OLGU SUNUMU / CASE REPORT

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The Cause of Chronic Cough A Rare Endobronchial Lesion: Lymphoma

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ABSTRACT
Non-Hodgkin lymphomas are tumors that originate from lymphoid tissues, mainly lymph nodes, consisting of B cells, T cells and natural killer cells. Extranodal lymphomas can also occur in any organ of the body, and endobronchial localization is extremely rare. Cough is a condition that impairs the patient's quality of life when it lasts for a long time. Cough exceeding 8 weeks is called chronic cough. The causes of chronic cough are many and sometimes it can be difficult to diagnose. It can be difficult to make a diagnosis with the tests performed in the first place. A stepwise approach is required at the diagnosis stage. We have presented here a patient who was diagnosed with lymphoma after the examinations, who was admitted to us with a cough that did not resolve despite medical treatment, due to the rare occurrence of endobronchial lymphomas.
Keywords: Bronchoscopy; cough; lymphoma.

Kronik Öksürük Sebebi, Nadir Görülen Bir Endobronşiyal Lezyon: Lenfoma

ÖZ
Non-Hodgkin lenfomalar, B hücreleri, T hücreleri ve natural killer hücrelerinden oluşan lenfoid dokulardan, esas olarak lenf düğümlerinden kaynaklanan tümörlerdir. Extranodal lenfomalar da vücudun herhangi bir organında görülebilir ve endobronşiyal yerleşim oldukça nadir görülmektedir. Öksürük uzun sürdüğü zaman hastanın yaşam kalitesini bozan bir durumdur. 8 haftayı geçen öksürük kronik öksürük olarak adlandırılmaktadır. Kronik öksürük nedenleri çok fazladır ve bazen tanısı zor koyulabilmektedir. İlk etapta yapılan tetkikler ile tanıya gitmek zor olabilmektedir. Tanı aşamasında basamaklı yaklaşım yapılması gerekmektedir. Biz burada medikal tedaviye rağmen geçmeyen öksürük nedeni ile tarafımıza başvuran ve yapılan tetkikler sonrasında lenfoma tanısı alan bir hastamızı, endobronşiyal lenfomaların nadir görülmesi sebebi ile sunmayı amaçladık.
Anahtar Kelimeler: Bronkoskopi; öksürük; lenfoma.

INTRODUCTION

Non-Hodgkin lymphomas (NHL) is a heterogeneous disease that can originate from any part of the body, and according to GLOBOCAN data, an estimated 509,600 new cases of NHL were diagnosed globally in 2018, comprising 2.8% of worldwide cancer diagnoses (1,2). 24-48% of NHLs are observed in extranodal localizations (3). Extranodal NHLs are most commonly seen in the gastrointestinal tract and the Waldeyer's ring, and their occurrence in the bronchi is very rare (4,5). On the other hand, endobronchial lymphoma is one of the rare causes of airway tumors. Non-Hodgkin lymphomas account for less than 1% of pulmonary malignancies (1). Endobronchial lymphoma is a rare condition when viewed from both sides, both because lymphomas are seen in the bronchi and lymphomas are rare among the lesions seen in the bronchus.

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CASE REPORT

A 51-year-old male patient came to the urgent care center with an acute onset of chills and cough two months ago and the posteroanterior chest X-ray taken in the first place was interpreted as normal. The patient was given symptomatic treatment previously and there is a history of visits to different centres because the cough did not resolve during follow-up. He was admitted to our center because of the lack of decrease in the severity of cough after various treatments given by more than one physician. On physical examination, respiratory sounds were found to be decreased in the left lung.

Blood pressure was 130/80 mmHg,pulse was 70/minute, fever was 37.2 °C (98.96 F), oxygen saturation was 98% with pulse oximetry. During the examination, no respiratory symptoms were detected in our patient except cough. Thoracic computed tomography (Thorax CT) was performed to investigate the etiology of cough. In the Thorax CT scan of the patient, a space-occupying soft tissue lesion and a subcarinal lymphadenopathy were observed in the upper lobe-lower lobe separation carina in the left lung, in the hilar region that protruded into the bronchi (Figure 1).

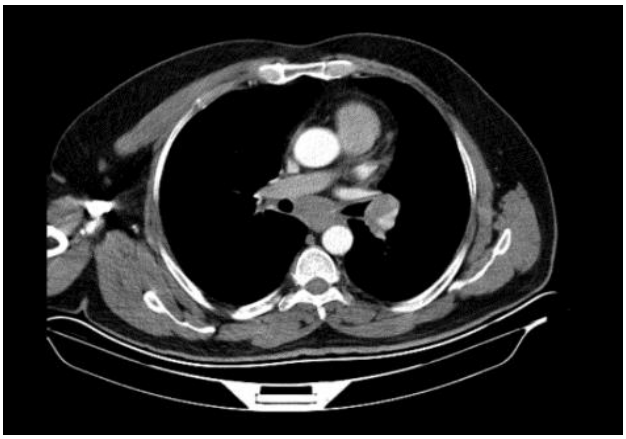

Figure 1. Subcarinal lymphadenopathy

Fiberoptic bronchoscopy (FOB) was performed on the patient. An endobronchial lesion was seen at the entrance to the upper left lobe, which almost completely filled the bronchus (Figure 2).

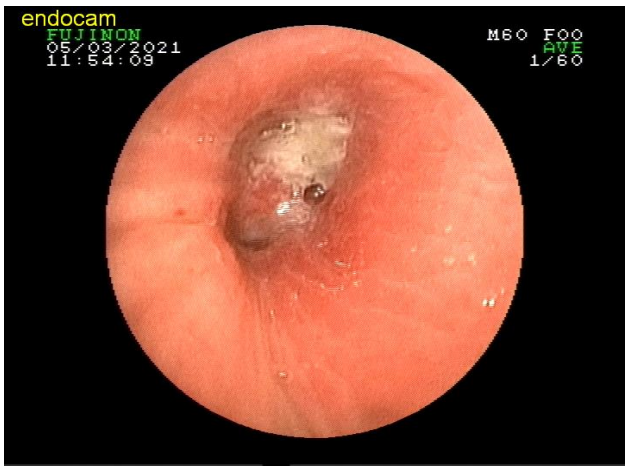

Figure 2. Endobronchial lesion

The patient, who was diagnosed with malignant lymphoma (B-cell type) as a result of biopsy taken after bronchoscopy, was referred to hematology with a plan to start treatment.

DISCUSSION

Non-Hodgkin lymphomas can originate from any part of the body and endobronchial invasion of NHLs is rare (4). The incidence of endobronchial NHL is mainly in the main bronchus and segmental bronchus of the trachea (6). Again, primary pulmonary NHL is rare. It constitutes less than 1% of all NHL cases, 3.6% of extranodal lymphomas and 0.5-1% of primary pulmonary malignancies (7,8,9). In our case, only an endobronchial space-occupying lesion was present and there was no parenchymal pathology. It is also rare to have only endobronchial lesion without parenchymal involvement. NHL symptoms and clinical presentation can vary widely. In our patient, the presenting symptom was cough that was caused by an endobronchial lesion. While fever was present at the beginning, it was not observed later and there were no B symptoms such as weight loss, night sweats. Cough is a defense mechanism of the lungs. Coughs that last longer than 8 weeks are called chronic cough, and the causes of chronic cough include conditions such as bronchiectasis, malignancy and foreign bodies affecting the airway (10). Endobronchial space-occupying lesions, which are one of the causes of chronic cough, are rarely observed. In less than 2% of cases of chronic cough, the etiology is lung cancer (10). Although even lung cancer is one of the rare causes of chronic cough, endobronchial lymphoma is an even rarer condition. Our patient was given various medical treatments for cough before the application, but no response was received. The fact that our patient did not benefit from medical treatments and the cough persisted should be considered as a hint in terms of investigating malignancy. The clinic is very changeable in the NHL. The condition that constitutes the clinical difference in the disease depends on the histological subtype and differences in the region of involvement. While variable lymphadenopathies are seen in some subtypes, some of them can lead to death within weeks if left untreated. 2.6% of all oncological deaths are attributable to NHL. (2) Pathologically high Ki-67 index is accepted as a poor prognosis indicator (11). The Ki-67 index of our patient was determined as 80% in the material obtained as a result of FOB performed in our hospital. We found out that our case was admitted to another center after receiving the diagnosis and passed away a short time later, and we thought that the death of the patient in a short time was due to the pathologically high Ki-67 index.

CONCLUSION

CT indication should be considered in coughs that don’t resolve despite medical treatment. Endobronchial lesions and lymphomas should be included in the differential diagnosis, although they are rare, and lymphomas should be kept in mind due to the different treatment approaches and prognoses.

Verbal consent was obtained from the patient's relatives before writing the case report.

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