

# [Cardiac exposure. transthoracic echo was performed which showed](https://assignbuster.com/cardiac-exposure-transthoracic-echo-was-performed-which-showed/)

Cardiac metastasis of Ewing’s sarcomaare exceedingly rare. A 35 year old male was admitted with complaints ofnon-productive cough and exertional dyspnea from 6 months with a history ofleft calf swelling which was proven to be Ewing’s sarcoma. A transthoracicechocardiography demonstrated inhomogeneous mass located in the roof of the left atrium and on the anteriormitral leaflet. The mass was also seen invading the pericardial space withpericardial effusion. Due to accompanying pulmonary metastasis and possiblepoor outcome of the surgery, surgical resection was not considered. KEYWORDS: 2 d echocardiography, Sarcoma, Cardiac metastasis                TEXTA 35 year old male presented withcomplaints of swelling in the left calf since 5 years, non-productive cough, and breathlessness from 6 months.

Of note, there was no history of syncope, constitutional symptoms, or previous asbestos exposure. Transthoracic echo wasperformed which showed a 2. 8×1. 1cm heterogenous mass arising from the anteriormitral leaflet (Figure 1)(Video 1) and another mass in the left atrial roofmeasuring 2. 7×1. 9 cm which was a tumor invading into left atrium through theleft upper pulmonary vein(Figure 2)(Video 1).

In addition, the tumor mass couldbe seen in the pericardial space with effusion that lead to tamponade (Figure 3)(Video2). A whole body PET-CT image were obtained which revealed a large FDG avidheterogenous mass in the anterior mediastinum measuring 12. 8×7.

4 cm. The masswas seen indenting on the left pulmonary artery with mediastinal shift to theright. A filling defect was seen in the inferior branch of the left pulmonaryvein showing peripheral uptake of FDG likely representing a pulmonary veintumor. Few FDG avid nodes were seen in the left axilla and mediastinum. Tru cutbiopsy of the left calf mass was performed.

The histopathologic examinationrevealed a tumor of mixed cellularity set within focally calcified fibrousstroma–positive margin. Morphologic and immunocytochemical features of thetumor were consistent with the diagnosis of synovial sarcoma. Metastaticcardiac disease is far more common than primary cardiac malignancy(1). Firstdescribed in 1921, Ewing’s sarcoma includes soft tissue primitiveneuroectodermal tumor, classic Ewing’s sarcoma of bone and extraosseous Ewing’stumor. Most cardiac sarcomas have the same histologic appearance similar totheir soft tissue counterpart. Metastasis of Ewing’s sarcoma to heart is rareand the incidence is unknown(2). Metastasis tend to be small and multiple.

However, it is possible to observe a single large tumor(3). Two Dechocardiography is the modality of initial investigation to detect cardiacmetastasis(4). In our case tumours were large and multiple with pericardialinvolvement. Definitive diagnosis can be made by pathologic examination of abiopsy specimen which is possible only in some cases. Computed tomography andMagnetic resonance imaging aid in the diagnosis. The 5 year survival rate oflocalised disease is 60% and has improved with multimodality therapy, but theoutcome of metastatic disease is poor with 5 year survival rate of only 25%.

Dueto the accompanying pulmonary metastasis and possible poor outcome of thesurgery, surgical resection was not considered and our patient receivedifosfamide based chemotherapy with adriamycin.