A case of giant mediastinal leiomyoma

Dev mediastinal leiomyoma olgusu

To the Editor,

A 52-year-old male patient with cough and dyspnea was admitted to our clinic. Eight months before admission, he began to feel dyspnea under effort. He had no smoking habit. Respiratory sound was hardly audible in the left lung in the physical examination. No abnormalities were noted in laboratory investigation tests. Forced expiratory volume in one second (FEV1) was 1.20 L. Chest roentgenogram showed a huge mass occupying most of the left hemithorax. Thoracic computed tomography (CT) scan showed a well-circumscribed 30x25x20 cm mass in the left hemithorax (Figure 1a). Brain CT scan and abdominal CT scan were normal. 18F-fluorodeoxyglucose positron emission tomography (PET) scan showed SUVmax: 4.86 in the mass. Fiberoptic bronchoscopy revealed an extrinsic compression at the left main bronchus, which reduced its lumen by 50%. No endobronchial lesions were observed. Bronchial lavages assessed cytologically showed no malignancy. Fine needle aspiration biopsy samples were obtained, and the results of the biopsy evaluations showed mesenchymal tumor.

Left thoracotomy was performed. The thorax was opened at the sixth rib. The tumor was huge (Figure 1b). The lower pulmonary lobe and lingular segment of the upper lobe were atelectatic because of compression of the mass. The tumor originated from the posterior mediastinum and had strong adhesion to both the mediastinal pleura and aorta. Due to the huge size of the mass, it was separated in three pieces, and removed without complications (Figure 1c). The tumor weighed 4300 g and was 31x26x20 cm in size, and was covered with a thin capsule. Histologic examinations revealed leiomyomatous tissue with cellular areas and ischemic necrosis with no cellular anaplasia or mitosis. Immunohistochemical examination was: tumor cells actin +, desmin +, CD34+, S100-, and CD31-. Final pathological diagnosis was leiomyoma from unknown origin. Primary mesenchymal tumors of the mediastinum represent less than 6% of all mediastinal masses (1). Primary mesenchymal tumors of the mediastinum are derived from adipose tissue, blood and lymphatic vessels, fibrous tissue, and muscles (2). Leiomyoma of the mediastinum usually originates in smooth muscle walls (3,4). The majority of leiomyoma cases reported have usually arisen from esophageal muscle. In our case, the tumor was located in the posterior mediastinum and its origin was not clear. This is the largest tumor reported to date, and therefore deserves special attention.

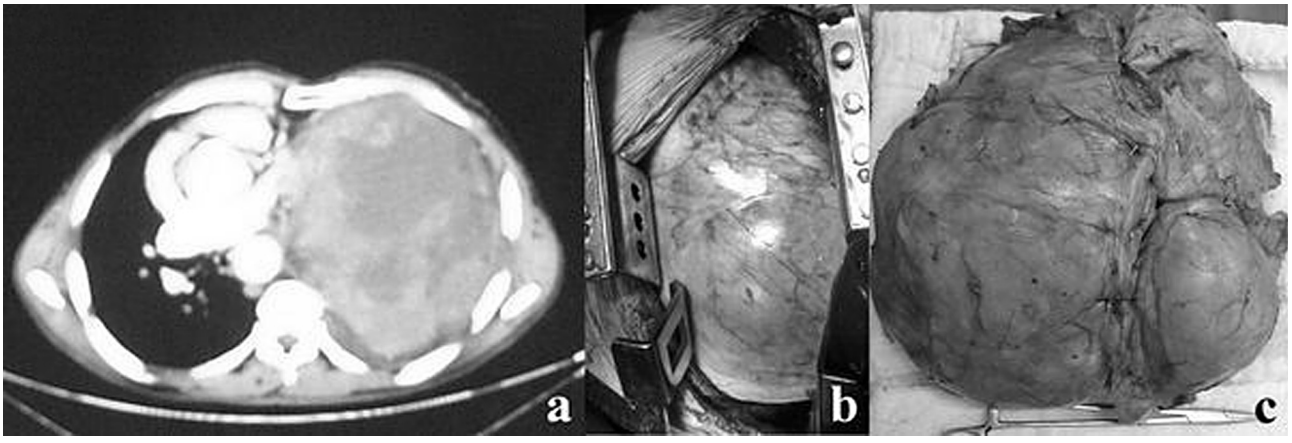

Figure 1a. Preoperative CT scan. **1b.** Intraoperative view of the giant leiomyoma. **1c.** Resected mediastinal leiomyoma.

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