



Solitary fibrous tumor of the pleura: A rare case report

Tumor fibroso solitário de pleura: Um relato de caso raro

DOI: 10.56238/isevjhv3n1-003

Receipt of originals: 11/12/2023

Publication acceptance: 12/29/2023

Ricardo Budtinger Filho¹, Eduarda Ambrosi², Thainara Missassi Heller³, Laura Beatriz Firmino Werner⁴, Lucas Giacomelli⁵

Keywords: Fibrous tumor, Histological examination, Neoplasm.

INTRODUCTION

Solitary fibrous tumor of the pleura, first conceptualized in 1870 (1), is a rare mesenchymal neoplasm that accounts for less than 5% of all tumors originating from the pleura (2,3). It is most common between the sixth and seventh decades of life, affecting men and women equally, with no associated hereditary and environmental risk factors (2,4). Pulmonary symptoms are nonspecific or absent, making prior diagnosis difficult, and can be detected accidentally on chest images or when they grow too large and begin to perform mechanical compression on other organs (2). Histological examination is essential for the final diagnosis, and complete resection of the tumor is necessary, including as a basis for treatment (1, 2 and 4).

This tumor, also historically called benign mesothelioma, has a limited literature due to the scarcity of reported cases, especially in Brazil.

PRESENTATION OF THE CASE

A 43-year-old and 3-month-old female farmer with untreated bronchitis and uterine myomatosis, on regular use of ferrous sulfate, smoker 16 packs/year, discovered an oval opacity with regular contours projecting into the anterosuperior third of the right lung, measuring about 2.5 x 2.0 cm in its longest axes, of an indeterminate nature, identified on preoperative radiographs for hysterectomy. Three months before the finding, the patient developed dry cough and pain in the thoraco-abdominal transition. During the following three months, she developed

¹ General Surgery Resident - Federal University of Mato Grosso

² Medical Student - Federal University of Mato Grosso

³ Resident in Oncological Surgery - Cancer Hospital of Mato Grosso

⁴ General Surgery Resident - Federal University of Mato Grosso

⁵ General Surgery Resident - Federal University of Mato Grosso



dyspnea on mild exertion and was referred for pulmonological follow-up to initiate treatment for the respiratory condition, where she was diagnosed with benign spindle cell neoplasia on histopathological examination after biopsy, nine months after the onset of symptoms. Two months later, with histochemical analysis, a solitary fibrous tumor of the pleura was evidenced, with the proposal of exploratory thoracotomy, which was performed three months after the histochemical diagnosis, with resection of a pedicled tumor of the visceral pleura in the right upper lobe, with no interurrences. The patient was discharged on the fourth postoperative day, eupneic and without complaints.

DISCUSSION

In about half of the cases, the reported tumor is asymptomatic and discovered accidentally, but it may also, as in the reported case, present symptoms of cough and pain or sensation of chest tightness (5). Surgical treatment is the first line, and the size and characteristics of the tumor in the present case made it possible to perform it through video-assisted thoracic surgery (VAST) (5). The rarity of this type of tumor and the scarcity of reports on it, especially in Brazil, make this case of great relevance. Among the difficulties in the management of the case are the need for histopathological or histochemical studies to confirm the diagnosis, since computed tomography-guided aspiration puncture is only effective in 43% of cases, and the limits of its management in a teaching hospital(5).



REFERENCES

- Crispim, J. P. B. L., Madeiro, J. A., Branco, B. C., & Carvalho, F. A. (2016). Mesotelioma pleural benigno: Apresentação de um caso singular. *J Bras Med*, 103(2).
- Demicco, E. G., & Meyer, C. (2022). Solitary fibrous Tumor. UpToDate.
- Ali, J., Ali, A., Van Leuven, M., & Bartosik, W. (2017). Giant solitary fibrous tumour of the pleura: an unpredictable entity: case series and literature review. *The Annals of The Royal College of Surgeons of England*, 99(6), e165–e171. doi:10.1308/rcsann.2017.0067
- Davanzo, B., Emerson, R. E., Lisy, M., Koniaris, L. G., & Kays, J. K. (2018). Solitary fibrous tumor. *Translational Gastroenterology and Hepatology*, 3, 94–94. doi:10.21037/tgh.2018.11.02
- Carvalho, J. V. L., Costa, R. J. B., Nunes, P. C. M., et al. (2021). Tumor fibroso solitário de pleura: um relato de caso. *Ciências da Saúde: desafios, perspectivas e possibilidades - Volume 1*. doi:10.37885/210203126