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Case Report

Endobronchial tuberculosis mimicking lymphoma

Lenfomayı taklit eden endobronşial tüberküloz

Meral Uyar[1], Ahmet Mete[2], Ayten Filiz[1], Deniz Özçalışkan[1], Kemal Bakır[3], Öner Dikensoy[1]

[1]University of Gaziantep, Faculty of Medicine, Department of Pulmonary Medicine, Gaziantep
[2]University of Gaziantep, Faculty of Medicine, Department of Radiology, Gaziantep
[3]University of Gaziantep, Faculty of Medicine, Department of Pathology, Gaziantep

Abstract
Endobronchial tuberculosis may present with different clinical pictures. We presented a 55 year old patient with complaint of cough. She had palpable supraclavicular and cervical lymph nodes. Thorax CT revealed multiple conglomerated mediastinal lymph nodes. Multiple swollen mucosal nodularities were observed on bilateral endobronchial area during fiberoptic bronchoscopy. Although acid-fast bacilli were negative in bronchial lavage fluid, biopsies obtained from the endobronchial nodules revealed caseous granulomatous inflammation compatible with tuberculosis. Improvement was achieved one month following antituberculosis therapy. This case report shows the importance of fiberoptic bronchoscopy in the differential diagnosis of subjects present with multiple mediastinal lymphadenopathies especially in populations where incidence of tuberculosis is high.
Keywords: Bronchoscopy; lymphoma; tuberculosis

Özet
Endobronşial tuberküloz farklı klinik tablolarda karşımıza çıkabilir. Biz bu yazıda öksürük şikayeti olan 55 yaşındaki bir kadın hastayı sunduk. Hastanın palpe edilebilen supraklaviküler ve servikal lenf nodları mevcuttu. Toraks BT'de multipl konglomere mediastinal lenf nodları mevcuttu. Fiberoptik bronkoskopik incelemede ise yaygın mukozadan kabarık mukozal nodülariteler her iki akciğer alanlarında tespit edildi. Bronş lavajı ARB'si negatif olmasına rağmen endobronşial alandan alınan biyopsiler tüberküloza uyan şekilde kazeöz granulomatöz inflamasyonla uyumluydu. Tüberküloz tedavisi başlandıktan bir ay sonra düzelme tespit edildi. Bu olgu sunumu özellikle tüberküloz insidansının yüksek olduğu populasyonlarda multipl mediastinal lenfadenopatilerin ayırıcı tanısında fiberoptik bronkoskopinin önemini göstermektedir.
Anahtar kelimeler: Bronkoskopi; lenfoma; tüberküloz

Introduction

Endobronchial tuberculosis (ET) is a condition where diagnosis may be delayed due to wide clinical spectrum of the disease (1,2). Several reports declared that ET manifests as different presentations. Parenchymal infiltration, especially patchy alveolar type was the most prevalent radiologic finding whereas it can mimic malignancy with partial segmental collapse appearance or right middle lobe syndrome (1,3-6).

Case

A fifty five year old female patient was admitted to the hospital with complaints of cough and dyspnea for two months and fever for two weeks. She had a history of eight kg weight loss in the last 3 months. She had never smoked but had biomass exposure for 50 years. Her vitals were as follows: body temperature, 36.5°C; pulse rate, 96 beats per minute; respiratory rate, 22 breaths per minute; blood pressure, 100/60 mmHg; and her SpO_2 was 96% on room air. She had no history of tuberculosis contact. She had multiple lymph nodes palpable in cervical and supraclavicular region. Her blood analyses were as follows: white blood cell count, 7500/mm^3; platelet count, 255.000/mm^3; hemoglobin, 12 g/dl; hematocrite, 39%; CRP, 15mg/l, and sedimentation rate, 20 mm/hour. Chest CT showed multiple mediastinal conglomerated lymph nodes (Figure 1). Neck ultrasound showed multiple lymph nodes on supraclavicular and cervical region. The spirometric studies were within normal limits. Fiberoptic bronchoscopy revealed multiple extensive nodularity from distal 1/3 trachea to both main bronchi (Figure 2). Mucosa was hyperemic and edematous in appearance. Biopsy samples were obtained from right upper lobe. Ocular examination showed findings compatible with stage 2 hypertensive retinopathy. Her body temperature reached to maximum of 38°C on her follow up. Sputum and bronchial lavage examinations were negative. Pathological evaluation of biopsy samples revealed granulomas with caseification necrosis compatible with tuberculosis. In view of these clinical and pathological findings, the patient was diagnosed as endobronchial tuberculosis and anti-tuberculosis drugs were administered. One month following the treatment clinical and radiological improvement was obtained.

Discussion

The differential diagnosis of conglomerated mediastinal and supraclavicular lymph nodes include lymphoma, sarcoidosis, tuberculosis and malignancy. All of these pathologies might have endobronchial involvement. Therefore, endoscopic examination with fiberoptic bronchoscopy is essential. As in the present case, diagnosis could be obtained easily by a simple bronchoscopic procedure under local anesthesia without further evaluation. Lung function test parameters were

İletişim/Correspondence to: Meral Uyar, University of Gaziantep, Faculty of Medicine, Department of Pulmonary Medicine, Gaziantep, TURKEY
Tel: +90 342 3606060 / 76183 *meraluyar1@yahoo.com*

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within normal limits and bronchoscopic biopsy and lavage samples were negative for malignancy.

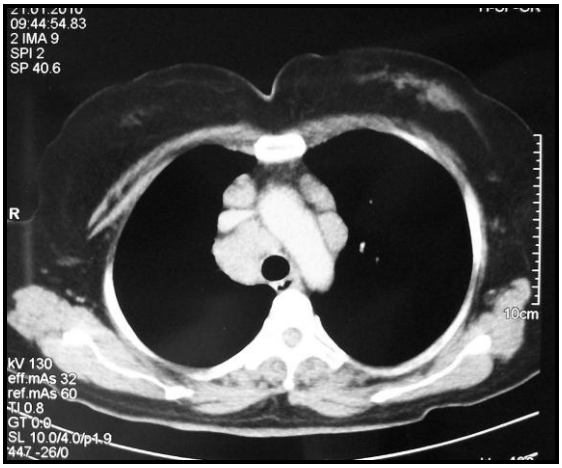

Figure 1. Chest CT showed multiple mediastinal lymph nodes.

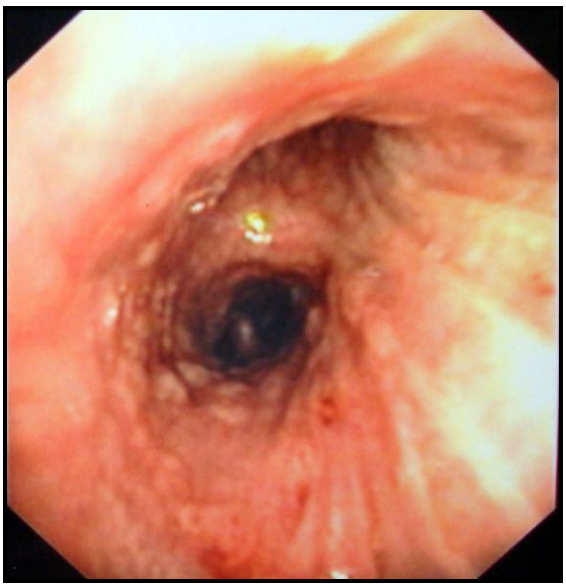

Figure 2. Multiple mucosal nodularities on bronchoscopic evaluation.

Previous reports suggested female sex predominance in subjects with ET (7-10). The most common complaint at presentation was reported to be cough, fever, sputum, chest pain in cases with ET.

The presented case had cough, fever, and lassitude that might be confused with B type lymphoma symptoms (7). The AFB examination of our subject was negative for both sputum and bronchial lavage fluid samples. It has been reported that AFB exam in cases with ET could be negative as in the presented case (10). Kim et al. (10) found that approximately one third of ET cases had negative culture results in their study population.

Foreign body aspiration is another situation that should be considered in the differential diagnosis of ET (3-6, 11). A patient with asthmatic symptoms, hilar lymph node enlargement and parenchymal infiltration on Thorax CT was biopsied from endobronchial nodular appearance similar to our finding which revealed ET (2). In conclusion, this case report suggests that FOB should be done in cases with mediastinal lymphadenopathy without profound parenchymal lung pathology where ET, lymphoma and other malignancies are considered in the differential diagnosis.

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