European Society of Cardiology. Published by Elsevier Ltd. All rights reserved.
Hydatid cyst (HC) is a parasitic disease caused by the larval stages of *Echinococcus granulosus*, and the most common sites of involvement are liver and lungs.\(^1\,^2\) Cardiac echinococcosis is rare, involving 0.5–2% of all cases.\(^1\,^3\) Recurrence after treatment is uncommon.\(^1\,^2\) Chest pain, palpitations and dyspnea are the main presentations.\(^1\,^2\)

Cardiac hydatidosis is often primitive and unique and may be multiple.\(^4\,^5\) Also, recurrences are infrequent and occur mostly in pericardial and right heart localisation.\(^1\,^2\,^6\,^7\) However, left ventricular intracavitary metastatic hydatidosis has not been documented.

The chest pain may imitate angina pectoris but more often suggests a noncoronary origin.\(^1\,^2\) In our case, signs of anterior myocardial ischemia and an intraventricular conduction disorder were present on the ECG, similar to those before operation. In young patients, especially when the ECG shows an ST–T wave change, the diagnosis of cardiac hydatidosis should be considered.\(^1\)

Patients with cardiac hydatid disease must undergo surgery because of life-threatening complications.\(^1\,^2\,^7\) However, surgical intervention may result in serious complications.\(^7\,^8\) Whether the treatment of this patient should be medical or surgical remains controversial.\(^1\,^2\,^7\,^9\) It is important to consider the localization, number and size of the cysts in choosing the surgical or medical treatment.

This is a rare case in which intracavitary multiple recurrence hydatidosis were found postoperatively. Even if its therapy is controversial, we feel that, surgical removal in patients with recurrent multiple small cysts should be considered because of the high risk of associated complications such as rupture, tamponade and anaphylactic shock.

Figure 1  ECG shows negative T waves and ST depression as well as intraventricular conduction disorder.

Figure 2  Transthoracic (A) and transesophageal (B) echocardiography shows multiple hydatid cysts in interventricular septum (IVS), left (LV) and right ventricular (RV) apex.
References


