A Calcified Left Sided Pericardial Cyst in a Middle Aged Woman

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ABSTRACT

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Pericardial cysts are benign congenital anomalies of the middle mediastinum. They may also appear secondarily to hydatid disease, tuberculosis, post surgery. Majority of the patients are asymptomatic and are detected incidentally when evaluated for some other cause. We report a patient with an unusual site of pericardial cyst. Pericardial cysts are diagnosed by computed tomography (CT) or magnetic resonance(MR) imaging and managed by follow up, percutaneous aspiration or surgical excision.

Keywords: Pericardial cyst, Calcified

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INTRODUCTION

Pericardial cysts are an uncommon benign congenital anomaly of the middle mediastinum.

Pericardial cysts occur at the rate of one per 100,000 population.[1] Seventy five per cent of them are asymptomatic, and are found incidentally during routine chest x-ray or echocardiography.[2] Twenty five percent of the patients present with chest pain, dyspnea, cough and paroxysmal tachycardia. Seventy per cent of the cysts are located at the right pericardiophrenic angle, 22% in the left, and the remainder in other sites in the pericardium.[2] This patient presented with a calcified pericardial cyst on the left side.

CASE HISTORY

A forty six year old lady presented to our out patient department with history of leg swelling and breathlessness on exertion for two months. She had history of hypertension for four years and type 2 diabetes for eight years. Clinical examination showed pitting pedal edema and bilateral basilar inspiratory crepitations. There was no history of myocardial infarction. The electrocardiogram revealed pathological Q waves in lateral limb leads with T wave inversions in lateral limb and chest leads. The patient's chest X ray (Figure – 1) showed an egg shaped calcified mass in the left lower lung zone close to the cardiac shadow. A Tran thoracic

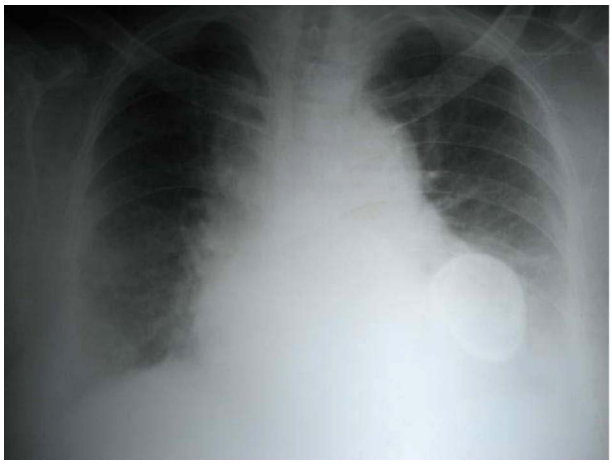

Figure 1. **Chest X ray showing egg shaped calcified mass.**

Figure 2. **CT scan showing calcified pericardial cyst**

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echocardiogram did not reveal any mass, but revealed significant left ventricular dysfunction. A contrast computed tomography (Figure 2) of the chest revealed a peripherally calcified hypo dense non enhancing lesion measuring 5.0 × 3.2 cm in the region of the left ventricle suggesting a calcified pericardial cyst.

DISCUSSION

Pericardial cysts are benign mostly congenital anomalies of the middle mediastinum. They result from an out pouching of the parietal pericardium that is lined by mesothelial cells. They are thought to result from failure of fusion of one of the mesenchymal lacunae that form the pericardial sac. They are most commonly detected incidentally and are common on the right side. They are commonly

Legends

Seen as an obliteration of the right cardiophrenic angle.[3] This patient had the cyst on the left side in the region of the left ventricle which is uncommon. Cardiac tamponade, obstruction of right main stem bronchus, and sudden death are the rare life threatening emergencies that have been reported.[1]

Contrast CT scan is the modality of choice to diagnose and to follow pericardial cysts. On CT scan pericardial cysts are thin-walled, sharply defined, oval homogeneous masses. They have same attenuation as water and fail to enhance with intravenous contrast.[4] Magnetic resonance imaging is superior for imaging cysts at unusual locations and to identify the cyst content.[5] The management of pericardial cysts includes observation, percutaneous drainage, and resection. The indications for resection of pericardial cysts are large size, symptoms, patient concern, uncertainty of malignant potential, and prevention of the life threatening emergencies. Currently VATS (Video assisted thoracoscopic surgery) is the approach most commonly used.[6] The VATS approach has many accepted advantages over open procedures, like better cosmesis, improved intra- operative visualization, shorter post-operative recovery, reduced pain, and patient preference. While the morbidity and mortality of pericardial cysts are unknown, surgery has been demonstrated as the only definitive cure. Since operative risks of minimally invasive techniques are extremely low, it would seem reasonable to offer resection for all pericardial cysts in otherwise healthy patients for whom the risk of surgery is low. Our patient opted to be on routine follow up.

END NOTE

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