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Complicated Trichotillomania of a Trichobezoar about a Clinical Case

Z. El Maataoui[1*], H. Belhadga[1], H. Kisra[1]

[1]Arrazi Sale Hospital, Morrocco

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***Corresponding author:** Z. El Maataoui
Arrazi Sale Hospital, Morrocco

Abstract **Case Report**

Trichotillomania refers to a repetitive behavior which consists of pulling out one's own hair, sometimes to the point of depilation of entire areas of the scalp, resulting in obvious alopecia. People with trichotillomania may play with and/or ingest the pulled hairs; This is trichophagia. The prevalence of this disorder is difficult to estimate, varying depending on the authors and the criteria used in the studies. This disorder is quite common and affects, according to studies, approximately 1 to 2% of the population, preferably women, children and adolescents. We illustrate a clinic for trichotillomania, associated with trichophagia, through the case of a 7-year-old girl. She had consulted a pediatrician and dermatologist previously and was treated as a case of alopecia areata because a mother would conceal her history due to the stigma attached. Due to severe abdominal pain she was referred to a surgeon where detailed examinations revealed the trichobezoar, caused by hair agglomeration linked to repeated hair pulling and ingestion behaviors. The initial management of the disorder is surgical, before referral to child psychiatry. Overall, various psychosocial factors that precipitate and perpetuate the pathology of trichotillomania must be taken into consideration and treated appropriately. The importance and severity of the medical complications of trichotillomania should not be underestimated. Awareness of the disorder as well as greater interdepartmental collaboration would help in early diagnosis and appropriate management.

Keywords: Trichotillomania, trichobezoar, obsessive compulsive disorder.

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INTRODUCTION

Trichotillomania (hair pulling disorder) is characterized by recurrent pulling out of the patient's own hair, resulting in hair loss associated with significant distress or functional disability. Hair pulling tends to be both automatic and targeted in response to an identifiable emotional trigger for each individual [1].

Previously classified in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) as an "impulse control disorder", trichotillomania is now classified in the DSM-5 as an "obsessive-compulsive disorder and related disorders", reflecting our evolving understanding of the etiology, psychopathology and phenomenology of this condition [2, 3].

Trichotillomania is a debilitating condition that can impair social functioning and seriously impact quality of life, leading to significant morbidity. It often begins in childhood, with an average age of onset of 13 years, and is estimated to affect 1 to 3.5% of older adolescents and young adults [4].

Medical complications such as skin irritation, infections, repetitive hand injuries related to hair pulling, and even gastrointestinal side effects when hair is ingested have also been reported in patients [5].

Hence the interest of this article which treats the case of a patient who had an intestinal obstruction following a trichobezoar secondary to the ingestion of hair.

CLINICAL OBSERVATION

This is a patient aged 7 years old, resulting from a well-monitored pregnancy, her delivery would have taken place without any anomaly, the adaptation to extra-uterine life took place without particularities, she did not present psycho-motor or emotional delay.

The beginning of her symptoms seems to date back to the age of 3, and given that the mother was a worker who worked all day, she was obliged to drop the girl off in a full-time daycare, the girl presented symptoms. Adaptation problems within this daycare, with incessant screaming, irritability, food refusal. When she returned home in the evening, she remained glued to

her mother, she also had a disturbance in her sleep with frequent awakenings at night.

One day, her mother noticed that the girl's hair was getting lighter and lighter, but she didn't pay attention to it, until she started having areas completely bare of hair, parallel to This symptomatology, the patient presented abdominal pain and an anemic syndrome, with iron deficiency anemia on the assessment which did not respond to attempts at supplementation.

A few months later, the patient had abdominal pain with an occlusive syndrome, the patient was seen in the emergency room, and was immediately taken to the operating room, where a giant trichobezoar was discovered. After stabilizing her clinical condition, she was sent to us for treatment.

In consultation, the patient seemed anxious, swinging her legs constantly, her facial expression showed sadness, her thoughts emanated a feeling of fear and worry regarding her mother's departure for work, she described a disgust with daycare, and She denied other behaviors such as nail biting or lip biting and skin scratching. Furthermore, no signs of these actions were detected during clinical evaluation. She was in elementary school, getting good grades, and had no problems communicating socially with classmates or teachers.

DISCUSSION

Trichotillomania, or hair pulling disorder, is classified as an obsessive-compulsive spectrum disorder. It involves repeated impulses to remove hair from the body, resulting in hair loss. Hair pulling behavior is often preceded by feelings of distress and results in temporary relief [6]. However, the revised diagnostic criteria established by the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders removed feelings of gratification [7]. The most commonly reported sites are the scalp, eyelashes, eyebrows, beard, and pubic hair [8]. Hair pulling often involves one or more areas of the body and can occur for hours at a time or at shorter intervals throughout the day. Pulling usually occurs when the person is alone rather than in social environments, and numerous studies have demonstrated that the vast majority of those who suffer from trichotillomania report feelings of ugliness, humiliation, and low self-esteem [9].

Trichotillomania is often associated with significant distress and functional disability. Many who suffer from this condition feel self-conscious about their hair loss and tend to avoid social situations for fear of being judged by their peers [5]. Overall, hair pulling can create a cycle in which stress and other unwanted emotions that accompany hair loss are directly linked to hair pulling urges and, therefore, a decrease in hair loss quality of life.

Recent studies have led to the identification of two distinct styles of hair pulling, automatic and concentrated. Self-pulling occurs with little or no awareness. Many of those who participate in self-pulling are unaware of this behavior until they are confronted with unwanted consequences such as new alopecia or a handful of hairs [6]. In contrast, individuals who engage in concentrated plucking tend to be aware of this activity and may pull hair to reduce stress or to temporarily experience pleasure that may accompany the plucking behavior. Most of those who suffer from trichotillomania have been shown to engage in both automatic plucking and concentrated plucking [7]. A thorough clinical examination and trichoscopy are the main methods of diagnosing trichotillomania.

Although few epidemiological studies of trichotillomania exist, recent community findings have estimated the lifetime prevalence of this condition to be between 1 and 3%, with a clear female predominance [8]. However, disagreement exists regarding the exact sex ratio, as some studies suggest that females dominate at a ratio of 9 to 1 for this disorder, while others suggest that the sex ratio is actually closer to 4 to 1. 1 [4]. However, the gender distribution in children was found to be almost identical [9].

Although little information is available on the physiological changes associated with trichotillomania, the presence of a familial component has been identified, with approximately 34.8% of patients reporting a family history of trichotillomania [10]. Multiple findings have demonstrated an increased risk of trichotillomania in first-degree relatives, as well as greater risks of associated anxiety disorders and other body-focused repetitive behaviors. A recent family study confirmed that patients' first-degree family members were at increased risk for repeated hair-pulling behavior [11]. In addition, a significant proportion of individuals with trichotillomania have another current psychiatric diagnosis or a past psychiatric diagnosis (current and/or previous). In particular, trichotillomania shows substantial overlap with depressive, anxiety, addictive, and other body-focused repetitive behavior disorders.

Trichotillomania is more commonly seen in women, who also experience other body-focused repetitive behavior disorders, such as nail biting, cheek biting, and skin scratching [12]. Additionally, patients tend to present with comorbid psychiatric disorders such as depression, anxiety, and addictive disorders at a significant rate [13].

Behavior after removal varies from person to person. While some discard the hair after removing it, others are known to engage in various activities with the removed hair, ranging from examining, playing, chewing, and even swallowing. Recent research has shown that more than 20% of trichotillomania patients ingest their hair, a practice that can lead to the formation

of hair masses, or trichobezoars, causing unwanted medical problems [14].

People with trichotillomania often experience feelings of stress and embarrassment due to the resulting hair loss. Many avoid social situations because they are very aware of the unwanted characteristics of hair pulling, such as bald spots, and they fear judgment from others [14]. Hair pulling usually occurs when the person is alone or engaged in sedentary activity, and it can create a vicious cycle in which negative emotions associated with post-pulling encourage continued plucking in hopes of temporary relief. People with this condition are at significant risk of anxiety and depression, and nearly a third report low or very low quality of life [5].

Few people with trichotillomania get professional help. Many are unaware that hair pulling is not a rare psychiatric disorder, feel self-conscious about their appearance, or fear that effective treatment does not exist. However, without treatment, only about 14% of adults see a reduction in symptoms [3].

A diagnosis of trichotillomania is usually made during a psychiatric examination when hair pulling behavior is suspected or a patient admits to pulling their own hair. Any comorbid conditions are also considered, and treatment options are evaluated. However, additional medical testing is necessary if a patient admits to ingesting their own hair, as this activity can lead to the formation of trichobezoars and other medical problems [7].

Trichoscopy, an examination of the hair and scalp regions using a dermatoscope, is a common technique used to identify hair pulling behavior. Patients with trichotillomania often have areas of asymmetrical alopecia, as well as broken, curled, and short hair. Sparse yellow dots sometimes containing remnants of dead hair follicles in the form of black dots also indicate a diagnosis of trichotillomania [14].

It is hypothesized that hair pulling may serve as a means to release tension generated by various emotional states (1). Tearing can provide temporary relief from negative emotions such as shame, sadness, frustration, anger, anxiety and boredom. Many studies of emotion regulation in individuals with trichotillomania have shown that these individuals have difficulty regulating various emotional states compared to controls [15]. Thus, the development of trichotillomania could be a potential behavioral response to cope with unwanted negative emotions. Numerous findings revealed that decreases in feelings of boredom, stress, and frustration were observed throughout the plucking cycle. Additionally, temporary increases in pleasure and relief have been noted. However, patients reported increased feelings of shame, sadness, and frustration shortly after hair pulling stopped [15]. These data support the idea that snatching can work to reduce unwanted emotions and is therefore reinforced, although any feelings of relief are temporary and often result in the return of previous unwanted emotions, creating a vicious cycle.

Trichotillomania is a complex condition involving hair pulling behavior and is often associated with significant distress and functional impairment. Although there is no FDA-approved medication specifically for trichotillomania, several treatment approaches have been shown to be effective:

- **Habit Reversion Therapy (HRT):** HRT is considered the primary behavioral intervention for trichotillomania. It involves self-observation, awareness and prevention training, and stimulus control techniques. HRT helps individuals become more aware of their hair-pulling behavior and provides them with strategies to interrupt it and replace it with more constructive actions.
- **Pharmacological Treatment:** Although no medications are FDA approved for trichotillomania, some have been used off-label to treat symptoms. These medications include:
- **N-acetylcysteine:** This over-the-counter supplement has been recognized for its effectiveness in treating adults with trichotillomania. It can help reduce compulsive behaviors and obsessive thoughts.
- **Clomipramine:** This medication, a tricyclic antidepressant, has shown some effectiveness in the short-term treatment of trichotillomania.
- **Risperidone and Naltrexone:** These medications have been reported to be effective in specific cases.
- **Selective serotonin reuptake inhibitors (SSRIs):** Some SSRIs may be used to manage symptoms in combination with behavioral therapy.
- **Psychotherapy:** Various forms of psychotherapy have been used to treat trichotillomania, including:
- **Cognitive-behavioral therapy (CBT):** CBT helps individuals identify and change negative thought patterns and behaviors associated with hair pulling.
- **Acceptance and Commitment Therapy (ACT):** ACT focuses on mindfulness and acceptance of difficult thoughts and emotions, providing strategies for living in accordance with one's personal values.
- **Dialectical Behavior Therapy (DBT):** DBT combines cognitive-behavioral techniques with emotional regulation and interpersonal effectiveness strategies.
- **Collaborative Care:** Collaboration between psychiatrists and dermatologists is essential for the diagnosis and treatment of trichotillomania. This collaborative approach helps address both the psychological and dermatological aspects of the condition.

It is important to note that the effectiveness of treatment may vary from person to person, and a combination of different approaches may be necessary for some individuals. Trichotillomania is a difficult condition, and seeking professional help is essential for effective management. Early intervention, support and

treatment can significantly improve the quality of life of those affected by this disorder.

CONCLUSION

Trichotillomania is a psychodermatological condition associated with hair-pulling behavior, and it is mainly seen in women. People with this disorder tend to face significant functional disability and are known to suffer from comorbid disorders such as other body-focused repetitive behaviors, depression, anxiety, and addiction-related disorders at significant rates.

REFERENCES

1. Flessner, C., Woods, D., Franklin, M., Keuthen, N., & Piacentini, J. (2008). Styles of pulling in youths with trichotillomania: exploring differences in symptom severity, phenomenology, and comorbid psychiatric symptoms. *Behavior Research and Therapy*, *46*(9), 1055–1061.
2. American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders. 4th Edn Text Revision. Washington, DC: American Psychiatric Association. American Psychiatric Association.
3. American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders. 5th Edn Arlington, VA: American Psychiatric Association.
4. Christenson, G. A., Pyle, R. L., & Mitchell, J. E. (1991). Estimated lifetime prevalence of trichotillomania in college students. *The Journal of clinical psychiatry*, *52*(10), 415-417.
5. Bouwer, C., & Stein, D. (1998). Trichobezoars in trichotillomania. *Psychosomatic Medicine*, *60*(5), 658–660.
6. Roberts, S., O'Connor, K., & Bélanger, C. (2013). Emotion regulation and other psychological models for body-focused repetitive behaviors. *Clinical Psychology Review*, *33*(6), 745-762.
7. American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders. 5th ed. Washington, DC: American Psychiatric Association. Obsessive-compulsive and related disorders; p. 129-133.
8. Grant, J. E., & Chamberlain, S. R. (2016). Trichotillomania. *American Journal of Psychiatry*, *173*(9), 868-874.
9. Bottesi, G., Cerea, S., Razzetti, E., Sica, C., Frost, R. O., & Ghisi, M. (2016). Investigation of the phenomenological and psychopathological features of trichotillomania in an Italian sample. *Frontiers in Psychology*, *7*, 256.
10. Grant, J. E., & Odlaug, B. L. (2008). Clinical characteristics of trichotillomania with trichophagia. *Comprehensive psychiatry*, *49*(6), 579-584.
11. Keuthen, N. J., Altenburger, E. M., & Pauls, D. (2014). A family study of trichotillomania and chronic hair pulling. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*, *165*(2), 167-174.
12. Grant, J. E., & Chamberlain, S. R. (2016). Trichotillomania. *American Journal of Psychiatry*, *173*(9), 868-874.
13. Özten, E., Sayar, G. H., Eryılmaz, G., Kağan, G., Işık, S., & Karamustafalıoğlu, O. (2015). The relationship of psychological trauma with trichotillomania and skin picking. *Neuropsychiatric disease and treatment*, 1203-1210.
14. Woods, D. W., & Houghton, D. C. (2014). Diagnosis, evaluation, and management of trichotillomania. *Psychiatric Clinics*, *37*(3), 301-317.
15. Bottesi, G., Cerea, S., Ouimet, A. J., Sica, C., & Ghisi, M. (2016). Affective correlates of trichotillomania across the pulling cycle: findings from an Italian sample of self-identified hair pullers. *Psychiatry Research*, *246*, 606-611.