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## Case Report

Trichotillomania: a rare disorder

## Trichotillomania: a rare disorder

Sadia Afrin Shampa, Niaz Mohammad Khan, Md. Sultan - E - Monzur, Rubina Hossain

**Abstract:** Trichotillomania (TTM) or hair pulling disorder is a debilitating psychiatric condition characterized by recurrent, irresistible urge to pull out one's own hair that leads to hair loss and marked functional impairment. This is a case report about a 21-year-old female from urban background who presented with the complaints of repeated hair pulling for last 4 years. On mental state examination, she revealed obsessive thoughts about hair pulling and compulsive act of pulling out hair from scalp region. Other medical causes of such condition were excluded. Both pharmacological and psychological intervention were given for management of the patient.

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**Keywords:** Trichotillomania; treatment of trichotillomania; rare disorders.

### Introduction

Trichotillomania (TTM) or hair pulling disorder is often a debilitating psychiatric condition, characterized by recurrent and irresistible urge to pull out of one's own hair that leads to hair loss and marked functional impairment.<sup>1</sup> This disorder was first mentioned by Aristotle in 4th century but was not considered as a medical condition back then. Later on, French dermatologist Francois Hallopeau in 1889 again documented a case about TTM.<sup>2</sup> TTM usually begins in adolescence with a lifetime prevalence reported as high as 3.5%.<sup>3</sup> Female predominance is seen in adult life with a male to female ratio of about 9:1.<sup>4,5</sup> There have been twin studies that demonstrated genetic anomalies associated with TTM and other OCD related disorders.<sup>6</sup> Positron Emission Tomography (PET) and Single Photon Emission Tomography (SPECT) studies have shown higher cerebral glucose metabolic rates in the cerebellum and right parietal cortex.<sup>7</sup> Dopamine system also plays a huge role in this condition and patients often reported that they were in stressful situations or boredom before hair pulling.<sup>8</sup> Pulling can be undertaken from any bodily region with hair but scalp is the most common site (72.8%), followed by eyebrows (56.4%) and pubic region (50.7%).<sup>9</sup> Some

patients with TTM ingest the pulled hair which in the long run, can form hairball in the stomach and cause intestinal obstruction. Anaemia, vomiting and restless leg syndrome are also associated with TTM. Most commonly employed psychological techniques for the treatment of TTM are habit reversal training and cognitive behavioral therapy. Aripiprazole, olanzapine and quetiapine have shown positive results in treating TTM.<sup>1</sup> In habit reversal training, the person is made to be aware of the situation or emotion that causes hair pulling. Once this solidifies, then they are taught how to distract their thought and do some other act instead of hair pulling by applying cognitive behavioral techniques.

### Case Report

A 21-year-old young lady visited the Outpatient Department of National Institute of Mental Health, Dhaka in January, 2021. She belonged to a middle socioeconomic group and had well educated, supportive parents. Patient was unmarried, studying in a reputed university, eldest among two siblings. She stated that 4 years back, one day

her private tutor noticed that while studying she kept on pulling her hair and a moderate amount of torn hair was on the floor. According to the patient, she did it unconsciously and was herself surprised. Gradually she started to notice that she was repeatedly pulling her hair. On asking, she described that she felt a sense of tingling in the root of her hair followed by an urge to pull. She tried to stop herself but she failed most of the time. When an episode started it continued for minutes to hours for several times in a matter of one day. She stated she spent more than one hour per day for last four years in this specified pattern of behaviour. Frequency of the episodes used to increase when she was alone. After pulling her hair she felt a sense of relief. But as she developed bald patches all over her head due to hair pulling, she developed extreme consciousness about her appearance and started to cover her head whenever she went out in social gatherings. She stated this condition was causing her marked distress. Then one year back she made herself bald thinking it would solve the problem. But as her hair grew back, her condition recurred. During observation, she was wearing a head cover and when she was asked to reveal her head for examination purpose, three areas of bald patches were noticed. On mental state examination, her mood was found to be depressed because of her condition. She had repeated urge to pull her hair, following a tingling sensation at the root of her hair which was accompanied by a compulsive act of pulling hair out. The thoughts and actions caused her marked distress but she was unable to stop the urge even when she tried to. She visited various doctors, particularly dermatologists for this condition but there was no improvement. Among other conditions, alopecia areata is a condition where bald patches are found clinically but it was already excluded by a dermatologist. All her routine investigations including CBC, TSH levels were within normal range. Her treatment was started with fluoxetine (20 mg) along with quetiapine (25 mg), and habit reversal techniques were applied. We advised her to take regular medications and taught her technique to keep her hands away from scalp along with mindfulness. After 2 months when she came for follow up, she stated that she was feeling less stressed lately and her number of episodes of hair pulling had also reduced. She was advised to continue same treatment along with psychotherapy. Regular follow up every 3 months was suggested.

## Discussion

TTM lies under impulse control disorder. According to DSM-5,<sup>10</sup> diagnosis can only be made if the criteria are met

for recurrent hair pulling or plucking resulting in visible hair loss, repeated attempts to decrease or stop hair pulling, the hair pulling causes clinically significant distress or impairment in social, occupational, or other important areas of functioning, the hair pulling is not attributable to the psychological effects of a substance (e.g., cocaine) or another medical condition (e.g., scabies) and the hair pulling is not better explained by symptoms of another mental disorder. All these criteria must be met in order to rule out other conditions like alopecia areata, tinea capitis, monilethrix, etc. The usual age of onset of TTM is 9-13 years, but in one study it has been documented in a 44-month-old female child with early onset.<sup>11</sup> Female predominance is seen in adult life with a prevalence of around 3.5%.<sup>12</sup> Most of the episodes start following boredom or stress. Our patient fulfilled all the above criteria and her episode mostly started from either boredom or stress. It was reported in 2016 that surgeons removed a hairball weighing 2 kg from the stomach of a teenage girl in Bangladesh.<sup>13</sup> Our case was asked questions about pulled hairs but she denied such behaviour.

A wide range of treatments are advocated to alleviate symptoms of TTM that include psychological techniques like cognitive and behavioral therapy, supporting counselling, support groups, hypnosis and medications such as clomipramine, naltrexone, N-acetylcysteine and atypical antipsychotics specially olanzapine.<sup>14</sup> Cognitive behavioral techniques have large effect size but relapse following acute treatment is a problem; and selective serotonin-reuptake inhibitors (SSRIs) is generally less efficacious than other treatments in reducing hair pulling symptoms.<sup>15</sup>

## Conclusions

Patients with TTM rarely seek medical help. A person with TTM can face devastating social, psychological or medical consequences. TTM requires a multidisciplinary approach with the involvement of psychiatrist, dermatologist, clinical psychologists. Exposure to TTM among the physicians are also less common. Proper cognitive behavioural therapy, habit reversal training and pharmacological treatment should be implemented as it requires prolonged monitoring for improvement.

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