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Choreiform movements associated with pegylated interferon-alpha in a patient with chronic hepatitis C

Kronik hepatit C'li bir hastada pegile interferon-alfa ile ilişkili koreiform hareketler

To the Editor,

Combination of pegylated interferon-alpha (PEG-IFN-α) plus ribavirin is the first-line treatment of chronic hepatitis C virus (HCV) infection. Common side effects are flu-like symptoms and reversible hematologic cytopenia. However, neuropsychiatric side effects, such as depression, cognitive disturbances, anxiety, mania, and psychotic states (1), and more rarely, movement and extrapyramidal disorders, such as chorea, parkinsonism, akathisia, dystonia, and myoclonus, can be observed (2). We report herein choreiform movements associated with the use of PEG-IFN-α 2b in a patient with chronic HCV.

A 67-year-old woman with chronic HCV infection was admitted to our clinic, and PEG-IFN-α 2b 100 mcg weekly plus ribavirin 1000 mg daily was started. At the fifth month of treatment, the patient was admitted to the hospital with the complaints of involuntary, irregular, jerky movements of the legs and "piano-playing" finger motions. She was evaluated by a neurologist and diagnosed as chorea. Mini-Mental State Examination and cognitive functions were normal. Electroneuromyography revealed motor neuropathy. Electroencephalogram, cranial magnetic resonance imaging and 24-hour urinary copper level were normal. Kayser-Fleischer ring was not detected with split lamp examination. Acanthocytes were not observed on peripheral blood smear. Autoimmune markers, antiphospholipid antibodies, anti-human immunodeficiency virus (HIV), and serologic tests for syphilis were negative. There was no mutation on DNA analysis for Huntington's disease (HD). We considered that this condition may be associated with PEG-IFN-α. Treatment was stopped, and choreiform movements gradually decreased and had completely resolved in a three-month period.

Chorea is defined as abrupt, unpredictable and nonrhythmic involuntary movements resulting from continuous random flow of muscle contractions. Genetic choreas such as HD, neuroacanthocytosis and benign hereditary chorea, Wilson disease, basal-ganglia lesions, infectious and autoimmune disorders, metabolic or toxic encephalopathies, and drug-induced chorea should be considered in the differential diagnosis (3).

Interferon (IFN)-α-induced choreiform movements were reported in five cases (2,4-7). Two of these cases were treated with PEG-IFN-α for HCV (2,4). In these reports, only one patient had a prior history of HD (4). The time between the initial expo-

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sure to IFN and the appearance of symptoms may be variable. Symptoms generally resolve following the cessation of the drug (3). IFN-α therapy may induce choreiform movements due to affecting the dopaminergic pathways. It may act as a dopamine antagonist in the long term and may cause choreic movements by dysfunction of basal ganglia-thalamocortical loops (6).

In conclusion, movement disorders can be observed as rare complications of PEG-IFN-α. Physicians should be aware of these rare neurologic side effects during therapy.

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Clinical remission after strict gluten-free diet in a patient with celiac disease, advanced cryptogenic cirrhosis and splenic atrophy

Çölyak hastalığı, ilerlemiş kriptojenik siroz ve splenik atrofisi olan olguda glutensiz diyet sonrası klinik remisyon sağlanması

To the Editor,

Splenic atrophy and liver cirrhosis are known complications of celiac disease (CD). We report a case with CD associated with decompensated cryptogenic cirrhosis and splenic atrophy who was withdrawn from the liver transplantation schedule after adhering to a strict gluten-free diet.

A 58-year-old man with a history of intermittent diarrhea for 10 years and of abdominal swelling and edema in the legs for six months was admitted to our clinic in September 2009. The patient reported having 10 to 12 defecations without blood per day for the last two months. There was no relevant family, alcohol, or drug history. On the physical examination, there were no pathological findings except muscle weakness, tense ascites and bilateral pretibial edema. Laboratory investigation revealed the following: hematocrit: 26.8%, hemoglobin: 8.5 g/dl, platelets: 384000/mm^3, white blood cells: 5060/m^3, aspartate aminotransferase (AST): 106 U/dL, alanine aminotransferase (ALT): 69 U/dl, alkaline phosphatase: 403 U/dl, gamma glutamyl transferase: 93 U/dl, total bilirubin: 0.6 mg/dl, total protein: 6.1 g/dl, albumin: 2 g/dl, prothrombin time: 18.6 seconds, international norma-

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