CASE REPORT

WILSON’S DISEASE PRESENTING AS ISOLATED OBSESSIVE-COMPULSIVE DISORDER

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ABSTRACT

Wilson’s disease (WD) is a genetic neurodegenerative disorder; it exhibits wide heterogeneity in symptoms and usually presents with liver disease and/or neuropsychiatric manifestations. The common neurological manifestations observed are dysarthria, gait disturbance, dystonia, rigidity, tremor, dysphagia and chorea. The frequent psychiatric manifestations reported are personality and mood changes, depression, phobias, cognitive impairment, psychosis, anxiety, compulsive and impulsive behavior. Isolated obsessive-compulsive disorder (OCD) is a rare presentation of WD. Reported herein is a case of a 17-year-old boy with isolated OCD. He presented to the psychiatrist with symptoms of contamination obsessions and washing compulsions, along with compulsion of repeated feet tapping, and was treated with adequate doses of fluoxetine for 6 months but did not improve. Later on, he was diagnosed as a case of WD and showed improvement with chelating and behavior therapy. This implies the importance of the occurrence of isolated psychological symptoms in WD.

Key words: Obsessive-compulsive disorder, psychiatric manifestations, Wilson’s disease

INTRODUCTION

Wilson’s disease (WD) is a rare autosomal recessive genetic disorder. The genetic defect is localized to chromosome arm 13q and has been shown to affect the copper-transporting adenosine triphosphatase (ATPase) gene (ATP7B) in the liver.[1] The disease usually presents in the first or second decade with hepatic and/or neuropsychiatric manifestations. Personality and mood changes, depression, altered sleep and appetite, inability to concentrate, lack of initiative, phobias, obsessive thoughts and compulsive behavior, panic attacks and lack of appropriate emotions are the common psychiatric manifestations, reported as presenting features and during treatment of WD.[2-6]

We are discussing a rare case that presented exclusively as OCD and diagnosed as WD. Probably; this presentation of WD is not published earlier in the literature.

CASE REPORT

A 17-year-old boy presented to the psychiatrist with contamination obsessions and washing compulsions, along with repeated feet tapping, since 1 month. He started wearing only new undergarments and used to change comb and handkerchief daily. Repeated feet tapping, even during night hours, disturbed his sleep pattern also. He described these thoughts as being of his own and recognized them to be ‘irrational.’ Their compulsions relieved his anxiety to some extent but disturbed his studies. He did not have any history of involuntary movements, drooling of saliva, bulbar symptoms, gait difficulty, jaundice or any psychiatric illness. None of his siblings had similar illness.

He was diagnosed as a case of OCD, and the severity of symptoms and response to treatment were assessed on Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) (severe, score - 30). He received fluoxetine at an initial dose of 20 mg/day, which gradually increased to 60 mg/day over the next 4 weeks. After 6 months, when he did not show any improvement (Y-BOCS score - 32), CT scan of the brain was done, which revealed a hypodense lesion in right caudate, he was referred to us for ruling out the organic cause of his illness.

His general physical examination disclosed normal power, tone, reflexes, coordination and gait. There were no abnormal or involuntary movements. The sensations were also normal. He did not have cerebellar signs.

The biochemical investigations revealed normal hemogram, blood sugar levels, renal and thyroid profile. The liver enzyme levels – SGOT: 36 U/l (normal range=5-42 U/l); and SGPT: 33 U/l (normal range=5-45 U/l) – were normal. The serum copper level 0.66 µg/ml (normal range=0.15-0.60 µg/ml) was low; and 24-hour urinary copper level 3143 µg/24 h (normal range=32-64 µg/24 h) was high. The electroencephalogram was normal. MRI of brain showed atrophy of right caudate nucleus, along with the altered signal intensity in right lentiform nucleus [Figure 1].

He was treated with D-Penicillamine (750 mg/...
In conclusion, isolated OCD is a rare presentation of WD. Young patients of OCD and those poorly responding to adequate psychiatric treatment should always be subjected to neurological examination to look for the organic cause, especially for WD. WD is a treatable disorder if diagnosed early, and the OCD symptoms in these patients can be managed with chelating and behavioral therapy.

REFERENCES