An Interesting Case of Adenocarcinoma: Miliary Metastases

İlginç Bir Adenokanser Olgu: Milier Metastaz

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Abstract
Diffuse miliary lesions in the lungs are mostly observed in tuberculosis, sarcoidosis and pneumoconiosis, while hematogenous metastases of some cancers of the lung may rarely have a miliary appearance. We present here a case of primary lung adenocarcinoma with miliary lesions and diagnosed by bronchoscopy.

Key words: Miliary lung lesions, adenocarcinoma, hematogen metastasis.

ÖZET

Anahtar Sözcükler: Milier acığa lezyonları, adeno-kanser, hematojen metastaz.

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Multiple, millimeter-sized, discrete, usually well-defined and widespread densities are referred to as miliary lesions in the lungs. Although a diffuse miliary appearance primarily suggests miliary tuberculosis, it can often be observed in pneumoconiosis and sarcoidosis. In rare cases, miliary lesions can also be observed in the hematogenous spread of carcinomas, and mostly in the form of thyroid and renal cancers and lung metastases of melanomas. The miliary distribution of lung cancers is very rare (1-4).

Lung adenocarcinomas are the most common histological subtype of lung cancer, accounting for around half of all lung cancers. Some 60–70% of adenocarcinomas are located peripherally, and appear as nodules, masses and infiltrations, although adenocarcinomas can also be seen as diffuse or localized parenchymal infiltrates (1–4). We describe here a case of lung adenocarcinoma presenting with diffuse miliary metastasis due to its rarity and unusual radiological appearance.

CASE
A 70-year-old male patient applied to our center with complaints of cough for six months, weakness for the last one month, weight loss of 3–4 kg, and bloody sputum for the last three days. The patient’s left hilum was enlarged, and bilateral diffuse miliary lesions were observed on chest X-ray, and the patient was subsequently admitted to our service.

The patient was a farmer with a 75 pack-year smoking history who was still smoking. Upon physical examination: fever: 36.5 °C, blood pressure: 120/70 mmHg, Pulse Rate: 70/min and respiratory rate: 22/min were recorded. In a respiratory system examination, bilateral mild coarsening was identified in the respiratory sounds. Complete blood count and biochemical tests were normal, and the erythrocyte sedimentation rate was 23 mm/h. A Postero-anterior Chest X-ray revealed left hilar fullness and bilateral diffuse miliary lesions (Figure 1).

In a computed tomography of the thorax (CT), many millimetric nodule images with bilateral and diffuse spread were identified. A pleural effusion reaching 1.5 cm in diameter was observed in the left pleural leaf (Figure 2), and a suspicious mass image was noted in the left peribronchial/paravertebral area, adjacent to the pleura, measuring 6x3.7 cm.

The patient's sputum was three-times negative for Acid-resistant bacillus (ARB). There was no growth in a sputum culture, and the sputum cytology was not diagnostic. Positron Emission Tomography (PET CT) was requested due to the suspicious mass. A primary malignant mass in the left lung was considered compatible with millimetric metastatic nodules in the bilateral lungs and mediastinal lymph nodes, as well as renal and bone metastases (Figure 3).

A video bronchoscopic examination revealed an all-around narrowing and train rail view in the left lower lobe bronchus, where a bronchial lavage and punch biopsy were performed (Figure 4), the histopathological examination of which revealed adenocarcinoma (consistent with the papillary variant).

The patient was referred to the oncology clinic with a diagnosis of Stage 4 non-small-cell lung cancer.

DISCUSSION
Radiologically, miliary lesion diseases are pulmonary sarcoidosis, miliary tuberculosis, lymphoma, pulmonary alveolar microlithiasis, pulmonary histoplasmosis, metastatic lung cancers, talc granulomatosis, early stage of pneumoconiosis and pulmonary hemosiderosis. Miliary metastases of primary lung cancers are very rare (5).
A miliary appearance in the lungs can be seen in many diseases, and Thorax CT and PET scans will help in the differential diagnosis. Pulmonary adenocarcinoma should be considered in cases presenting with miliary shadowing.

CONFLICTS OF INTEREST
None declared.

AUTHOR CONTRIBUTIONS
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