

Catatonia as a Symptom of Obsessive Compulsive Disorder: A Case Report

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Abstract Catatonia can occur in the courses of psychiatric disorders, neurological diseases or due to various drugs. It is rarely seen in obsessive compulsive disorder (OCD). This paper presents a case of OCD with catatonia as a compulsive symptom. The description of catatonia neurobiology may contribute to a better understanding of OCD neurobiology.

Keywords Catatonia, Obsessive compulsive disorder, Neurobiology

1. Introduction

Catatonia has been defined as a state where the clinical picture is dominated by at least three of the following: stupor, catalepsy, waxy flexibility, mutism, negativism, posturing, mannerism, stereotype, agitation, grimacing, echolalia, echopraxia [1]. The etiology of catatonia is not known exactly. It has been suggested that basal ganglia modulation impairment occurring due to insufficient cortical gamma-aminobutyric acid (GABA), a primary inhibitory neurotransmitter, may explain the motor symptoms of catatonia [2].

Catatonia was classified as a separate category in DSM-V in contrast to DSM-IV which classified it as a subtype of schizophrenia. It can occur in the courses of psychiatric disorders such as bipolar affective disorder, neurological diseases or due to various drugs [1]. Catatonia is rarely seen in obsessive compulsive disorder (OCD). This paper presents a case of OCD with catatonia as a compulsive symptom.

2. Case report

The patient was a 20-year old single male. He was a high school graduate and was unemployed at the moment. He lived in Germany with his mother. The patient who was admitted accompanied by his mother with complaints of loss of motivation, adjustment difficulties and freezing was evaluated in the outpatient clinic. The patient was socially withdrawn for the past 3 years, continuously seen thinking alone. He told his mother that he couldn't 'find the files in his head'. In the course of the disorder he started to freeze

in a certain position for hours, once or twice a week. This symptom could occur while he was tying his shoes or drinking water. During these fits he could not respond to verbal stimuli. The fits usually lasted for 30-60 minutes and ended as the patient repeated his last behavior before the fit. He had been hospitalized twice in Germany. He had never received electroconvulsive therapy. He had been on pharmacotherapy with aripiprazole 30 mg per day, quetiapine 500 mg per day and risperidone 5 mg per day for the last year. Psychiatric examination revealed a flattened affect, unwillingness for the interview and withdrawal. The patient was hospitalized. Biochemical analysis, sleep electroencephalography and cranial magnetic resonance imaging were unable to explain the symptomatology. The patient's Bush Francis Catatonia Rating Scale score was 15. Pharmacotherapy was carried out as aripiprazole 30 mg per day, biperiden 4 mg per day and pimozide 2 mg per day. ECT was begun because of no responsiveness to pharmacotherapy. After the third session of ECT, recurrent ritual behavior and posturing were observed. The Yale Brown Obsessive Compulsive Scale which was conducted for a probable diagnosis of OCD was scored as 26. The patient had obsessions such as trying not to forget thoughts in case they become needed and being able to pass to another thought after touching things. Pimozide was discontinued. Aripiprazole dose was decreased to 20 mg per day. Fluvoxamine 100 mg per day and clonazepam 6 mg per day were added to the treatment regime. ECT was discontinued after the 10th session. The patient was discharged with partial remission on aripiprazole 20 mg per day, clonazepam 2 mg per day and fluvoxamine 200 mg per day. The status of partial remission was seen to continue on the third month follow up interview.

3. Discussion

Catatonia is rarely seen together with OCD and there are

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a limited number of case reports in the literature [3-6]. While catatonia is classified as a subtype of schizophrenia in DSM IV, later, as it is observed in other psychiatric illnesses, especially in bipolar affective disorder (BAD), and in some medical conditions, it is considered as a clinical condition evaluated in a different category in DSM V. In literature, catatonia was reported to be seen in bipolar disorder, major depressive disorder, autism, Tourette disorder, secondary basal ganglia disorders, and most frequently in BAD, especially in mix episode [7-11]. Hermes *et al.* reported 2 cases with bizarre posturing due to obsessional thoughts who responded to anti-obsessive medication [4]. This paper presents a case of compulsive posturing secondary to obsessional thoughts. In a case presented by Fontenelle *et al.* catatonic symptoms in an OCD patient were thought to be symptoms of comorbid bipolar affective disorder [5]. In the case presented in this paper the posturing following obsessions was considered to be a compulsion. In this case, bipolar disorder was not considered. The posturing following thought obsession was evaluated as compulsion. His Compulsion was clinically so evident that he was only able to bring his thought obsessions after it was partially opened through ECT therapy.

The etiological cause of catatonia and OCD comorbidity is not fully understood. Catatonic symptoms were associated with frontal, parietal lobes, basal ganglia, pons, cerebellum and corpus callosum lesions [12-14]. Additionally, in catatonia and OCD, involvement of dopaminergic hyperactivity was reported. Increased dopaminergic activity in the basal ganglia upon removal of serotonin control on dopamine may cause catatonia symptoms [15, 16]).

Benzodiazepines, ECT and antipsychotics are used in treatment. Reducing dopaminergic activity especially on GABA with benzodiazepine, catatonia symptoms are decreased. In our case, aripiprazole, fluvoxamine, benzodiazepine, and ECT therapy was used. After fluvoxamine and clozapine was started, the patient's condition dramatically improved. In a case presented by Mukai, improvement was achieved with fluvoxamine, lorazepam, aripiprazole and memantine [6].

The case presented in this paper benefited from fluvoxamine, aripiprazole, benzodiazepines and ECT. As a consequence, the description of catatonia neurobiology may contribute to a better understanding of OCD neurobiology.

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