

Solitary Fibrous Tumor: A Giant Intra-thoracic Mass

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Abstract

Background

The authors present a clinical case of a solitary fibrous tumour with a singular and exuberant radiological presentation.

Keywords: Solitary Fibrous Tumour • Pleura • Lung Cancer

Description

74-year-old woman, non-smoker, who presented with chest pain after a blunt trauma of the right hemithorax. She also reported progressive dyspnea, cough, anorexia and weight loss. The physical examination revealed digital clubbing and decreased breath sounds over the right hemithorax. Chest radiograph showed total opacification of the right hemithorax, with slight contralateral mediastinal shift. Contrast-enhanced CT scan revealed a large mass (20x10x15cm) with ovoid and lobulated morphology, well-defined margins, occupying practically the whole left hemithorax. The lesion displayed intense and heterogeneous contrast uptake and central areas of calcification (Panels A and B). A transthoracic CT-guided biopsy was performed and revealed tissue

consistent with a solitary fibrous tumor, composed of spindle cells with slight atypia arranged in a fibrocollagenous stroma (Panel D). Immunohistochemistry was positive for vimentin (Panel E), CD34 (Panel F) and Bcl2 (Panel G). Considering the dimensions and characteristics of the lesion, the patient was submitted a surgical resection (Panel C).

Solitary fibrous tumors of the pleura are uncommon neoplasms; more frequent in the 6th to 7th decades of life, without gender predilection neither identified risk factors. Histo-pathological analysis is essential for reaching the right diagnosis. The treatment of choice is complete surgical excision; as the biological behavior is unpredictable, the follow-up based on early detection of recurrence or metastasis is mandatory [1, 2].

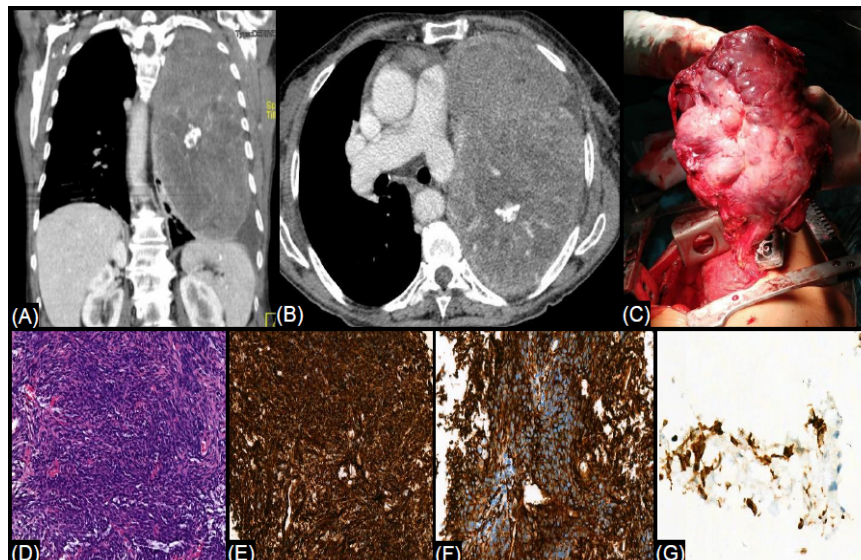


Figure 1. (A). Coronal axial; (B). Computed tomography scans demonstrating large tumour occupying the left hemithorax. (C). Ovoid and bosselated fibrous tumour surrounded by a thin translucent, glistening membrane containing a reticulated vascular network. (D). The histopathological findings revealed a mesenchymal tumour composed of spindle cells with slight atypia arranged in a fibrocollagenous stroma; (E). Immunohistochemical staining was intense and diffusely positive for vimentin. (F). CD34 (G). Bcl2.

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Discussion

In most cases of haemothorax, the insertion of a big calibre chest tube drainage is usually the initial step of the treatment in stable patients. In our patient, an immediate surgical approach was performed taking into account the suspected diagnosis of an intrathoracic bleeding tumour at CT scan and the unstable hemodynamic clinical status at the time of our evaluation.

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Conflicts of Interests

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References

1. England, DM, L Hochholzer, M J Mc Carthy. Localized benign and malignant fibrous tumors of the pleura. A clinicopathologic review of 223 cases. *Am J Surg Pathol* 13(1981): 640-658.
2. Mora, Sánchez Nora, M Cebollero-Presmanes, Velázquez Monroy, L Carretero-Albiñana, et al. Tumor fibroso solitario pleural: Características clinicopatológicas de una serie de casos y revisión de la bibliografía. *Arch Bronconeumol* 42(2006):96-99.

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