Hydatid Cyst of the Interaltrial and Interventricular Septum of the Heart*

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To our knowledge this report describes the first case of a large hydatid cyst involving the full thickness of both the intertrial and interventricular septum of the heart, which was detected at autopsy. The cyst was intact. Clinically, there was complete heart block. (Chest 1991; 99:1020)

CTR = cardiothoracic ratio; IV = intraventricular

Cardiac echinococcosis is infrequent. The incidence ranges from 0.5 to 3 percent of all echinococcal disease.1 Cardiac septal involvement is quite rare.1,2 Various types of conduction disturbances are linked with septal hydatidosis.3,4 To our knowledge, this is the first case report of an isolated cardiac hydatid cyst which is large in size and involves both intertrial and interventricular septa.

CASE REPORT

An 18-year-old girl was clinically diagnosed as having right ventricular endomyocardial fibrosis in 1976. A chest x-ray film revealed cardiomegaly and a CTR of 80 percent; an ECG showed IV conduction defect and Wenckebach's phenomenon initially, and complete heart block seven years later. Multiple filling defects in the right ventricle were seen on cineangiogram.

The patient died in 1986, and at autopsy the heart weighed 635 g. and the shape was distorted. A large cystic mass measuring 13.6 × 10.2 × 8 cm was located in the intertrial septum and upper two-thirds of the interventricular septum, involving the whole thickness of both septa. The cyst was intact and projecting into all four chambers. The cyst wall was 1 to 3 mm thick, rigid, and filled with 300 ml of yellowish pasty material with altered blood (Fig 1). Microscopically, it was a dead hydatid cyst with a calcified wall. A few intramural arteries showed echinococcal germinal layer emboli (Fig 2). The rest of the organs were normal.

DISCUSSION

The first well-documented case of cardiac hydatidosis was reported in 1836.5 Most of the cases were diagnosed at autopsy. Now, slowly, with the help of new techniques such as echocardiography, tomography, and cineangiography, successful surgical excision of cardiac hydatid cysts has been reported in the literature.1,6,7 The atrial septal location was recorded in 2 percent, while in the ventricular septum, it was 9 percent of all cardiac hydatidosis.1,6,7 but simultaneous involvement of both septa has not been reported so far in the literature. The present case is unusual in that the cyst involved the whole thickness of both septa, which is a rare observation in the literature. The septal location of the cyst is always associated with some kind of conduction disturbances, and sudden death is known in unruptured septal cysts due to fatal arrhythmias.1,3,4 This was observed in our case as well. Although the main cyst was dead, the emboli.

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REFERENCES

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