

Images in medicine

Giant mediastinal liposarcoma, a rare location of a common mesenchymal neoplasm

Liposarcoma mediastínico gigante, una rara localización de una neoplasia mesenquimatosa común

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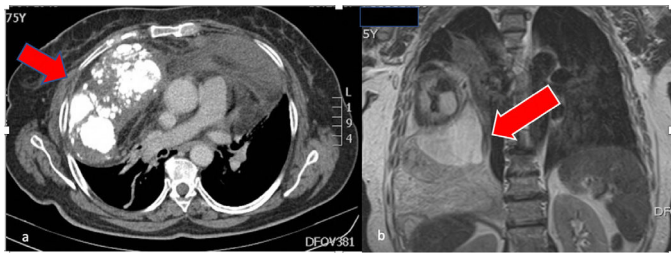
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Fig. 1.

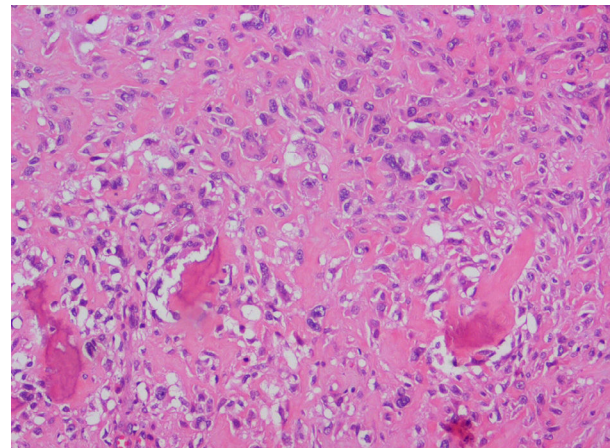


Fig. 2.

A 75-year-old female with no relevant personal history, went to the Emergency Department due to dyspnea, right thoracalgia and dry cough in the last two weeks. Physical examination was normal apart from a significant reduction of the vesicular murmur on the right side and the presence of homolateral subcrepitant rale. Analytically without relevant findings. Chest X-ray revealed a heterogenous hypodensity occupying almost the whole area of the right hemithorax. Chest CT (Fig. 1a) followed by Thoracic MRI (Fig. 1b) revealed a giant heterogeneous and calcified mass of the anterior mediastinum without involvement of vascular or nerve structures that deviated midline structures. The patient underwent surgery to remove this mass weighing more than 3000 g and with macroscopic characteristics of benignity. In microscopy it appears like a dense fibrous tissue with marked atypia, large nuclei, hyperchromatic and bizarre shapes, immunohistochemistry shows, in lipogenic areas, smooth muscle actin (negative) and S100 (positive) with an expression of Ki67 (30%). Immunofixation was positive for CD21 and negative for CD20, CD3, PAX5, EBER and HHV8. The final diagnosis was an undifferentiated liposarcoma (Fig. 2).

Liposarcomas are extremely rare cause of malignancies comprising <1% of all tumors. Primary Liposarcoma of the mediastinum count for less than 1% of mediastinal tumors. Commonly it occurs on the posterior mediastinum, it is more rare if is located in the anterior mediastinum. These tumors grow very slowly, normally by the time of diagnosis it tend to be a giant mass with involvement of adjacent structures, like, superior vena cava and pericardium.

The most common symptoms are, dyspnea, cough and chest discomfort.

The optimal treatment is a complete surgical resection, however radiotherapy and chemotherapy may take place.

Almost 40% of mediastinal liposarcomas recur after surgery.

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