Hydatid Cyst of Right Atrium

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A 70-year-old male presented with dyspnea New York Heart Association (NYHA) class II since 1994. Dyspnea was not progressive. There was no history of cough, fever, chest pain, or palpitation. He was investigated and was told to have some abnormality in his heart and was advised surgery. Since patient was not very symptomatic, he did not undergo surgery. He did not have any record of his ailment. This time he was referred to us for fitness for noncardiac surgery. His electrocardiogram (ECG) showed normal sinus rhythm and right atrial (RA) enlargement. His echocardiography showed large cystic mass in his RA, occupying almost three-fourth of RA (Fig. 1). His noncontrast contrast-enhanced computed tomography (NC CECT) of thorax was done. It showed well defined cystic lesion with internal heterogeneous contents and calcification along its wall in RA, measuring 8.1 × 8.3 × 8.4 cm, suggestive of hydatid cyst of RA (Fig. 2).

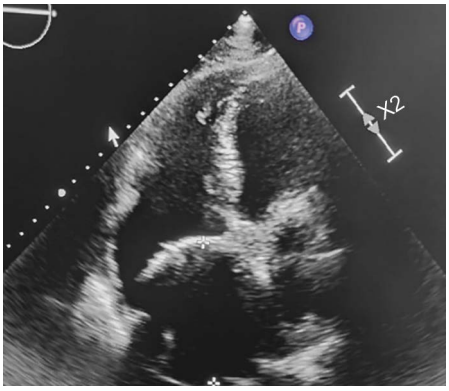

Fig. 1: Four chamber view in echocardiography shows dilated Right atrium, with large cystic mass in it

Cardiac involvement by hydatid disease is very rare, accounting for 0.5–2.0% of all hydatid infestations.[1] There are two methods by which heart can be involved by it. Firstly, it can be due to invasion of heart through coronary circulation. Second method is through rupture of pulmonary hydatid cyst into the pulmonary vein and thus entering into the left heart.[2] In heart, most common chamber to be involved is left ventricle, which occurs in 55–60% cases of cardiac hydatid disease. Left atrium is involved in 8% of cases. Right atrium is very rarely involved (3–4%).[1] Due to very slow growth, cardiac hydatid cyst may remain asymptomatic for a long period of time till it causes pressure symptoms or till the complications occur. Symptoms depend upon the organ involved. When left ventricle is involved, it can cause symptoms due to left ventricular outflow obstruction.

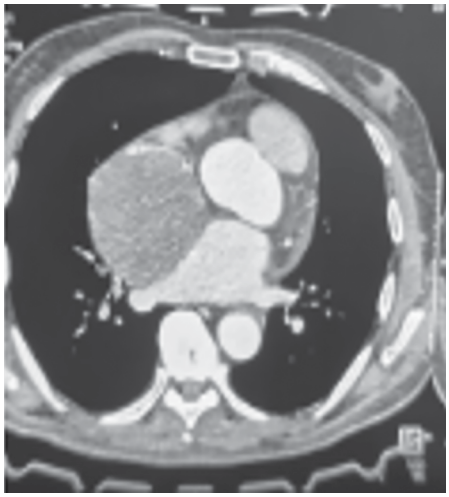

Fig. 2: CECT shows showed well defined cystic lesion with internal heterogeneous contents and calcification along its wall in RA

In left atrium, it can mimic mitral stenosis. In right atrium, it may cause obstruction of tricuspid valve and so can present with systemic venous congestion. When it is present in coronary, it can present as angina or myocardial infarction.[3] If it involves the conduction system of heart, it may present as heart block.[4] It can cause an emergency if it ruptures, when it can cause anaphylaxis and can be fatal.[5] So, it should be treated before it ruptures.[5] Cardiac hydatid cyst can be diagnosed by echocardiography, computed tomography (CT) scan, or magnetic resonance imaging (MRI).

Our patient had long standing disease, and patient was not very symptomatic, and so he refused surgery.

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