



## Thyrotoxicosis due to interferon therapy in patient with behcet's uveitis

### Behçet Üveitli Hastada İnterferon Tedavisi Sırasında Gelişen Tirotoksikoz

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Dear Editor,

Immunosuppressive therapy, interferon alfa-2a , is an effective treatment option and used for Behçet's panuveitis 1-2). The percentage of the serious side effects of the interferon therapy has been reported about 5% during Behçet uveitis. These side effects are severe fatigue, psoriasis, epileptic seizures, mastodynia, vitiligo and hyperprolactinemia (3-5). Symptomatic autoimmune thyroid disease which is as another side effect is well-studied in patients with chronic hepatitis C using interferon alfa-2a. Autoimmune thyroid disease was detected by 3.9% in chronic hepatitis C patients using interferon therapy (6). Here, a woman case of thyrotoxicosis using the interferon alfa-2a treatment due to resistant panuveitis associated with Behçet's disease is aimed to be discussed.

Case: A thirty-seven-years-old female patient was diagnosed as Behçet's disease in the year of 2006. At that time, she had oral ulcers, retinal vasculitis, erythema nodosum and a positive pathergy test. She did not receive her medical follow-up regularly and took colchicine and azathioprine in an irregular and intermittent manner. Colchicine treatment was started again for active genital ulcers and erythema nodosum 5 months before the uveitis attack. The patient had left eye panuveitis in October of 2014. There was a complete loss of vision of her left eye. Corticosteroid and azathioprine therapy was started. but the uveitis was resistant to this therapy and interferon alfa-2a therapy (9 million IU, 3 times a week) was initiated. She had a complete remission with this dosage and the therapy was switched to a dosage of 4.5 million IU, 3 times a week as a maintenance therapy.

She admitted to the hospital with some complains during the 3rd month of the interferon therapy. She told us that she felt unwell, fatigue, nervousness, sweating, palpitations and loss of hair. Physical examination also revealed tachycardia. Behçet's pulmonary artery thrombosis or aneurysm was suspected and she had plain radiographs and computed tomography (CT) for the lungs. But the X ray and CT was normal. We could not think any other distinct pathology in the first diagnostic attempt but we have sent biochemistry, complete blood count and the thyroid tests to the laboratory during the investigation. We have reached the exact pathology after a few hours later. The patient's complaints were result of the thyrotoxicosis. Her Thyroid stimulating hormone was 0.008 with freeT4=6,64 freeT3=13.41. We don't think the thyrotoxicosis at first line even some clinical clues suggest it. Since the thyroid tests were normal before the interferon treatment. After the repeated thyroid function tests pointed out thyrotoxicosis, interferon therapy was considered as leading reason. Propranolol and methimazole were initiated, and Interferon was stopped at the same time. Her clinical situation and the thyroid tests became normal after a couple of weeks.

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Then she was also examined for the Graves Disease but the TSH receptor antibody was negative and the other hyperthyroidism causes were excluded by the endocrinology department.

Behcet is a unique disease with unknown etiology characterized by unpredictable flares that can involve many organs and systems. The course of the disease and the treatment approaches show heterogeneity. Not only the clinical pictures of the patients, but also the side effects of the immunosuppressive agents emerge difficulties. The clinicians, who treat the patients with Behcet, have to be ready for the course of disease and of course the side effects of the drugs. Interferon alfa-2a is one of these drugs. Thyroid abnormalities that can be seen during this treatment may be in the form of hypothyroidism or hyperthyroidism. The patients with Behcet's disease under interferon therapy should be monitored for the thyroid function tests and the thyroid abnormalities also have to be remembered if any clinical symptoms are present.

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