

# A Case of Mesothelial Cystic Mediastinal Mass



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## Case

A 65 year old woman presented with vague chest pain and shortness of breath. General physical and systemic examinations were unremarkable. Chest X-Ray showed a large mass in the antero-superior mediastinum. Computed Tomography (CT) Scan showed a well-defined soft tissue mass with broad base towards the pleura in the right upper lung zone measuring 7.9X7.5X7 in transverse, crainio-caudal and AP dimensions, respectively. CT-guided Fine needle aspiration biopsy was done which was non-diagnostic. Bacterial cultures and AFT cultures turned out to be negative. Median sternotomy was done, and the entire mass was excised. The excised mass was sent for histopathology. The FNA was not diagnostic. The histopathology proved it to be primary mesothelial cyst of the mediastinum. The patient made uneventful recovery postoperatively.

## Discussion

Primary cysts of mediastinum include bronchogenic cysts, enteric or duplication cysts, mesothelial cysts, thymic cysts, and thoracic duct cysts [1]. Mesothelial cysts are fluid filled sacs lined by Mesothelial cells [2]. They are usually unilocular and can be found in various sites like liver [3], round ligament [4], pericardium [5], peritoneal cavity [6], spermatic cord [7], adrenal gland [8] kidney [9] and spleen [10]. Intrathoracic mesothelial cysts are congenital lesions due to an anomaly in the development of the pericardial coelom [11]. They are classically located in

the anterior cardiophrenic angle but rarely can they be found elsewhere in the paravertebral region, the anterior mediastinum [12] or the paratracheal regions [13]. Mesothelial cysts include a variety that has been reported as pleuropericardial, pleural and simple mesothelial cysts.

Pathologically, the cyst wall consists of a single layer of flattened endothelial cells with an underlying connective tissue stroma. They are often detected as an abnormal shadow on routine chest x-ray films, occurring at an incidence of 1 in 100,000 [14]. As reported by two old case series, they are located in the right cardio-phrenic angle in 51%-71% of cases, and in the left cardiophrenic angle in 22%-38% of cases [15,16]. Surgical resection is the ideal treatment of these lesions, and is classically performed by thoracotomy [17,18]. Mesothelial cystic mediastinal mass is considered as a rare mesothelioma.

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