A Strange Dweller in Pulmonary Mass: Lung MALToma: Case Report

Akciğer Kitleinde Yabancı Bir Sakin: Akciğer MALToması

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Geliş Tarihi/Received: 31.08.2015 Kabul Tarihi/Accepted: 04.02.2016

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doi: 10.5336/caserep.2015-47680

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ABSTRACT MALT (mucosa-associated lymphoid tissue) lymphoma is an extranodal marginal zone B-cell lymphoma. Although the most common site of MALT lymphoma is gastrointestinal tract; salivary glands, orbit, lung, skin, thyroid, breast, liver, kidney, bladder, prostate have been reported. Lung MALToma (LM) or more correctly BALLM (bronchus-associated lymphoid tissue) lymphoma springs in the marginal zone and marauds the bronchial epithelium by cellular lymphocytic infiltration. Lesions in lungs smaller than generally 3 cm in size are accepted as solitary pulmonary nodule. If they exceed this dimension, they are called pulmonary masses. Lots of benign and malign pulmonary or extrapulmonary pathologies lodge in these lesions. Lymphomas are rarely seen in these masses. Here, we report a MALT lymphoma of the lung.

Key Words: Lymphoma, B-Cell, marginal zone; fluorodeoxyglucose F18


Anахtar Kelimeler: Lenfoma, B-hücreli, marjinal zon; fluorodeoksiglukoz F18

Türkiye Klinikleri J Case Rep 2016;24(2):105-7

Mu cosa-associated lymphoid tissue (MALT) lymphoma locates under the epithelia furnishing gastrointestinal (GIS), respiratory, urogenital tracts and their rudiments.1 MALT lymphoma is an extranodal marginal zone B-cell lymphoma. Although the most common site of MALT lymphoma is GIS tract; salivary glands, orbit, lung, skin, thyroid, breast, liver, kidney, bladder, prostate have been reported.2,3 Lung MALToma (LM) or more correctly BALLM (bronchus-associated lymphoid tissue) lymphoma springs in the marginal zone and marauds the bronchial epithelium by cellular lymphocytic infiltration. These infiltrates expand into interstitium. As a very rare tumour, LM is responsible for just 0.5% of all lung malignancies and compromises less
than 1% of all lymphomas. Lobar atelectasis and its symptoms can be seen in the patients.

**CASE REPORT**

A space-occupying lesion was discerned on chest X-ray graphy of 26 year-old male patient complaining of hemoptysis, cough, night sweats and weight loss. A pulmonary mass, sized 46x34 mm in inferior lobe of right lung was seen on thorax computed tomography (CT) performed for further examination. Bronchoscopic biopsy of the lesion revealed suspected malignancy. Upon this, FDG-PET/CT was requested for differential diagnosis of benign/malign. The lesion causing atelectasis in the majority of right inferior lobe by pressuring on right lower lobe bronchus had mild diffuse het-

**FIGURE 1:** 26 year-old male patient was requested FDG-PET/CT for benign/malign differentiation of the mass seen on thorax CT. MIP (A), transaxial PET (B), CT (C) and fusion (D) images show diffuse heterogeneous uptake pertaining to this mass in inferior lobe of right lung (arrows).
erogeneous FDG uptake (SUV max: 3.1) (Figure 1). After a wedge resection, the histopathologic diagnosis was MALT lymphoma and the patient was treated with chemotherapy.

**DISCUSSION**

The most frequent sign of LM on CT is parenchymal consolidation with air bronchograms embodying as a nodule. FDG-PET is used to characterize glucose metabolism of pulmonary mass lesions and helps differentiating between benign and malignant conditions. As LM grows slowly and stays silent for a long time, normal expectation is mild to moderate FDG uptake. At the same time, PET helps indirectly by confirming the exclusion of other primary lymphoma origins and systemic involvement or detecting extrapulmonary metastasis of a primary lung cancer. This tumour can be treated successfully by surgical resection followed by chemotherapy or radiotherapy alone. For this reason, they must be distinguished from other primary or secondary pulmonary malignancies. In this sense, a biopsy or a diagnostic and also therapeutic surgical intervention is very appropriate if possible. As a conclusion, it must always be kept in mind that all inhabitants lodging in solitary pulmonary nodules or masses thought to be malignant, may not always belong to expected primary or secondary pulmonary malignancy spectrum. Sometimes extraordinary tumours managed by distinct therapy protocols than the usual ones confused with them, can reside in these nodules.

**REFERENCES**