Trichotillomania: An Impulsion beyond Hair Pulling

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ABSTRACT

Introduction: Trichotillomania is a psycho-dermatologic disorder that has been identified as a common morbidity in children and adolescents having a positive correlation with depression and Obsessive Compulsive Disorder (OCD). Very few cases have been reported in the 20-30 age groups, therefore, we intend on reporting this case. Case Presentation: We report a case of a 26-year-old male patient who presented in Psychiatry Outpatient Department and was diagnosed with Trichotillomania (TTM). The patient's family observed him of being involved in a puzzling behavior. They found him pulling hair from different parts of his head. Inspection of his face revealed patchy hair loss from his eyebrows and moustache. Dermatologic examination of the scalp revealed irregular bald patches. Trichoscopy of the alopecic patch further highlighted random hair lengths with no exclamation mark hairs. The patient was started on Trifluperazine, Trihexyphenidyl, and Clonazepam along with sessions of Behavioral therapy and was advised regular follow ups. Conclusion: The diagnosis of our patient was established upon the history, clinical and dermatologic evaluation, and eventual elimination of the possible differential diagnosis. Although rare, this disorder can leave a significant burden on patient's mental status giving rise to behavioral abnormalities.

Keywords: Behavioral therapy; Depression; Obsessive compulsive disorder; Pyschodermatologic disorder; Trichoscopy; Trichotillomania

INTRODUCTION

Trichotillomania evolves as an impulse control disorder in the literature where hair puling ultimately leads to achievement of mental satisfaction and pleasure. Although rare, it has been reported in the literature previously where adolescents and children between ages 9 -13 years have been frequently targeted by this psycho-dermatologic morbidity. [1]

Frequent misdiagnosis of trichotillomania with alopecia areata appears to be common according to studies and hence a challenging task lies to clinically diagnose the former accurately. [2,3] Trichotillomania repeatedly appears to be linked with depression, obsessive compulsive disorder, low self-esteem, poor social functioning and self-image. Patients who clinically present with such psychiatric abnormalities should be evaluated for mental and behavioral disorders where they tend to carry out anomalous tasks in order to relieve anxiety. Clinical interventions to precisely evaluate and further manage trichotillomanics require large scale studies with positive outcomes. Most successful behavioral modifications and therapies such as habit reversal tend to outweigh the pharmacological approach where the latter has been utilized to resolve partial symptoms. [4]

The aim of our study enlightens the need for proper assessment and accurate diagnosis of such patients and to keep trichotillomania as part of the differential

diagnosis in patients with other underlying behavioral or psychiatric morbidities. We report a similar unique case of a patient who being an addict presented with chronic hair pulling not only from the scalp but also from the moustache.

In adults, trichotillomania appears to have a large female preponderance, with a female-to-male ratio of 4:1, which is uniquely high among psychiatric disorders. In childhood, the sex distribution has been found to be equal. [5,6]

In trichotillomania, pulling can be undertaken at any bodily region with hair, but the scalp is the most common site (72.8%) followed by the eyebrows (56.4%) and the pubic region (50.7%). [7]

Triggers to pull may be sensory (e.g., hair thickness, length, and location and physical sensations on scalp), emotional (e.g., feeling anxious, bored, tense, or angry), and cognitive (e.g., thoughts about hair and appearance, rigid thinking, and cognitive errors). [8]

Many patients report not being fully aware of their pulling behaviors, at least some of the time—a phenomenon known as "automatic" pulling; "focused" pulling, in contrast, generally occurs when the patient sees or feels that a hair is "not right," or that a hair feels coarse, irregular, or "out of place". [9]

Psychosocial dysfunction, low self-esteem, and social anxiety are all associated with trichotillomania, largely as a result of an inability to stop pulling and the resulting alopecia. [10]

Individuals frequently report failure to pursue job advancement or avoidance of a job interview because of the pulling. Many avoid intimacy for fear that their partner may play with their hair and possibly expose areas of alopecia. Most individuals avoid swimming, for fear that it will draw attention to their alopecia. Nearly one-third of adults with trichotillomania report a low or very low quality of life. [11]

Trichotillomania may result in unwanted medical consequences. Pulling of hair can lead to skin damage if sharp instruments, such as tweezers or scissors, are used. Over 20% of patients eat hair after pulling it out (trichophagia), a behavior they feel is even more embarrassing than the pulling. In fact, many people with trichotillomania do not divulge this fact until they feel greater trust in the clinician. The ingestion of hair can result in the formation of gastrointestinal hairballs (trichobezoars), which can cause obstructions that may require surgical intervention. [12]

CASE PRESENTATION

A 26 years old male, unemployed, accompanied with his sister presented to the Psychiatry Outpatient Department (OPD). She complained that the patient had a habit of forcible hair pulling from his scalp for the past four months. On proceeding further with the history, the patient had quit his education four years prior to developing this addiction, reason being progressive loss of interest and motivation. Due to unemployment and lack of educational influence, he began to develop anxiety and insomnia which gave rise to poverty of speech and catatonic characteristics such as prolonged aimless standing under the sun, self-smiling and delusions of persecution. To counteract these symptoms, he developed addiction to Cannabis and has been an addict since the past four years. The patient was also asked to sketch an image of a human being in order to evaluate his cognitive element but was found to be below average. The patient had achieved all the milestones according to his age. His age

related learning skills, responsibility towards family members, social interaction skills
were average during his adolescence. No similar history was documented amongst any of his family members. On a previous visit to a Primary Care Physician, he was prescribed a 6 weeks trial of sertraline, risperidone and clonazepam. Despite being compliant to the treatment, his hair pulling addiction did not wane and the family members were compelled for total removal of his scalp hair leaving the patient completely bald.

Dermatological evaluation alongside the psychiatric consultation revealed sparse, unevenly trimmed hair of the moustache. Scalp examination showed presence of small, bizarre bald patches in absence of erythema or nodules on the vertex, right frontoparietal and occipital regions. No fungal growth was noted. Trichoscopy of the alopecic patch was performed which revealed random hair lengths with a few broken hair shafts along with moderate black spots. No exclamation mark hairs or any other scalp eruptions were noted. Hair pull test was negative. Further scalp biopsy was advised to the patient but did not show compliance. General physical examination of the skin, nails and the mucous membranes remained unremarkable. Baseline investigations including Complete Blood Count (CBC), Liver Function Tests (LFT's), Urine Detailed Report (D/R), Urea Creatinine Electrolytes (UCE), Chest X-ray (CXR), and Viral markers were performed and were found to be insignificant. The patient was commenced on Trifluoperazine 1mg (thrice daily), Trihexyphenidyl 2mg (half three times daily), and Clonazepam 0.5mg (once daily). Furthermore, he was also advised for regular sessions of behavioral therapy. The patient failed to keep up the consultations for future behavioral therapy sessions, therefore, no outcome of his progress could be generated.

DISCUSSION

Discussion Trichotillomania is a hair pulling disorder classified under obsessive compulsive spectrum in the Diagnostic and Statistical Manual of Mental Disorders (DSM V). According to DSM V it is characterized by recurrent hair pulling resulting in hair loss. [13]

The estimated lifetime prevalence of TTM varies from 0.6% to 3% according to some studies. [14-15] The age of onset of trichotillomania is usually childhood or adolescence which was similar to what we encountered and the disorder follows a chronic course. [16]

Trichotillomania usually presents with focal patches of hair loss which are commonly seen on the crown, occipital and parietal regions of the scalp. Other sites frequently involved in this disorder include the eyelashes, eye brows, pubic or other body hair. [17]

The involvement of hair from the moustache was seen in our patient which appears to be unique and correlating with the literature. The alopecia is usually seen on the contra lateral side of the body from the dominant hand and the area of hair loss can be either ill-defined or can manifest as a well-defined linear patch [18]

Two distinct styles of hair pulling have been identified in individuals with Trichotillomania. Focused hair pulling is labelled when it is done with awareness in order to attain pleasure, while in automatic sub-type there is subconscious pulling outside the individual's awareness. The history of our patient is consistent with the automatic type. This psycho-dermatological disorder often involves

mood and anxiety disorders which is why TTM needs to be evaluated by a dermatologist and a psychiatrist. [19]

Considering the dermatological aspect of the disease, more commonly, the differential diagnosis can be tinea capitis, traction alopecia, alopecia areata, and fungal infections. [20]

Many psychological conditions can also be difficult to differentiate from Trichotillomania including Obsessive Compulsive Disorder, Body Dysmorphic Disorder, Autism Spectrum Disorder, Stereotypic Movement Disorder and even certain disorders such as the Borderline Personality Disorder can have features similar to TTM. Despite the classification of trichotillomania under the obsessive compulsive spectrum moiety, a study also enlightens a wide area of neuropsychological impairment in Obsessive Compulsive Disorder which comparatively appears to be intact in the hair pulling disorder. [21]

There is scarcity of studies in the literature to create a positive correlation between cannabis addiction and Trichotillomania, however, a case has been reported where a four year cocaine addict eventually presented with constant scalp hair pulling to the substance misuse service facility. [22]

Interestingly, our patient was also found to be on substance abuse for the last four years. The investigations that can be used to help distinguish Trichotillomania from other causes of alopecia include Trichoscopy (scalp and hair dermoscopy), skin biopsy, trichogram and hair pulling test. [23]

Dermoscopy, however, has been firmly stated as a useful tool in the diagnosis of the disease. Findings most commonly include broken hair with random lengths. Additionally, frayed hair ends, presence of black and yellow dots and absence of exclamation point hairs aid in the diagnosis. Presence of exclamation mark sign on dermoscopy, however, is found in alopecia areata which is the closest differential diagnosis of Trichotillomania. Studies have enlightened hair pull test as a maneuver to help in the diagnosis. It is considered positive when less effort is required to pull hair and negative when efforts are additional. [24] A similar phenomenon was seen in our case where the patient's efforts were supplemental. The trichoscopic scalp findings of our patient demonstrated the same findings that included sparse broken hair shafts with varying hair lengths with no exclamation mark sign.

Most of the complications of Trichotillomania arise from the fate of the hair after being pulled from the body. Trichophagy or the ingestion of pulled hair occurs in trichotillomanics with the concomitant formation of trichobezoars which causes anorexia, bloating, and obstruction. Other complications that may occur because of TTM include infections at the site of hair pulled, prolonged shoulder or backache due to abnormal posture. Carpal tunnel syndrome has also been reported due to overuse of the wrist secondary to chronic hair pulling. [25]

Treatment for Trichotillomania in adults focuses on the combination of pharmacotherapy and behavioral therapy. Pharmacologic treatment includes drugs such as clomipramine and amino acid N-acetylcysteine (NAC) which have shown promising results with the latter proving to be the most effective with minimal side effects. [26] Certain other drugs such as olanzapine, naltrexone, Selective Serotonin Reuptake Inhibitors (SSRIs), and Tricyclic Antidepressants (TCAs) have also been

used to treat TTM with varying results. [27-29]

Antipsychotics and benzodiazepines have been mentioned useful in such disorders and hence the patient was started on trifluoperazine and clonazepam respectively. [30] However, due to scant published literature, strict guidelines are not available for the pharmacologic treatment of Trichotillomania. Behavioural therapy comprises of Habit Reversal Training (HRT) and stimulus control. [31] HRT, with the highest efficacy and impact on the resolution of Trichotillomania, has been mentioned in the literature. Hence our patient, with the pharmacological therapy, was also advised for consistent future behavioral therapy sessions. Despite confronting such a rare case, we were able to evaluate and approach the diagnosis by consulting the dermatology and psychiatry facilities which we considered as our strength. All the evaluation procedures were rendered free of cost to the patient who eventually showed a greater compliance in eventually finalizing our diagnosis. Since we could not keep track of the patient's further progress, we failed to establish a definite disease-outcome relationship. Previous medical and educational records were also unavailable, hence the task of correlating trichotillomania with other behavioral addictions were minimized.

CONCLUSION

Trichotillomania has been implicated as a disorder of childhood. Its association with obsessive compulsive disorder, depression and substance abuse has been demarcated clearly. A treatment algorithm bridging the pharmacological and behavioral therapy must be established in order to counteract and approach such cases effectively. However, due to poor patient compliance and lack of adequate number of behavioral centers in our city we could not keep a regular follow up with our patient and outcome could not be generated.

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