Pseudo-Pancoast Syndrome Caused by a Solitary Fibrous Tumor of the Pleura

To the editor: Primitive pleural neoplasms are rare entities. Solitary fibrous tumors of the pleura (SFTP) are a benign variety of primitive pleural tumor that are slow-growing and localized, but may occasionally behave aggressively.[1] They are usually clinically silent and are detected by chance on a chest x-ray taken during unrelated testing. We report the case of a patient who presented with clinical and radiological features consistent with Pancoast syndrome but who was finally diagnosed with SFTP.

A 53-year-old male smoker, who had had tuberculosis as a child, presented with fever, general discomfort, an increase in his usual dyspnea, and mechanical pain in the right scapular area radiating into the right arm. The main finding of the physical examination was generalized

hypophonesis on the right side. The chest x-ray showed a large mass in the superior lobe of the right lung. The results of analyses were normal.

Computed tomography of the thorax (Figure) showed a 9 cm lung mass filling almost all of the apical segment of the superior lobe of the right lung and coming into contact with the posterior curvature of the first 3 ribs and the medial side of the first few thoracic vertebrae. Radiological features were consistent with a primary lung neoplasm. Fiberoptic bronchoscopy did not show significant alterations, and cytology gave negative results. An attempt at fine needle aspiration revealed fragments of fibrous and vascular tissue, with no signs of malignancy. Results for tumor markers were negative. Because of failure to make a histological diagnosis of the mass, a McGoon biopsy—taking a transcervical diagnostic approach—was carried out. The sample obtained was described as a mesenchymal spindle-cell proliferation without evidence of malignancy. The immunohistochemical study suggested a diagnosis of SFTP. However, because of the scant amount of tumoral tissue in the sample and the nature of the clinical and radiological findings, it was not possible to provide conclusive evidence to support this diagnosis. An exploratory thoracotomy of the right side was therefore decided on, with resection if possible. The superior lobe of the right lung was removed, with great difficulty, after ensuring that the tumor could be freed. The pathologist's report described an 8.5 cm SFTP with abundant necrosis, tumor-free margins, 4 lymph nodes, and no evidence of neoplasia. The patient experienced progressive relief from the radiating scapular pain and was released from hospital.

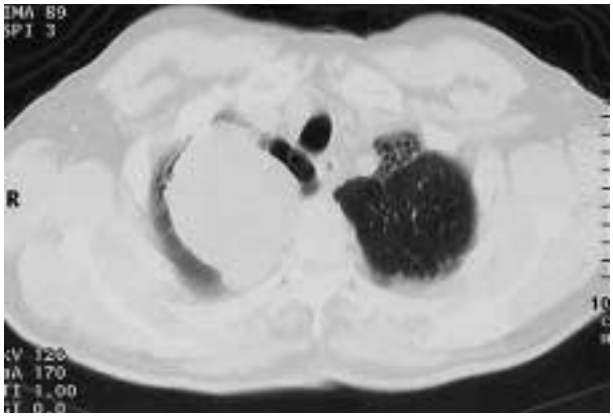

Figure. Computed tomography of the thorax, showing a large lung mass in contact with the thoracic wall.

Pancoast syndrome is a clinical entity associated with tumoral growth in the superior sulcus of the lung and with local invasion and destruction of nerve structures. The initial, and most common, symptom is localized back pain, which is present in 90% of cases.[2] Computed tomography and magnetic resonance of the thorax are used for diagnosis. Histological diagnosis is difficult given that the area is almost inaccessible to bronchoscopy or transthoracic needle aspiration.[3] In the case we report the patient developed clinical and radiological features similar to those of the Pancoast syndrome. However, the final histological results were consistent with a SFTP, which is considered a benign variety of primitive pleural tumor even though in 13% to 23% of cases it behaves aggressively, with invasion of the surrounding tissues, intrathoracic spread, and recurrence.[4] The clinical picture, which depends on the size of the tumor and its compressive effects, includes progressive dyspnea, chest pain, and, in advanced cases, compression of structures such as the brachial plexus or the superior vena cava.[5] Although histologically SFTP is considered a benign tumor, the treatment of choice is surgical resection and long-term follow up given the risk of recurrence and malignant transformation.[4] In the case we report the patient's clinical and radiological features were more indicative of a malignant pulmonary neoplasm than of a benign pleural neoplasm. It was not easy to take samples using the McGoon biopsy technique[6] and the possibility that the biopsy sample was taken from the capsule of a malignant tumor could not be ruled out from the results obtained, in spite of the immunohistochemical study indicative of SFTP. Radical resection of the tumor was finally possible and was followed by spectacular improvement in the suspected Pancoast syndrome.

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