

# A Case Report On Trichotillomania with Onset During Covid-19 Pandemic

S, Mubeena<sup>1</sup>, Cherak R Marak, Steve<sup>2</sup>, Lenin, RK<sup>3</sup>

<sup>1</sup>(Postgraduate trainee-3, Department of Psychiatry, RIMS, Imphal, Manipur)

<sup>2</sup>(Postgraduate trainee-3, Department of Psychiatry, RIMS, Imphal, Manipur)  
(Professor and Head, Department of Psychiatry, RIMS, Imphal, Manipur)

**Abstract:** A case of 23-year-old female with 3-year history of intense desire to pull her hair from scalp which relieved after pulling resulted in diffuse hair loss over the scalp. This behaviour started as a result of anxiety and boredom caused by lockdown of COVID 19. The patient was treated for Alopecia areata multiple times without any results referred from dermatology clinic was diagnosed with Trichotillomania. She had co morbid moderate anxiety and depression. patient was treated with a combination of Fluoxetine and psychotherapy in the form of Habit reversal Therapy aided with Jacobson's Progressive Muscle Relaxation (JPMR) exercise and diaphragmatic breathing. The combined approach has reduced the debilitating behaviour of the patient.

**Keywords:** COVID-19, Alopecia areata, Trichotillomania, Habit Reversal Therapy, JPMR

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## I. Introduction

Trichotillomania (TTM) is an understudied condition that involves chronic, repetitive hair pulling leading to noticeable, unwanted hair loss. Prior to DSM-5, TTM was classified as an impulse-control disorder. In DSM-5, the authors re-classified TTM as obsessive-compulsive disorder (OCD)-related, in a new chapter that also includes body dysmorphic disorder (BDD), hoarding disorder, and skin picking (excoriation) disorder (SPD); a similar grouping will appear in ICD-11.<sup>[1]</sup>

Environmental and internal factors, including boredom, activity restriction, emotional reactivity, stress response, abnormalities in perceptual sensitivity, dissociation, and trauma history may all contribute to symptom provocation and exacerbation of BFRBs.<sup>[2]</sup>

In the general population, the 12-month prevalence for trichotillomania in adults and adolescents is 1%-2%.<sup>[3]</sup> The disorder is more common in females and has its onset during puberty (10–13 years).<sup>[4]</sup>

Societal changes from the COVID-19 pandemic present a unique challenge to those with BFRBs (body focused repetitive behaviours). Rapid implementation of changes to daily life, including COVID-19 social distancing directives, increased social isolation already experienced by those with BFRBS escalating anxiety and symptom severity.<sup>[5]</sup>

## II. Case Report

Miss X , a 23-year-old female patient from lower socioeconomic status was referred to psychiatry department by dermatology clinic where she was presented with complaints of diffuse hair loss over the scalp for past 3 years.

Patient was a high school dropout, who used to go for weaving for a living. As lockdown due to COVID-19 pandemic started, source of income stopped and the patient started having stress and boredom. This initiated the intense desire of pulling of hair. Her family members noticed her excessive hair loss as they saw clumps of hair falling around her. She was taken to dermatologists and treated for Alopecia areata multiple times. But her condition remained the same.

Later on, the family members noticed that the patient is pulling her hair herself while watching TV or at times when she is angry. She expressed intense desire to pull hair which reduced after pulling and if she doesn't do it, she feels uneasy. She was often found biting the hair but denied swallowing it. The patient started avoiding gatherings out of shame and developed low self-esteem. This in turn increased the intensity of symptoms. She started wearing towel or hair cap even at home. There was no history of odd belief about her body or plucking of hair from any other part of body or psychotic symptoms.

On MSE the patient was found covering her head with a towel. Diffuse hair loss over the scalp with sparing of occipital region and broken hairs of various length were noted. She was depressed and expressed worry about her looks. On Hamilton Anxiety rating scale (HAM -A) moderate features of anxiety and on

Revised Hamilton rating scale for depression (HAM-D) moderate depression was revealed. Patient was diagnosed as a case of Trichotillomania as per ICD 10. She was started on Fluoxetine 20 mg and gradually increased to 40 mg in further visits. Along with pharmacotherapy, psychotherapy was also given.

In the first session patient and family members were explained about TTM, its prevalence, causes and treatment approaches. Concept of Habit Reversal Therapy (HRT) was introduced. A questionnaire related to the activating event, behaviour and consequences was given and made it mandatory to fill it on a daily basis.

In the second session feedback for the previous session was taken and self-monitoring form was assessed. It was found that hair pulling has occurred during her free time while watching TV, while looking in the mirror and during parental conflicts. In the view of family conflict, family therapy was also initiated to cut down the anxiety provoking situations. Jacobson's Progressive Muscle Relaxation exercise (JPMR) and diaphragmatic breathing were taught to the patient and advised to do whenever the urge to pull the hair comes. She was given task for weaving clothes to avoid boredom and to engage her hands. She was trained to keep her hands in the pocket while watching TV. Family members were told to supervise her tasks and to support the patient in curbing anxiety.

In the third session she reported having more awareness of her habits and could resist pulling better than before. She could cut down the time spent looking in the mirror. She was given an imaginal exposure of anxiety provoking situation and trained to prevent the pulling behaviour by doing the relaxation exercise.

In the fourth session the patient was more confident about her appearance and reported greater reduction in her hair pulling behaviour. She restarted her work and started attending social gatherings. Postural modifications and problem-solving skills were taught.

Her HAM-A score reduced from 24 to 12, HAM-D scores reduced from 22 to 9 and the management is ongoing. Fig 1&2 shows the improvement achieved in the patient.

### **III. Discussion**

Trichotillomania, also known as hair-pulling disorder, is characterized by the repetitive pulling out of one's own hair, leading to significant functional impairment.<sup>[6]</sup>

Sufferers typically pull from the scalp, eyebrows, and eyelashes but may also pull from the face, axillary, and pubic regions. Some individuals participate in hair-related rituals or behaviours once the hair is pulled out like rolling the hair between finger, running the hair over the lips or through the teeth, biting the hair, and/or swallowing the hair (trichophagia) or pulling out specific hairs based on characteristics such as texture, colour, and length.<sup>[7]</sup>

TTM has also been thought to overlap with other psychiatric disorders like obsessive compulsive disorder (OCD), Tourette's, and other impulsive disorders such as nail biting and skin picking.<sup>[7]</sup>

It results in loss of functionality in all aspects of life. In terms of its aetiology and treatment algorithm, there remain areas that still require large scale research.<sup>[8]</sup>

Many who suffer from TTM experience shame, low self-esteem, and report repeated efforts to conceal hair loss. They often avoid pulling in social situations and prefer to pull while alone or while engaged in sedentary activities, illustrating the ability to suppress pulling to avoid stigma. Creating a vicious circle, negative affective experiences such as stress and anxiety often exacerbate pulling. There may be difficulties in academic functioning like school absences, difficulties in performing school responsibilities, and difficulty studying, disability across work, social, and family domains, substance abuse to cope with the emotional problems, and elevated levels of anxiety, depression, and stress.<sup>[9]</sup>

In our case the patient started developing the behaviour as the lockdown of COVID 19 curtailed her opportunities to go out and earn a living. It induced anxiety and boredom. Because of her resulted looks due to TTM, even when the lockdown eased down, she avoided social and recreational activities, and her occupational opportunities dropped. This created a vicious cycle and exacerbated her behaviour.

Four hundred sixty patients with BFRBs were examined in a study and 70% of the patients had repetitive hair pulling during COVID-19 pandemic. A 1.6-point increase was detected on the Massachusetts General Hospital Hairpulling Scale of the patients, and as a result, the authors reported that hair-pulling symptoms of these patients increased in the COVID-19 pandemic.<sup>[5]</sup>

Behavioural therapies such as habit reversal training (HRT) have demonstrated efficacy reducing hair pulling severity. In pharmacological measures antidepressant medications (e.g., clomipramine, fluoxetine, sertraline) remain the most frequently used treatment for individuals with TTM. These medications share the commonality of inhibiting the reuptake of serotonin leading to the belief that deficiencies of serotonin may underlie hair pulling behaviours.<sup>[10]</sup>

Increased awareness of this disorder at a primary healthcare level should be encouraged. HRT Plus appears to be an effective mode of treatment for Trichotillomania. There is a need to educate the primary care physicians and dermatologists, to whom such cases primarily present to, about this therapy. However, more

studies comparing HRT and pharmacotherapy are needed to evaluate their relative efficacy. Dual treatment options must also be evaluated.<sup>[11]</sup>

#### IV. Conclusion

TTM is a poorly understood disorder that requires extensive empirical investigation. Diagnosis clearly starts with a thorough clinical interview and functional assessment. Building a comprehensive understanding of how hair pulling functions for the individual is paramount, particularly in consideration of the diverse phenomenology and behavioural heterogeneity of the disorder. Additionally, a physical examination of pulling sites and alopecia is recommended in order to differentiate TTM with unrelated dermatological and medical conditions.<sup>[8]</sup>

Focused rating scales and review photographs will help in assessing the treatment response. Primarily there should be a proper therapeutic alliance with the patient to improve the treatment adherence.

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**Fig 1: Comparison of the scalp hair before and 8 weeks after the onset of combined Pharmacotherapy and psychotherapy.**



**Fig 2: Comparison of the sides of scalp before and 8 weeks after the onset of combined pharmacotherapy and psychotherapy. After 8 weeks, compared to the upper part of scalp, the sides of scalp have more bald spots which indicate that plucking of hair is more from the sides compared to the upper part of the scalp.w**

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