A completely asymptomatic 60-year-old man presented for a preventive calcium score screening. ECG-gated non–contrast-enhanced cardiac computed tomography showed a noncalcified hypodense oval mass in the right ventricle with a spontaneously hyperdense wall measuring 19×17 mm (Figure 1A). Echocardiography was performed and found a 16×18 mm egg-shaped hypoechoic mass with regular hyperechoic borders, suggestive of a cyst appended to the interventricular septum. Although he never traveled outside Western Europe, a hydatic cyst was suspected and a follow-up strategy was decided.

The size of the cyst remained stable at the third year of follow-up (Figure 2B); then, at the fifth year, an increase in its size to 23×22 mm was evidenced by echocardiography, but the patient remained symptom-free (Movie I in the online-only Data Supplement). Cardiac magnetic resonance confirmed these findings by demonstrating a round-shaped cystic mass of the right side of the interventricular septum that measured 25×22 mm (Figure 1C), with no late gadolinium enhancement noted inside and around the mass (Movie II in the online-only Data Supplement). It was decided to perform a surgical resection.

The interventricular septum was approached through the tricuspid valve under cardiopulmonary bypass. A bulging mass was easily identified. After injection of hypertonic saline solution, a cleavage plane could be found and the tumor was resected en bloc. It macroscopically looked like a hydatic cyst (Figure 2), which was subsequently confirmed by its pathological examination. The patient was put on Albendazole for 4 weeks; no recurrence was detected after 1 year of follow-up.

Hydatic cysts of the heart are rare. They occur in 0.5% to 2% of the cases of hydatidosis through the systemic or pulmonary circulation or through extension from adjacent structures. The left ventricle is most frequently involved because of its rich blood supply. Next to be involved are the right ventricle (15%), the interventricular septum (9%), the left atrium (8%), the right atrium (4%), and the interatrial septum (2%). Signs and symptoms depend on the number, the location, and the size of the cysts. Surgical excision is the treatment of

Figure 1. Initial ECG-gated nonenhanced cardiac computed tomography performed for calcium scoring, axial view (A), showing a hypodense egg-shaped cyst measuring 19×17 mm with hyperdense borders in the right ventricle. Cardiac magnetic resonance images performed for the follow-up showed stability in the size of the cyst at 3 years (B), but, at 5 years (C), a significant increase in its size was demonstrated.

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choice for cardiac hydatid cysts. Antiparasitic agents should then be given to limit the dissemination of the parasite during enucleation.¹

Disclosures

None.

References


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