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Trichotillomania: Hair Pulling Disorder

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ABSTRACT

Trichotillomania, also known as hair pulling disorder, is a chronic psychiatric condition common among women. It is a condition that causes impairment in social, occupational, or other important areas of functioning. The rate of presentation of such cases to medical practitioners is low, as affected individuals conceal it because of the shame associated with hair pulling behaviour. This makes the aetiology and management of the condition to be fairly understood; creating the need for extensive empirical research. This paper discusses the clinical and epidemiological features of trichotillomania and its management.

Keywords: Trichotillomania, hair, disorder, psychiatry, epidemiology, symptoms, diagnosis, treatment

1. INTRODUCTION

Trichotillomania is a term describing a medical disorder of compulsive hair pulling from the scalp, eyelashes, eyebrows, or any other parts of the body where hair can be found growing, causing bald patches in the parts involved. This disorder varies in its severity,

location on the body, and response to treatment (American Psychiatric Association, 2013; Bhandare et al, 2016). Trichotillomania, according to Swedo et al (1989), can occur in association with normal human development, personality and developmental disorders, or psychosis. This disorder is characterized by: urge-driven repetitive hair pulling; increased body tension when pulling is resisted; and a sense of relief after pulling. Obvious alopecia and significant distress from the habit is diagnostic of the chronic and relapsing condition. Chamberlain et al. (2007) mentioned other habits such as nail biting, knuckle cracking, touching or playing with pulled hair, and hair swallowing (trichophagia) to be associated with this disorder. The medical complications that can arise from this disorder are: infection; permanent loss of hair; repetitive stress injury; iron-deficiency anaemia; carpal tunnel syndrome; and gastrointestinal obstruction by hairballs (trichobezoars), as a result of swallowing of hair (a condition known as trichophagia) (Chamberlain et al, 2007; Sayar & Kagan, 2014).

2. EPIDEMIOLOGY

Trichotillomania (hair-pulling disorder) has been described more than a century ago by the French dermatologist called Hallopeau (Christenson & Mansueto, 1999). The awareness of this medical disorder – trichotillomania – is gradually increasing. It is a chronic condition in many individuals, especially women (Stemberger et al. 2003).

Duke et al. (2010) stated that the estimate of the lifetime prevalence of trichotillomania is between 0.6% and 1.0%. The lifetime prevalence is averagely 3.4% for women and 1.5% for men, according to Yik & How (2016). Trichotillomania is commoner in females than males because women are more likely to seek medical care unlike men who hide the outcomes of the hair pulling effect by shaving their scalp hair, moustaches and beards (Sah et al, 2008; Ahlawat 2015).

The onset of this disorder is usually during childhood, between age five and twelve years; however, it may occur at any age (Sayar & Kagan 2014; Ahlawat 2015). If it occurs later in life during adulthood, it is usually associated with an underlying psychopathy and has a poorer prognosis (Ahlawat, 2015). The underlying psychopathic conditions associated with the occurrence of trichotillomania in adulthood include obsessive-compulsive disorder (OCD), attention deficit hyperactivity disorder (ADHD), tic disorder, and major depression (Christenson et al, 1991; King et al, 1995).

3. AETIOLOGY

Recent research has shown that there may be a genetic predisposition to this disorder. Like many other disorders, trichotillomania may develop due to a combination of genetic, hormonal, emotional and environmental factors (Diefenbach et al, 2009, Bhandare et al, 2016).

Research has suggested that stress may play a role in the development of trichotillomania as hair pulling soothes increasing tension (Diefenbach et al, 2005; Woods et al, 2006). Depression and anxiety are associated with trichotillomania and people with this disorder may engage in hair pulling to distract themselves. Ironically, the development of bald

spots can in turn lead to exacerbations of depression and anxiety, leading to even more pulling in an attempt to manage the symptoms (O'Sullivan et al, 1997; Sayar & Kagan, 2014;).

Hemmings et al. (2006) reported evidence for differences in distributions of serotonin 2A receptor genes between trichotillomania patients and comparison subjects. In an animal research work, Greer and Capecchi (2002) reported that mice with mutation of the *hoxb8* neurodevelopmental gene showed aberrant grooming behaviour including hair pulling.

4. SYMPTOMS

The following are the symptoms experienced by individuals suffering from trichotillomania (Begotka et al, 2004; Woods et al, 2006; Chamberlain et al, 2007; Flessner et al, 2007; Sah et al, 2008, Bhandare et al, 2016):

1. Constant pulling or twisting hair
2. Bald patches or hair loss
3. Uneven hair appearance
4. Denial of the hair pulling
5. Obstructed bowels if the hair pulling is consumed
6. Tension before hair is pulled and relief or gratification after.
7. Other self-injury behaviours
8. Poor self-image
9. Feeling sad, depressed or anxious.

5. DIAGNOSIS

The methods for assessing trichotillomania in patients vary, and only few objective validated clinical instruments have been developed for patients; the National Institute of Mental Health (NIMH) Trichotillomania Scale, Yale-Brown Obsessive-Compulsive Scale-Trichotillomania, Psychiatric Institute Trichotillomania Scale, Massachusetts General Hospital (MGH) Hair pulling Scale, Trichotillomania Scale for Children and The Milwaukee Inventory for Styles of Trichotillomania are objective instruments used for assessing the severity, types and pattern of the condition (Woods & Houghton, 2014; Chamberlain et al, 2007; Bhandare et al, 2016).

Diagnosing this disorder is not difficult if the patient admits to hair pulling, other-wise a differential diagnosis must be pursued. Differential diagnosis should be ruled out by evaluating the patient for the absence of conditions that mimic trichotillomania. Common differentials of trichotillomania include alopecia areata, iron deficiency, hypothyroidism, tinea capitis, traction alopecia, alopecia mucinosa, and thallium poisoning (Sah et al, 2008; Huynh et al, 2013; Sayar & Kagan, 2014).

Diagnostic techniques such as scalp biopsy, hair microscopy, full blood count, ferritin level determination, and abdominal ultrasonography has been developed to confirm trichotillomania in suspected cases (Hautmann et al, 2002; Millard, 2002; Sayar & Kagan, 2014). Scalp biopsy may be helpful in revealing traumatized hair follicles with perifollicular haemorrhage, fragmented hair in the dermis, empty follicles, deformed hair shafts (trichomalacia) and multiple catagen hairs (Hautmann et al, 2002). Hair microscopy may help

to show the broken off and fractured hairs with blunt end. Full blood count and ferritin level is done to rule out iron deficiency anaemia (Millard, 2002). Abdominal ultrasound is done to check for trichobezoar (Sayar & Kagan, 2014).

5. 1. Diagnostic Criteria

The diagnostic criteria for trichotillomania, according to the Diagnostic Statistical Manual 5 (DSM-5), are as follows:

1. The individual pulls his/her hair out on a recurrent basis, which results in hair loss.
2. Repeated attempts have been made to reduce or stop the hair pulling altogether.
3. The hair pulling causes significant distress or impairment in areas of occupational, social or another regions of functioning
4. The hair pulling cannot be better attributed to another medical condition.
5. The hair pulling cannot be better explained as a symptom of another mental disorder.

6. MANAGEMENT

Chawla et al. (2013) and Franklin et al. (2011) stated that the management of trichotillomania can be difficult, as there is a high chance of relapse after various modalities of treatment is done. Cognitive and behavioural therapy (CBT) and pharmacotherapy, using antipsychotic agents – selective serotonin reuptake inhibitors (SSRI) and tricyclic antidepressants – are the main options of treatment (Hautmann et al, 2002, Ahlawat, 2015). Other modalities of treatment are hypnotic therapy, psychotherapy and supportive therapy. The most appropriate therapeutic approach depends on factor such as the patient's age, medical status and mental status (Ahlawat, 2015).

6. 1. Cognitive behavioural Therapy

The first line of treatment for trichotillomania involves the use of habit reversal training (HRT), a form of cognitive-behavioural therapy. Studies have shown the effectiveness of HRT as a method limiting the intensity and frequency of behaviours associated with trichotillomania (van Minnen et al, 2003). One of the key elements of this therapy is involvement of patient in a motor activity that prevents the implementation of the motor pattern involved of pulling/eating hair (Sayar & Kagan, 2014).

The use of HRT in treating trichotillomania involves the following steps: educating the patient about the condition and how it's treated; making such patient to be aware of when and why he/she pulls his/her hair out such as a result of stress; teaching the patient a new response to carry out when he/she feels the urge to pull a hair out such clenching the hand into a fist; creating barriers that prevent him/her from pulling their hair out such as wearing a hat if pulling is from the scalp; and, finally, the involvement of patient's family member(s) in the treatment to support and encourage the patient (Sayar & Kagan 2014; Bhandare et al, 2016).

6. 2. Pharmacotherapy

The use of medications in the treatment of trichotillomania is limited as clinical research on the drugs has little evidence, due to inadequate sample size. Despite these limitations,

pharmacotherapy still plays an important role in managing the anxiety, depression and obsessive compulsive symptoms that accompany trichotillomania (Stemberger et al, 2003).

Selective serotonin reuptake inhibitors (SSRIs) such as fluoxetine, fluvoxamine, and citalopram are useful in the treatment of trichotillomania (Ninan et al, 2000, Stemberger et al, 2003). Antipsychotics such as haloperidol and risperidone are also efficacious in successful treatment of trichotillomania (Stemberger et al, 2003; Ahlawat, 2015). Other agents have also been examined as potential pharmacotherapeutic agents for TTM: naltrexone, an opioid antagonist; lithium, a mood stabilizer; and inositol, a carbohydrate (Stemberger et al, 2003). However, certainty about the benefits of these agents is limited because of methodological shortcomings, such as small sample size and inadequate controls. Therefore, these agents cannot be recommended for routine clinical use at the present time (Stemberger et al, 2003; Bhandare et al, 2016)

7. CONCLUSION

Trichotillomania is a disorder characterized by constant pulling of hair which offers relief and gratification. This is a very shameful condition which affects societal participation for the individuals suffering from it. Research has shown that this disorder has a multifactorial aetiological origin. Trichotillomania can be diagnosed via clinically validated instrument and laboratory investigation. Criteria are laid down in the Diagnostic and Statistical Manual – 5 for the diagnosis of this disorder. This condition can be managed using cognitive behavioural therapy and pharmacotherapy.

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