Özet

Anahtar Kelimeler
Myxoid Liposarkoma; Mediastinum; Cerrahi

Abstract
Liposarcomas are uncommon tumors originated from the primitive mesenchymal cells. Mediastinal liposarcoma is a very rare localization, accounting less than 1% of all the mediastinal tumors. These tumors may remain asymptomatic until they reach a giant size due to pleural space and elasticity of the lungs. Complete resection is not always possible in the poorly differential types invading the mediastinal vital organs. In this article, we presented a 34 years-old man patient with an anterior mediastinum localized liposarcoma that was asymptomatic until last 3 months and reached to giant sizes and complete successful surgical intervention.

Keywords
Myxoid Liposarcoma; Mediastinum; Surgery
Introduction
Liposarcomas are uncommon neoplasms originated from the primitive mesenchymal cells, accounting for 15-20% of all the sarcomas. Liposarcomas have been often reported in the lower extremities, retroperitoneum, vulva and as rarely retropharynx [1-5]. Primary liposarcoma of the mediastinum is one from very rare localizations, and they are seen as less than 1% among all the mediastinal tumors. Mediastinal liposarcomas are often anterior mediastinal localized and mostly reported to originate from the thymus-related fatty tissue [1,3,4,8]. In this study, we present a case with anterior mediastinal localized liposarcoma, which was originated from paracardiac fatty tissue and remained asymptomatic until reached to a giant size and successful surgical resection.

Case Report
A 34-years-old male patient who had not any complaint previously was admitted to our hospital with complaints of shortness of breath increasing on effort and right chest pain for 3 months. On X-ray radiograph, an opacity was detected, which filled the 2/3 lower part of right hemithorax (Figure-1a). On subsequent contrast-enhanced computed tomography (CT), an anterior mediastinal localized mass lesion of 36x22x17 cm in size, shifting the mediastinal organs particularly the heart leftward, pressing the diaphragm downward was found (Figure-1b). The tumor was smooth contoured with different density areas. Because of the low attenuation values (~65 HU) of the mass on CT it might be diagnosed as lipoma or liposarcoma. A fine needle aspiration cytology attempted from the mass was non-diagnostic. Surgery was planned and then right anterior thoracotomy and inferior partial median sternotomy was performed. The mass was found to have minimal adhesions with the surrounding tissue, the tumor was encapsulated and had an expansive, non-infiltrative growth, thus making the radical resection possible. The mass was seen to be originated from the paracardiac fatty tissue and invaded at this point (Figure-2a). The tumor was en-bloc resected with the right, left paracardiac and mediastinal fatty tissue (Figure-2b). There was no evidence of pericardial invasion and mediastinal or hilar lymphadenopathy. The tumor was weighed 3.200 g which was detected to be lobulated, and smooth surfaced. On histopathological evaluation of the tumor revealed the diffused distribution of lipoblastic mesenchymal cells with increased cellularity and atypical nuclei, and a plexiform capillary network, all set in a myxoid matrix, scattered strands of fibroconnective tissue, with positive results of protein S-100, Vimentin and CD34 and negative results of protein smooth muscle actin (SMA) and desmin, examined by immunohistochemical methods, also surgical margin was tumor negative on paracardiac localization. The final diagnosis was made as a primary myxoid liposarcoma of anterior mediastinum (Figure-3). Surgical margin was tumor negative on paracardiac localization. The postoperative course was uneventful; chest radiograph documented the re-expansion of the right lung and re-alignment of the mediastinum, and the patient was discharged on the 13th day post-operative. No recurrence was seen in 1-year follow-up of the case.

Discussion
Primary liposarcomas of the mediastinum are very rarely seen neoplasms and may remain asymptomatic until reach to a giant size. They generally occur at adults, although they have been reported in children also [1,2,6,7]. The most common symptoms...
may emerge with chest pain, dyspnea, coughing, wheezing and compression to adjacent organs developing related to the tumor size. Vena cava superior syndrome, mediastinal shift and atelectasis due to the pulmonary compression and cardiac compression findings may develop [3,4,7].

Mediastinal liposarcomas may not give symptoms until they reach to a large size because of the elasticity of lung tissue and the pleural space. Liposarcoma cases reached to the large size, manifests as a mass appearance on chest X-ray radiography. Many cases are diagnosed during the routine chest graphy evaluation [1-4].

On Thorax CT evaluation, they are seen as the smooth contoured solid mass lesions consist of heterogeneous densities having a mostly fatty content, necrosis areas and soft tissue content. Especially, myxoid type calcifications and ossifications may be seen. Normal fat shows low attenuation values between -50 and -150 Hounsfield Unit (HU), whereas the attenuation of liposarcomas may show higher density because of its different tissue composition [4,6,9]. An important role of especially multislice CT is to guide the pre-operative surgical planning. CT is an effective guide in a correct incision and surgical management. Despite so much guiding informations about the nature of the tumor is obtained from CT, the histopathologic examination is necessary for the definitive pre-operative diagnosis [9,10]. MRI is better than CT-scanning in ruling out invasion of vessels in the mediastinum and thoracic inlet [10].

Primary liposarcomas are histologically divided into 5 subtypes: well-differentiated, myxoid type, round-cell, pleomorphic type and mixed cell type. Of these sub-types, myxoid type is the most common liposarcoma (40-50%) [5], while well-differentiated type has the least common recurrence (53%) and the best 5-year survival rate (70-85%). Whereas pleomorphic and round cell types have been reported to have the most common recurrence rate with 73% and 85% respectively, and the worst 5-year survival rate with 10-21% and 18%, respectively [2,6,7].

However, 5-year survival rates are directly related with the surgical resection of the primary and recurrent tumors [2]. Nevertheless, especially in the retroperitoneal and abdominal localized tumors reached to giant sizes, a tumor-reduction operation, even with an incomplete resection has been reported to improve the life quality. Furthermore, in the mediastinal poor differential type since liposarcomas often invade mediastinal structures and vital organs such as heart, complete resection in tumors localized in these areas is not always possible. Considering the limited benefit of radiotherapy and chemotherapy, we recommend de-bulking operation also in these cases.

Treatment of mediastinal liposarcomas is surgery and complete resection is impossible, we recommend de-bulking operation also in these cases.

Compacting interests
The authors declare that they have no competing interests.

References