# Tangled strands: A Case Study of Automatic Trichotillomania in a Female Adolescent''

<sup>1</sup>Purushottam Singh, <sup>1</sup>Dipika Vidhan Co-authors: <sup>2</sup>Sunil Regmi, <sup>3</sup>Chandni Sharma, <sup>3</sup>Dikshya Neupane, AIIMS, Rishikesh

Date of Submission: 10-12-2023 Date of Acceptance: 20-12-2023

#### **ABSTRACT:**

**Background:** Trichotillomania is a complex psychiatric disorder characterized by recurrent hair-pulling leading to noticeable hair loss. The automatic subtype, characterized by unconscious and involuntary pulling, poses unique challenges in diagnosis and management, particularly in adolescent populations.

Case Presentation: We present the case of a 13-year-old female, who presented with a history of habitual hair-pulling behaviours predominantly manifested in an automatic and involuntary manner causing significant hair loss in the scalp region. The assessment revealed a pattern of hair pulling occurring during various activities, often without conscious awareness. Subsequent therapeutic interventions involving cognitive-behavioural techniques and habit reversal therapy were initiated along with pharmacological therapy, showing promising early signs of symptom management and improvement.

Conclusion: This case highlights the challenges in diagnosing and managing automatic trichotillomania in the population. Early recognition and tailored interventions are crucial in mitigating the distress and functional impairment associated with this condition. Further research is warranted to elucidate effective therapeutic approaches tailored to the unique needs of adolescent patients with automatic trichotillomania.

## I. INTRODUCTION:

Trichotillomania has been included in Obsessive and Compulsive related disorders in ICD 11. It defines trichotillomania as "recurrent pulling of one's hair, with unsuccessful attempts to stop or decrease hair pulling leading to significant hair loss that results in significant distress or significant impairment in personal, family, social, educational, occupational or other important areas of functioning." (1)

Trichotillomania resembles potential OCD spectrum illnesses in that it may exhibit selective sensitivity to serotonin reuptake inhibitors and have

repetitive, stereotyped and compulsive behaviours. But a large percentage of the patients do not pull off their hair because of obsessional thoughts or urges, nor are they aware that they are doing it. (2)

Automatic hair pulling has been distinguished from focused hair-pulling by Christenson and Mackenzie. Focused hair-pulling shares the phenomenology similar to the compulsions in OCD, the hair pulling is the focus of the individual's attention whereas hair pulling occurs outside the conscious awareness of the individual in automatic hair pulling. (3)

According to McGuire et al. (2020), there is evidence that focused pulling responds well to habit reversal therapy, which has been partially integrated into most trichotillomania therapies. Thus, it would seem that the best way to lessen the severity of symptoms would be to combine treatment for the automatic behaviour with habit therapy for the focused reversal Alternatively, it might be possible to improve or expand habit reversal therapy's "awareness training" component, which would help it better target automatic pulling in addition to focused pulling. (4)

# II. CASE REPORT:

A 13-year-old female, was brought by her mother, with a history of continuous, non-conscious hair pulling over the past four months. The mother noticed that she had been continuously pulling her hair during the periods of focused attention like studying or while engaging in sedentary activities like watching television and also during stressful situations. These episodes lasted for varying time, ranging from brief moments to extended period of time. She reported no any urge to pull hair. She exhibited noticeable hair thinning and bald patches on the scalp impacting her self esteem, causing significant distress and impairment in daily functioning.

#### On examination:

Psychiatric evaluation revealed no reported compulsion or conscious awareness during hair pulling episodes. The absence of associated distress typically seen in trichotillomania posed a diagnostic challenge.

Physical examination revealed patchy areas of hair loss, broken hair strands and unequal length of hair over the vertex region of scalp. No visible scarring was seen and no hair loss was seen in any other part of the body.

#### **Diagnostic assessment:**

Despite the patient's denial of an associated urge, the diagnosis of automatic trichotillomania was established based on observable hair loss patterns and the exclusion of other dermatological or psychological conditions causing alopecia.

#### **Treatment:**

Since the patient reported no compulsive urges, a modified therapeutic approach was employed. Behavioural therapy, i.e., Habit reversal therapy was introduced to increase awareness of subconscious hair-pulling behaviours and strategies to redirect attention during triggering situations. Tab N-acetyl cysteine (600mg every 8 hourly) and Escitalopram (10mg/day) was added. psycho-education Additionally, and family counselling was provided to support the patient and her family in managing the condition.

## Follow up:

Regular follow-ups indicated a gradual improvement in hair re-growth over 4months. The patient exhibited increased awareness of her subconscious hair-pulling behaviours, which subsequently reduced the frequency of her hair pulling episodes. Family involvement played an important role in reinforcing behavioural strategies.

## III. DISCUSSION:

Trichotillomania was first described by the French physician Francois Henri Hallopeau (1889). The real prevalence of trichotillomania remains underestimated as the sufferers feel ashamed and embarrassed about their condition. The prevalence rate from several studies ranges from 0.6-2.0%. (5)

The most common presentation is during early adolescence, with the peak prevalence being between 4 and 17 years. (6) The sex ratio of trichotillomania in adults as well as childhood shows a substantial prevalence in females (4:1 female: male). (7) The common areas involved in hair pulling involves mostly from the scalp, and

other common areas involving eyebrows, eyelashes, beard, and pubic hair. (8)

Trichotillomania has three subtypes: early onset (onset before the age of 8 years), automatic and focused. Automatic hair-pulling is described as that occurring generally unintentionally, without awareness, while a person is lost in contemplation or engaged in another activity, including watching television, reading, resting in bed, or talking on the phone. Christenson et al. (1994) found that among all with trichotillomania about three-fourths pull hair without awareness. (9) Several studies support these concerns, finding that 17–27% of patients do not report rising tension before, during, or after hair-pulling. (10)

Trichotillomania may co-occur with many other psychiatric disorders which include anxiety, depression, OCD, skin picking disorders. Between 29% and 52% of patients had lifetime and current major depressive disorder, while more than 26% of trichotillomania patients also had OCD. And when individuals have co morbid skin picking disorder they suffer severe symptoms of trichotillomania. (11)

The cases having childhood onset have a better prognosis and the prognosis worsens with the advancing age of onset (10)

The first line of treatment suggested for trichotillomania is cognitive behavioural therapy. (12) Habit reversal therapy (HRT) is relatively well established in the treatment of trichotillomania, with a large effect size versus control conditions. HRT focuses on: awareness training (encouraging awareness of situations that can precede pulling episodes), relaxation training (since anxiety and stress are commonly reported triggers for hair pulling episodes), competing response training (encouraging unwanted pulling behaviours to be replaced with a less conspicuous action), motivation procedures, and generalization training. (13) No pharmacotherapy has been approved yet, though some studies have shown N-acetyl cysteine to be equally beneficial as behaviour modification therapy. (14)

This case underscores the complexities in diagnosing and managing automatic trichotillomania when patients do not report the characteristic compulsive urge. It emphasizes the importance of tailored interventions focusing on increasing awareness and modifying subconscious hair-pulling behaviours.

# IV. SUMMARY:

This case of automatic trichotillomania presented a compelling insight into the complex nature of this condition. The patient exhibited



habitual hair-pulling behaviours characterized by an automatic and unconscious impulse, markedly distinct from the urge and voluntary pulling. The level of distress and impairment suffered was significant, even though there was no awareness of or control over these acts. The example emphasises the complex presentation of trichotillomania and stresses the value of thorough evaluation and specialised treatment methods in the management of this difficult condition.

## **BIBLIOGRAPHY:**

- [1]. Harrison JE, Weber S, Jakob R, Chute CG. ICD-11: an international classification of diseases for the twenty-first century. BMC Med Inform Decis Mak. 2021 Nov 9;21(6):206.
- [2]. Ninan PT, Mansueto C, Rothbaum BO, O'Sullivan RL, Nemeroff CB. Challenges in the Classification and Treatment of Trichotillomania. CNS Spectr. 1998 Oct;3(9):30–5.
- [3]. Du Toit PL, Van Kradenburg J, Niehaus DJH, Stein DJ. Characteristics and phenomenology of hair-pulling: An exploration of subtypes. Compr Psychiatry. 2001 May;42(3):247–56.
- [4]. Grant JE, Chamberlain SR. Automatic and Focused Hair Pulling in Trichotillomania: Valid and Useful Subtypes? Psychiatry Res. 2021 Dec 1;306:114269.
- [5]. Grant JE, Dougherty DD, Chamberlain SR. Prevalence, Gender Correlates, and Co-morbidity of Trichotillomania. Psychiatry Res. 2020 Apr 18;288:112948.
- [6]. Keren M, Ron-Miara A, Feldman R, Tyano S. Some reflections on infancy-

- onset trichotillomania. Psychoanal Study Child. 2006;61:254–72.
- [7]. Grant JE. Trichotillomania (hair pulling disorder). Indian J Psychiatry. 2019 Jan;61(Suppl 1):S136.
- [8]. Duke DC, Keeley ML, Geffken GR, Storch EA. Trichotillomania: A current review. Clin Psychol Rev. 2010 Mar;30(2):181–93.
- [9]. Christenson GA, Crow SJ. The characterization and treatment of trichotillomania. J Clin Psychiatry. 1996;57 Suppl 8:42–7; discussion 48-49.
- [10]. Mehta DSK. Trichotillomania in a Patient with Psychosis.
- [11]. Grant JE, Leppink EW, Chamberlain S, Redden SA, Curley E, Odlaug BL, et al. Does Comorbidity Matter in Body Focused Repetitive Behavior Disorders? Ann Clin Psychiatry Off J Am Acad Clin Psychiatr. 2016 Aug;28(3):175–81.
- [12]. Weidt S, Zai G, Drabe N, Delsignore A, Bruehl AB, Klaghofer R, et al. Affective regulation in trichotillomania before and after self-help interventions. J Psychiatr Res. 2016 Apr;75:7–13.
- [13]. Rehm I, Moulding R, Nedeljkovic M. Psychological treatments for trichotillomania: update and future directions. Australas Psychiatry Bull R Aust N Z Coll Psychiatr. 2015 Aug;23(4):365–8.
- [14]. Sani G, Gualtieri I, Paolini M, Bonanni L, Spinazzola E, Maggiora M, et al. Drug Treatment of Trichotillomania (Hair-Pulling Disorder), Excoriation (Skin-picking) Disorder, and Nail-biting (Onychophagia). Curr Neuropharmacol. 2019;17(8):775–86.