

ARCHIVOS DE **Bronconeumología**

ARCHIVOS DE Bronconeumología

www.archbronconeumol.org

Clinical Image

A Giant Malignant Solitary Fibrous Tumor of the Pleura

Julio Ricardo Torres Bermúdez*, Oriana Andreina Fernández González, Sebastian Sevilla López





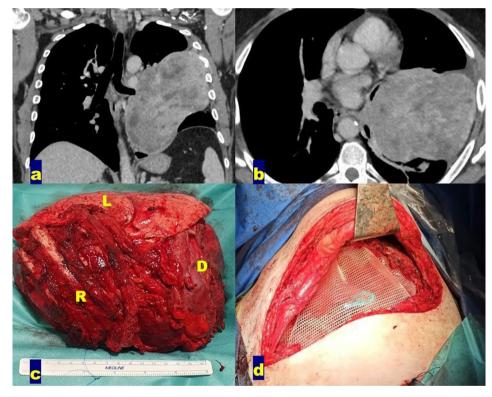


Fig. 1. (a and b) A chest CT showed a $12 \, \text{cm} \times 16 \, \text{cm}$ mass with compression of mediastinum. (c) Specimen after a left intrapericardial pneumonectomy with an en bloc resection of the 4–7th left ribs and a segment of diaphragm (L – lung, R – ribs, D – diaphram). (d) Closure of the wall defect using a $20 \, \text{cm} \times 15 \, \text{cm}$ composite polyester mesh with collagen film (SYMBOTEXTM).

Malignant solitary fibrous tumors of the pleura (SFTP) are aggressive tumors with a recurrence rate between 0% and 42.9%. Surgical resection is the standard treatment. 1,2

A 50-year-old male patient presented with a 3 months history of 10 kg weight loss, dyspnea, chest pain, and anemia. A computed tomography (CT) scan showed a $12 \text{ cm} \times 16 \text{ cm}$ mass with compression of mediastinum (Fig. 1a and b).

The patient underwent a left intrapericardial pneumonectomy with an en bloc resection of the 4–7th left ribs and a segment of diaphragm (Fig. 1c: L - Lung, R - Ribs, D - Diaphragm). The chest wall and diaphragm defects were closed using a $20 \, \text{cm} \times 15 \, \text{cm}$ composite polyester with collagen film (SYMBOTEXTM) (Fig. 1d) and a $10 \, \text{cm} \times 15 \, \text{cm}$ titanised polypropylene (TILENE®) mesh respectively.

E-mail address: ricardo970sigma@yahoo.com (J.R. Torres Bermúdez).

^{*} Corresponding author.

Histologically the specimen showed a $16 \,\mathrm{cm} \times 19 \,\mathrm{cm} \times 17 \,\mathrm{cm}$, $2 \,\mathrm{kg}$ SFTP infiltrating into the lung parenchyma, 4th rib and diaphragm with more than $2 \,\mathrm{cm}$ free resection margins. The tumor had hypercellularity, atypia, dedifferentiation, pleomorphism, and $6 \,\mathrm{mitosis}/10 \,\mathrm{high}$ -power fields (HPFs). Immunohistochemically expressed vimentin and CD34. The tumor was classified as SFTP with high malignant potential. The patient started adjuvant therapy with adriamicin and doxorubin regime.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial or not for profit sectors.

Authors' contributions

JRTB conceived and designed the study. JRTB, OAFG and SSL contributed to the writing of the manuscript, revised the article critically and approved the final version.

Informed consent

The authors have obtained the informed consent of the patient. This document is held by the corresponding author.

Conflict of interest

The authors have no conflicts of interest to declare that might be directly or indirectly related to the manuscript contents.

References

- 1. Mercer RM, Wigston C, Banka R, Cardillo G, Benamore R, Nicholson AG, et al. Management of solitary fibrous tumours of the pleura: a systematic review and meta-analysis. ERJ Open Res. 2020;6, http://dx.doi.org/10.1183/23120541.00055-2020, 00055-2020.
- 2. Dörr NM, Krüger M, Möller M, Zinne N, Toennies M, Schega O, et al. Solitary fibrous tumors of the pleura: do we need a different perspective on malignancy? Eur J Cardiothorac Surg. 2024, http://dx.doi.org/10.1093/ejcts/ezae096.