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Pneumocytoma (Formerly Known as Sclerosing Hemangioma of the Lung): A Rare Cause of Chest Pain[☆]

Neumocitoma (antes denominado hemangioma esclerosante pulmonar), una rara causa de dolor torácico

To the Editor,

The patient was a 41-year-old Chinese female, who after a dry cough presented with acute onset of left chest pain¹ and dyspnea on exertion, for which she attended the emergency department. A chest X-ray was performed, revealing the presence of a left infrahilar lung mass (Fig. 1). Positron emission tomography-computed tomography (PET-CT) scanning showed a 59 mm × 42 mm × 50 mm infrahilar mass (Fig. 2) and seven pulmonary nodules measuring between 1 and 12 mm. Neither the mass nor the nodules had increased metabolic activity. Complete resection of the mass was

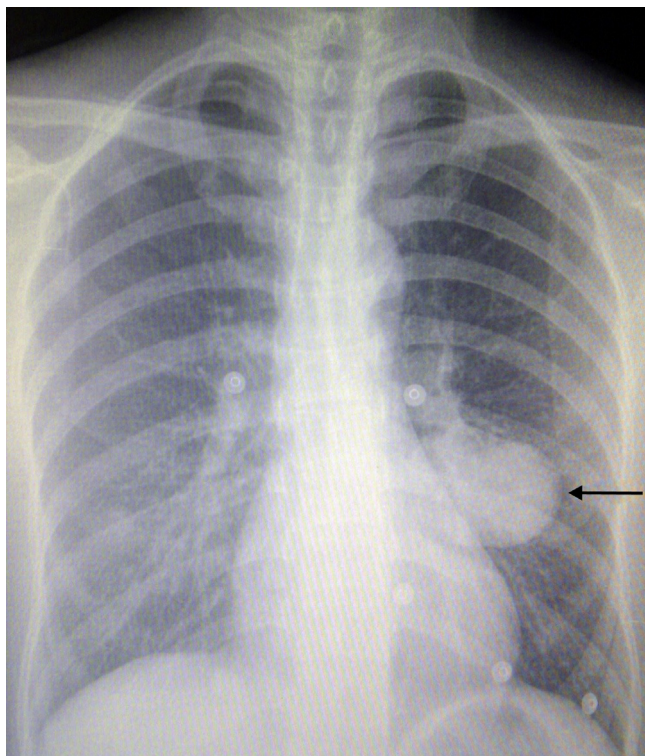


Figure 1. Pneumocytoma in the left hemithorax on the X-ray (arrow).

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then carried out by pneumotomy. As an isolated complication, the patient presented hemothorax in the post-operative period and required surgery. She subsequently progressed satisfactorily and was discharged home 72 h after the first operation. Histology confirmed pneumocytoma with a maximum diameter of 65 mm, of mixed pattern, predominantly solid with pseudopapillary areas, and absence of atypia, mitosis or necrosis.² Two surgeries were required to resect all the pneumocytomas, since she presented, in addition to those described, a further seven smaller pneumocytomas measuring between 1 and 12 mm, distributed in the left lower lobe, left upper lobe and right lower lobe.

Pneumocytoma, formerly known as sclerosing hemangioma of the lung, is a benign lung neoplasm, first described in 1956 by Liebow and Hubbel.³ Owing to discussions on its histogenesis, it has received several names throughout its history, among them sclerosing hemangioma of the lung,³ benign pulmonary histiocytoma and xanthomatous pseudotumour.^{2,4} Today, ultrastructural study and immunohistochemical techniques suggest that this is an epithelial tumor with differentiation to type II pneumocytes, hence the name pneumocytoma. The first to coin the term "pneumocytoma" were Tanaka et al.⁶ in 1986.

Pneumocytoma can present four different histological patterns: papillary, solid, sclerotic and hemorrhagic.⁵ This complex histology raises the differential diagnosis with bronchoalveolar adenocarcinoma, carcinoid tumor of the lung, papillary adenoma, angiosarcoma and mesothelioma^{4,5}; some of these are pathologies with a poor prognosis that require radical treatment, so correct histological diagnosis is essential, as surgical resection is curative.

Pneumocytoma is a benign tumor with low prevalence that is observed predominantly in Asian women. The mean age of onset is 46 years. The most common presenting form is as an asymptomatic solitary pulmonary nodule.^{2,4,5} It can reach up to 7 cm in

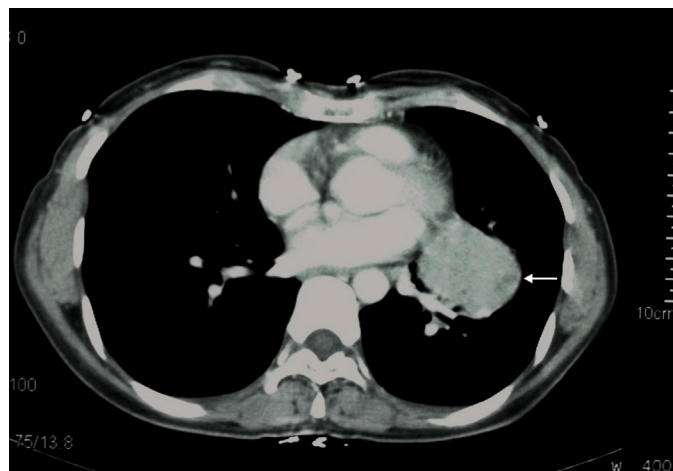


Figure 2. Left infrahilar location on the chest CT scan (arrow).

size, although 73% of the lesions are smaller than 3 cm². Exceptionally, cases of several nodules have been described (multiple pneumocytoma) as in our patient, and when symptoms appear, the most common is chest pain,¹ as in the case discussed.

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