

## HEMOPTYSIS IN BEHÇET'S DISEASE. A CASE REPORT AND REVIEW OF THE PREVIOUS STUDIES

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### INTRODUCTION

Behçet's disease is a systemic disease of unknown etiology and is thought to be leukocytoclastic vasculit (1,2,3). The major criteria of diagnosis are aphthous stomatitis, genital ulcerations, ocular lesions, cutaneous lesions, and arthritis (4). Behçet's disease is a chronic relapsing illness characterized by polymorphic clinical manifestations. Although pulmonary involvement is unusual, it is known that it is particularly more frequent in our country (5,6).

Behçet's disease was diagnosed in a case with hemoptysis in our department. Because the first symptom was hemoptysis, this case was interesting for us. Therefore, we approved to report the case and reviewed other cases in literature.

### CASE REPORT

The patient, a 24 year old male, presented a history of high fever, cough and hemoptysis since 3 months. First, we consulted in our department in August 1986. He had received tuberculostatics and nonspecific antibiotics before our examination. No abnormalities were found on examination. At the first examination, the sedimentation rate was 60 mm/hr. The leukocyte count was 9.500/mm<sup>3</sup>, of which 77 percent were polymorphonuclear cells. Gamma-2 globulin was 21.2 percent in protein electrophoresis. Bronchoscopy and esophagoscopy revealed no abnormalities. Pulmonary radiography showed the bilateral alveolar infiltrates (Figure 1).

After hospitalization, genital ulcerations and apthous stomatitis occurred. Hypersensitivity reactions were seen in the enjection areas. The findings on ophtal-

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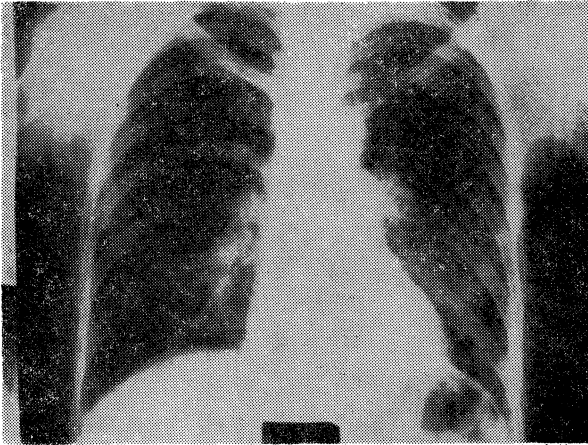


Figure 1. Bilateral alveolar infiltrates consistent with Behçet's disease.

mologic examination were normal. Therefore, we thought that hemoptysis may be secondary to Behçet's diseases. Pulmonary angiography wasn't able to be carried out, since we were afraid of the fact that aneurysms were able to rupture. Therapy comprising 1 mg/kg of prednisone per day was begun and led to a relatively improvement.

## DISCUSSION

According to observations of Firat (7), pulmonary lesions were present about one percent in 245 Behçet patients (190 males and 55 females). Although pulmonary lesions were infrequent, these were fairly good defined. Recurrent pneumonias, pleural effusions, hilar adenopathies, rounded opacities, pulmonary thrombosis, superior vena cava syndrome, and pulmonary artery aneurysms are mainly pulmonary findings in Behçet's disease (8).

The principal pathologic abnormality is vasculitis consisting of infiltration with immunocomplexes, immunoglobulin G, complement 3 and 4 of pulmonary capillaries and venules. Indeed, several histological studies have proved the existence of vasculitis chiefly in the venules and capillaries with infiltration of lymphocytes and plasmocytes (2,3,9).

Pulmonary arteries can also be influenced by the disease and aneurysms may occur. Multiple pulmonary arterial aneurysms are uncommon, but occur preferentially in the peripheral branches of the pulmonary arteries. In Hughes-Stovin syndrome, the multiple pulmonary aneurysms are accompanied by venous thrombosis, especially that of the vena cava (10,11,2). Hughes-Stovin syndrome may be indistinguishable from the pulmonary involvements of Behçet's disease.

The pulmonary lesions can be accompanied by thrombosis of the vena cava in Behçet's disease. Carman et al. (13) observed a such association in four of 12 patients with pulmonary lesions. Ateş et al. (8) also reported three cases with superior vena cava syndrome. Granier et al. (14) observed thrombosis of the superior or inferior vena cava in two of the five patients having three major criteria. One of the characteristics of the disease is involvement of the large vessels, mainly of the veins with a frequency of 24 percent. The venae cava are the veins most often affected. Thrombosis or aneurysms of the aorta or limb arteries have been reported rarely (4,14).

Radiological abnormalities may consist of alveolar infiltrates. as our case, has and rounded opacities. The alveolar infiltrates are probably the radiographic expression of the hemorrhage. Pleural effusion seems to be the common result of pulmonary infarction. Pulmonary angiography makes visible the severity of pulmonary arterial lesions and shows occlusions and aneurysms (4).

From a clinical standpoint, pulmonary, manifestations always occur during exacerbation of the disease (4,13). The most frequent symptom observed in hemoptysis, which is sometimes fatal. Çobanlı (15) reported hemoptysis in 11 of 19 patients with pulmonary lesions. In our case, hemoptysis occurred before the major criteria of Behçet's diseases. Since Behçet's disease is frequent in our country. It is to remembered in differential diagnosis of hemoptysis, even major criteria are not present.

### SUMMARY

In a case, hemoptysis secondary to Behçet's disease was diagnosed in our department,. Therefore, we reviewed the literature concerned with this disease.

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