

Clinical Image

Recurrent spontaneous pneumothorax due to pulmonary cystic metastasis of epithelioid sarcoma[☆]



Neumotórax espontáneo recurrente secundario a metástasis quísticas pulmonares de un sarcoma epiteliode

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We report the case of a 29-year-old man who consulted for recurrent spontaneous pneumothorax associated with lung cysts. In the last 3 months, he had 2 episodes of pneumothorax (one right and one left) that required drainage; a simultaneous bullectomy of both pulmonary vertices (using video-assisted thoracoscopy) was performed after the second episode. He subsequently developed another pneumothorax, and a chest computed tomography (CT) scan was requested, which showed bilateral lung cysts, some of which were associated with ground glass opacities (Fig. 1A–C). The patient was initially evaluated and underwent surgery in another hospital, and no CT had been performed prior to the visit. A lung biopsy of the left lower lobe was performed. The surgical biopsy showed metastasis of an epithelioid sarcoma. A positron emission tomography-computed tomography scan was performed with ¹⁸F-FDG that showed a solid hypermetabolic lesion in the vastus lateralis muscle of the right thigh (Fig. 1D), consistent with a primary lesion (epithelioid sarcoma). The patient was referred to the oncology department. During the course of his disease, he had recurrent pneumothorax and several episodes of hemoptysis.

Pulmonary cystic metastases from epithelioid sarcoma are rare, and few cases have been described in the literature.¹ It is postulated that these cysts develop through a valvular mechanism causing distension of the small airway by infiltration of the alveolar sacs by malignant cells.² On CT they may be accompanied by ground glass opacities caused by foci of peritumoral hemorrhage. A common complication of this type of metastasis is the development of spontaneous, usually recurrent, pneumothorax caused by rupture

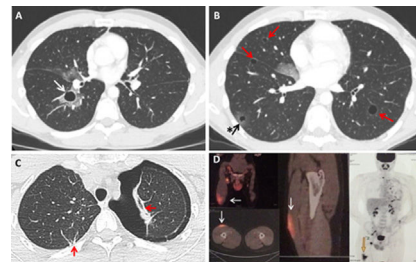


Fig. 1. Chest computed tomography. A) Lung cyst measuring 16 mm in diameter with thin smooth walls, showing a ground glass halo in the right lower lobe (arrow). B) Multiple lung cysts with bilateral distribution (arrows), one with a ground glass halo (arrow with asterisk). C) Left pneumothorax and fibrous tracts in the vertices (arrow). D) Flat hypermetabolic lesion measuring 4 × 1.9 cm (SUV 5.3) in the right vastus lateralis muscle (arrows), associated with hypermetabolic inguinal lymphadenopathies in the same side.

of the cysts in the pleural cavity. Another associated complication is hemoptysis. Prognosis is usually unfavorable.

References

- Hoshi M, Oebisu N, Iwai T, Ieguchi M, Ban Y, Nakamura H. An unusual presentation of pneumothorax associated with cystic lung metastasis from epithelioid sarcoma: a case report and review of the literature. *Oncol Lett.* 2018;15:4531–4.
- Hasegawa S, Inui K, Kamakari K, Kotoura Y, Suzuki K, Fukumoto M. Pulmonary cysts as the sole metastatic manifestation of soft tissue sarcoma: case report and consideration of the pathogenesis. *Chest.* 1999;116:263–5.

[☆] Please cite this article as: Rodriguez Gimenez JA, Castro HM. Neumotórax espontáneo recurrente secundario a metástasis quísticas pulmonares de un sarcoma epiteliode. *Arch Bronconeumol.* 2021;57:368.

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