Intrathoracic liposarcoma: Case report with emphasis to histogenesis and site of origin classification problems

Sir,

Intrathoracic liposarcoma (IL) may arise from mediastinum, lung, and pleural cavity. In these sites, the tumor may remain limited to the origin site or infiltrate the adjacent organs. In all origin sites, the L originates from primitive mesenchymal cells, localized in the endothoracic fascia (lung L), present in the submesothelial tissue of parietal pleura (pleural L), or disseminated in the mediastinum (mediastinal L).

In the present case of voluminous IL, we discuss the radiological features with emphasis to histogenesis and location classification problems.

A 46-year-old man presented with a 2-month history of chest distress and persistent subdiaphragmatic pain.

Chest X-ray showed extensive opacity of the left hemithorax [Figure 1a] corresponding to adipose tissue with dense striae and lobulation on axial [Figure 1b] and coronal multiplanar reconstruction [Figure 1c] computed tomography. The left lung was collapsed and compressed medially.

Because a complete excision was not possible, thoracoscopic biopsy was performed. The tissue fragment revealed myxoid L [Figure 2].

The present case demonstrated the decisive role of the imaging in the establishing nature of intrathoracic tumors, supported by biopsy procedures with

Figure 1: Chest X-ray showed extensive opacity of the left hemithorax (a) corresponding to adipose tissue with dense striae and lobulation on axial (b) and coronal multiplanar reconstruction (c) computed tomography. Note the left lung collapsed and compressed medially (b)

Figure 2: The tumor showed areas characterized by small, round to oval cells, embedded in abundant myxoid stroma and displaying a delicate arborizing capillary vascular network (H and E, x40)
Letters to Editor

Therapeutic implications. In the study of IL, it is essential to establish the histological subtype. The myxoid L is highly radiosensitive and remarkable response has been reported, with volume reduction of 52%, lipoma-like transformation and dense vascular pattern.[3] Radiotherapy is believed to be an ineffective therapeutic modality for survival of dedifferentiated and pleomorphic subtypes. According to the classification of tumor location, the terms mediastinal, lung, or pleural L may be used exclusively for the tumor limited to origin site. When L extends to two or all intrathoracic locations, the term IL is more appropriate. The accurate description of the tumor extension should be described in the report. Because of the expansile rather than infiltrative growth pattern of myxoid L, patients often present with few symptoms despite having large or even massive tumor.[4]

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that his name and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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