

# Giant Asymptomatic Pericardial Cyst

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**Abstract**— Pericardial cysts are unusual lesions. They are usually benign and are located in the middle mediastinum. We present the case of a 71-year-old Female with a massive pericardial cyst, discovered incidentally. Our case throws light on the fact that pericardial cysts are usually benign, asymptomatic and generally do not grow over time.

**Keywords**— Pericardial cyst, Pericarditis, Mediastinal cyst.

## I. INTRODUCTION

Pericardial cysts are uncommon. These rare, usually benign, and congenital anomalies are found incidentally usually in the middle mediastinum. The estimated incidence is about 1:100,000. Their diameter generally ranges from 1 - 5 cm (1). They are found at the right cardiophrenic angle in majority of cases, the left cardiophrenic angle in around 22% of cases, and infrequently in the posterior or anterior superior part of the mediastinum (2). The majority of the pericardial cysts are asymptomatic (1, 3) and have a benign natural course. Some cysts cause symptoms like dyspnea, chest pain, or persistent cough. Hemoptysis, fever, and pneumothorax (3) are infrequent presentations. Although it sometimes causes symptoms related to compression of adjacent structures, they majorly have no symptoms and are almost always diagnosed incidentally. With the advancement in technology and CT scans, we are now able to diagnose this benign congenital anomaly before surgery.

## II. CASE REPORT

A 71-year-old female patient with a past history of random bouts of chest pain lasting for less than a second duration presents to the outpatient clinic for a follow-up of her established diagnosis of a pericardial cyst several years ago. She also has chronic fatigue and mild dyspnea on exertion. She denies having dysphagia or chest pressure. She was diagnosed incidentally during work-up of chest pain of having a pericardial 7 years ago.

The patient has normal cardio-respiratory examination with stable vitals. No murmurs or JVD seen. No dilation of veins seen over precordium.

CTA coronary and heart with IV contrast in 2015 showed a 10x6x5 cm anterior pericardial cyst, abutting the left pleural space.

Her ECG presently shows normal sinus rhythm with inverted T waves in leads I and aVL, which is unchanged from her previous ECG.

Her echocardiogram in 2015 showed an EF of 60% with normal atrial and ventricular size.

CTA of heart was ordered to look for the progression of the cyst. Further management would depend on the size and

current location of the cyst and the risks v/s benefits of having a surgery.

## III. DISCUSSION

Pericardial cysts (or benign mesothelial cysts), are uncommon lesions that are usually found incidentally. Their formation may result from failure of fusion of one of the mesenchymal lacunae that form the pericardial sac (5). On histologic examination, the cyst wall is composed of fibrous tissue lined by mesothelium, like normal pericardium, with mild chronic inflammation (5).

Most of them are asymptomatic and discovered incidentally during routine chest X-ray or echocardiography (2). If required, additional diagnostic methods like transthoracic echocardiography, CT scan and magnetic resonance imaging (MRI) can be used. The interval of follow up imaging has not been defined yet (6). Contrast-enhanced CT scan is the gold-standard for diagnosing and follow-up of pericardial cyst (3). It is seen as a thin-walled, sharply defined, and an oval homogeneous mass on the CT scan. Pericardial cyst calcification or rupture occurs rarely (4).

## IV. CONCLUSION

Pericardial cysts are rare and usually benign anomalies found incidentally. They are usually asymptomatic and do not require intervention, but rarely, can cause compressive symptoms and require removal. Our case represents the benign nature of the cyst even at an enormous size.

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