**CASE REPORT**

**PLEURAL LIPOMA: A CASE REPORT AND REVIEW OF LITERATURE**

Sheeza Imtiaz  
Department of Radiology, Patel Hospital, Karachi, Pakistan.

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**ABSTRACT**

Lipomas are benign soft tissue tumors arising from mature adipocytes. Although they can be encountered almost anywhere in the body, their occurrence within the thoracic cavity in relation to the pleura is very rare. Most reported cases of pleural lipoma are of asymptomatic lipomas, which are accidentally discovered. Symptomatic pleural lipoma is a much more rare entity. This is a case of benign pleural lipoma causing mild chest symptoms and was successfully treated with video assisted thoracic surgery (VATS).

**Case Report**

A 50 year old obese woman presented to the pulmonologist with complaints of low grade fever and mild left sided chest discomfort on and off for 6 months. Her chest examination was unremarkable. Plain X-ray of the chest was advised that showed an abnormal radio-opacity with tapered margins in the left lung lower zone close to the retrocardiac shadow making an obtuse angle with the lung parenchyma (Fig 1). CT scan chest with contrast was recommended to rule out the possibility of any underlying mass lesion. CT revealed a well defined pleural based fat density lesion measuring 4.2 x 2.7 cm in the posterolateral aspect of the left lower thoracic cavity. It has convex and tapering edges making an obtuse angle with chest wall. No post contrast enhancement was present. Diagnosis of pleural lipoma was made (Fig. 2, 3, 4). Video Assisted thoracoscopic surgery (VATS) was done and lesion was removed. Histopathological examination of the specimen confirmed a benign pleural lipoma.

**Discussion**

Lipoma is a benign mesenchymal neoplasm of fat. Lipomas are rarely encountered in the thoracic cavity. Intra-thoracic lipomas are classified as:

- Endobronchial lipoma: arising from the subcutaneous fat of the tracheobronchial tree.

**Figure 1:** CXR PA projection showing an abnormal radio-opacity with tapered margins in the left lung lower zone close to the retrocardiac shadow making an obtuse angle with the lung parenchyma.
Figure 2: Axial section of CT Scan chest showing a well defined fat attenuation lesion in the postero-lateral aspect of left lower thoracic cavity. It is making obtuse angle with lung parenchyma with tapered edges.

Figure 3: Coronal section of CT Scan chest showing fat attenuation lesion in left lower thoracic cavity measuring approximately 4.2 x 2.7cm.

Figure 4: Sagittal section of CT Scan chest showing pleural lipoma with tapered margins

- Pleural lipoma: originating from the submesothelial parietal pleura which may extend into subpleural, pleural or extrapleural spaces.²
- Mediastinal lipoma.
- Cardiac lipoma.

Lipomas can be also divided into two classes: (1) hourglass or dumbbell lipomas that pass through intercostal space or the thoracic inlet; and (2) purely intrathoracic lipomas. Our case belong to the latter type, since it was entirely within the right thorax.³ ⁴ They are usually solitary and have no association with other extra-thoracic locations; they involve both sides with the same frequency. They are most commonly detected between the ages of 40 and 60 years, frequently in obese individuals. The intrathoracic lipoma arises most frequently in the parietal pleura and may exhibit hemispherical sessile or pedunculated
Conclusions

Pleural lipomas are considered to be very rare entity. CT scan is a very helpful diagnostic tool in clinical diagnosis of pleural lipoma and to differentiate it from liposarcoma. Surgical resection, with thoracotomy or VATS, remains a valuable procedure for establishing a firm diagnosis and complete excision.

References


