

Psychopharmacological Treatment of Trichotillomania in an Adolescent Case: Significant Improvement with Aripiprazole Augmentation

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ÖZET:

Bir ergen olguda trikotilomaninin psikofarmakolojik tedavisi: Aripiprazol augmentasyonu ile belirgin iyileşme

Trikotilomani (TTM), kişinin saçını belirgin bir açıklık bırakacak şekilde koparmasıyla karakterize, kronik bir dürtü kontrol bozukluğudur. TTM'nin başlangıç yaşı genellikle ergenlik döneminde olmaktadır. TTM tedavisinde, birçok farmakolojik ajan ve psikoterapi (özellikle bilişsel davranışçı terapi) yöntemleri kullanılmasına rağmen literatürde henüz bu konuyla ilgili bir görüş birliğine varılamadığı görülmektedir. Bu yazıda, trikotilomani semptomları aripiprazol tedavisine yanıt veren 15 yaşında bir ergen olgu bildirilmiştir.

Anahtar sözcükler: trikotilomani, dürtü kontrol bozukluğu, ergen, tedavi, aripiprazol

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ABSTRACT:

Psychopharmacological treatment of trichotillomania in an adolescent case: significant improvement with aripiprazole augmentation

Trichotillomania (TTM) is a chronic impulse control disorder characterized by pulling out one's own hair, resulting in noticeable hair loss. The emergence of TTM is generally in adolescence. A number of pharmacological agents and psychotherapy (especially cognitive-behavioral therapy) have been used in the treatment of TTM but in the literature, no consensus has yet been established. Here, we report the case of a 15-year-old adolescent with trichotillomania who responded to aripiprazole treatment.

Keywords: trichotillomania, impulse control disorder, adolescent, treatment, aripiprazole

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INTRODUCTION

Trichotillomania (TTM) is a mental disorder defined in 1889 through investigation of a patient who pulled out her hair and evaluated as a type of alopecia¹. The disorder is characterized by pulling out hair resulting in repetitive and noticeable hair loss. The patient reportedly feels tension before hair pulling and gratification during hair pulling². It is classified as "Impulse Control Disorder, not classified elsewhere" according to the DSM-IV³.

Consideration of the literature about TTM, which has been thought to be rare and not take place in psychiatry, reveals that it is much more common than considered and affects

approximately 1-3.5% of the adolescent and young adult population⁴. Two subtypes which begin in childhood and adolescence have been described for TMM⁵. The age of onset is reported to be 18 months for the subtype beginning in childhood and 13 years for the subtype beginning in adolescence^{5,6}. Childhood TTM is usually evaluated as a habit disorder which the child does for relief and response to therapy is better^{5,6}. Adolescence TTM is a clinically more severe condition and evaluated as real TTM^{2,5}.

Although TTM may be seen at any hairy site of the body, the scalp is usually chosen as the target by patients followed by the eyebrows and eyelashes. The affected area is usually vertex of the

scalp followed by the temporoparietal, occipital and frontal regions⁷. Patients may be seen to wear hats or wigs or to try to cover the alopecia area with long hair⁵.

Hair is usually pulled out one by one. A “just right” sensation, which resembles the subjective process accompanying compulsions and tics, is of importance for deciding which hair will be pulled out. The hair in the region is searched and the most appropriate hair is selected. The pulled out hair is stated to be different from others in terms of thickness, curl and hardness. The harm to the pulled hair results in growing a shapeless new hair and this new hair will be targeted in a later stage^{2,5}.

There is not a consensus on treatment of TTM and psychopharmacologic and behavioral methods need to be used together. Selective serotonin reuptake inhibitors (SSRI)^{8,9}, typical/atypical antipsychotics^{10,11}, lithium¹², valproic acid¹³, topiramate¹⁴, naltrexone¹⁵, N-acetyl cysteine¹⁶ are used in pharmacologic treatment of TTM. In addition, cognitive behavioral therapy (CBT) is one of the most important methods of treatment. In particular “habit reversal training” is reported to be more beneficial than other behavioral techniques¹⁷.

Case Presentation

A 15-year-old girl was admitted to our clinic with the complaint of “hair pulling”. It was learned that her complaints had begun 2 years ago and there were no previous stressors; she was started on sertraline 25 mg/day with a diagnosis of TTM and elevated to 50 mg/day one week later. She used this drug regularly for 1.5 months and discontinued thereafter as she did not perceive any benefit and gastrointestinal side effects (dyspepsia) developed.

In her medical history, motor-mental development was normal and she did not have any significant diseases or trauma. In her family history, it was learned that her brother was being treated for obsessive-compulsive disorder (OCD) and her mother for generalized anxiety disorder (GAD).

In the first visit, she was wearing a hat due to hair loss. On her mental state examination, her general appearance was consistent with her age, she was conscious, orientation was full and self-care was normal. Spontaneous and unprompted attention, memory, perception and clinical intelligence levels were evaluated as normal. Speech and thought were normal. There were intensive thought about hair pulling. Her mood was euthymic, her affect was consistent with her mood. Sleep and appetite were normal and physical and neurologic examinations were normal.

When a detailed anemnesis was obtained, it was learned that an intensive desire for hair pulling had been occurring for 2 years. She could not stop this desire; she thought that the pulled hair was different from others; she felt tension before pulling hair and she felt relief after pulling hair.

Her Beck Depression Inventory (BDI) scale score was 5 at the first visit. She was evaluated as “5” (markedly ill) according to the Clinical Global Impression Scale (CGI-S). She was diagnosed with “trichotillomania” according to the DSM-IV-TR. Fluoxetine was planned to be started at a dose of 10 mg/day and elevated to 20 mg/day five days later. Psychoeducation was done. Cognitive behavioral recommendations targeted at teaching her to delay pulling out hair when she felt the sensation for it or to replace it with another activity pattern were given. At the second visit four weeks later, it was learned that she was compliant with drug therapy however, the hair pulling complaint continued with the same severity and frequency. The fluoxetine dose was gradually elevated to 30 mg/day. Her complaints were seen to continue four weeks later, so the fluoxetine dose was elevated to 40 mg/day and aripiprazole 2.5 mg/day was added and elevated to 5 mg/day one week later. The patient was seen again four weeks later and it was observed that there were no side effects due to fluoxetine and aripiprazole, she could partially comply with cognitive behavioral recommendations and the hair pulling complaint was significantly reduced compared to beginning

of the treatment. She scored 2 points on BDI. She was evaluated as “2” (borderline mentally ill) according to the Clinical Global Impression Scale (CGI-S). Her treatment continues at our outpatient clinic.

DISCUSSION

In this paper, an adolescent patient with trichotillomania who did not benefit from fluoxetine treatment and significantly improved with the addition of a low dose of aripiprazole is reported. Although it is accepted that trichotillomania has two subtypes beginning in childhood and adolescence⁵, trichotillomania which begins in adolescence is considered to be the real trichotillomania^{2,5}. In the literature, TTM is reported to usually begin before 20 years of age and to be most common between 11-15 years of age^{5,18}. Complaints were reported to begin around 13 years and the patient was diagnosed with TTM at another center. The targeted field is usually the scalp in TTM⁷. Patients may be observed to wear a hat or wig or try to cover the bald area with long hair⁵. Complaints were concluded to be related with hair pulling also in our case. Her coming to the interview by wearing a hat suggested that she tended to cover the space arising from hair pulling with a hat. Our case is consistent with the literature in that respect.

Many factors are considered to play a role in the etiology of TTM and stressful life events are considered to initiate the disorder in more than one fourth of the cases¹⁸. A significant life event was not detected in our case. However, considering that our patient was an adolescent, the stress caused by psychodynamic and physical changes that this period could bring could be effective for development of the disease. In the literature, TTM is stated to be a disease in the spectrum of OCD or tic disorder^{4,5,9}. The presence of OCD in her sibling and GAD in her mother suggested that she could be genetically susceptible to the diseases in the spectrum of anxiety disorders or impulse control disorders.

There is no consensus in the literature about

treatment of TTM. Various medications have been used in pharmacotherapy. Although most papers are case reports, open ended studies are also available^{19,20}. Long term follow ups have not been encountered. Studies are available both indicating that SSRIs are effective^{21,22} and not detecting a significant difference from placebo²³⁻²⁵. Sufficient response could not be obtained with long term and appropriate dosing of fluoxetine. This condition is consistent with the studies indicating that SSRI use alone is not effective. Considering that TTM is included in the spectrum of OCD or tic disorder, reports have indicated that atypical antipsychotics are used alone or in combination with SSRIs in treatment of TTM^{19,20}.

Most of the reports are about olanzapine or risperidone and studies about aripiprazole are few^{20,26-28}. To the best of our knowledge, aripiprazole has been added to TTM treatment with a SSRI in only one TTM case in childhood and adolescence and a satisfactory result was obtained. In that single case report in the literature, aripiprazole 10 mg daily was added to 50 mg daily sertraline treatment and hair-pulling frequency was reduced²⁸. Fluoxetine treatment alone which was used for a satisfactory period did not provide benefit in our case. It was suggested to add aripiprazole to treatment considering that fluoxetine treatment was not effective alone and she could discontinue use of the medication. The dose was gradually increased to 5 mg daily. Complaints of the patient were observed to decrease significantly on her control. Improvement was considered to be related to aripiprazole added to the fluoxetine, which had been used for an appropriate period and dose but was not be effective. The patient is being followed up.

To the best of our knowledge, our case is the second that has been shown to respond to aripiprazole added to SSRI for treatment of TTM. Aripiprazole is accepted as a dopamine balancer, and while it shows an antagonistic effect on 5HT_{2A} receptors, it shows a partial agonistic effect on D₂ and 5HT_{1A} receptors, differently from the other antipsychotics²⁹. Effectiveness of aripiprazole in

TTM treatment is considered to develop through increasing serotonergic conduction and improving motor inhibition by stabilizing dopaminergic conduction particularly in the prefrontal cortex^{20,27,28}.

Data about TTM treatment in childhood and

adolescence seem to be limited to case reports. It is clear that long term controlled studies with large samples are required in order to better understand the effectiveness of psychopharmacologic and BDT applications and to compare treatment options.

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