

Trichotillomania

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MJAFI 2003; 59 : 65-66

Key Words : Obsessive Compulsive Disorder; Trichotillomania

Introduction

'Pulling one's own hair' as a symptom can occur in association with normal development, personality and developmental disorders, and psychosis. In contrast, the syndrome of trichotillomania (TTM), first described by Holopecau in 1889, arises de novo and is characterized by urge-driven, repetitive hair pulling, increased tension when pulling is resisted, and a sense of relief after pulling. The condition is frequently chronic and unremitting [1,2]. We present two cases that illustrate many of the complexities of the phenomenology and treatment of this condition.

Case Report -1

A 14 year old girl was referred for psychiatric evaluation in December 2000 for chronic hair pulling. In early June 1999, she noticed 5-6 gray hair on the scalp while combing. She asked her friend whether the gray hair were visible. On being reassured that nothing was wrong she did not give it further thought. In January 2000, one of her friends pointed out the gray hair on her head. Patient looked into a mirror and noticed that the gray hair had increased in number. She became worried and thought that soon all her hair would turn gray. She discussed the issue with her mother and elder sister, who told her that the gray hair could be due to mental stress of the forthcoming examination and would disappear thereafter. She was not satisfied, and continued to worry. In March 2000 she was busy preparing for her final examination. One evening she saw an advertisement of a shampoo on television in which the model initially pulled her coarse hair. Later while studying, it struck her that she could pull her gray hair and get rid of them. She went to the mirror and pulled out a gray hair. She felt happy and immediately pulled a few more hair. The next evening while combing she again noticed gray hair and felt relieved after pulling them off. Later she felt restless, tense and was unable to concentrate on her studies, until she pulled 2-3 hair, after which she felt intense pleasure and relief. Soon, the thought of pulling her hair became so uncontrollable that the moment she got the thought, her hand would go to her scalp and pull a hair. Initially, she would search for a gray hair, but later she started pulling her black hair as well. Initially she was pulling a single hair at a time, but since past one month had been pulling tufts of five to six hair.

Despite her attempts to conceal this behaviour, her family and friends noticed it. They counselled her and told her various ways to stop her habit by diverting her attention to something else. However, when she tried to stop, she felt tense and uneasy and could stop the habit only temporarily. She felt low when her mother admonished her and advised her to wear a cap to hide her hair loss. However, she continued enjoying pleasurable activities. She denied any persistent alteration in mood, sleep or appetite. She performed well in studies and passed 8th class with 80% marks in April 2000.

There is no relevant past history. She is the youngest of 5 siblings from an urban upper middle-class family. Father, 50 years old, is an alcoholic and gambler. Her parents separated in 1990. Mother is earning about 15,000/ month. Interpersonal relations with other family members are cordial.

Physical examination showed diffuse hair loss over scalp. The hair was predominantly long, but also had few short hair. No evidence of infection involving hair or scalp was found. Mental status examination, showed a young girl wearing a cap. She stated most of the time she felt happy, but felt bad about her habit. Affect was shallow, appropriate and congruent. Her cognition was normal. No features of psychosis were present. Insight and judgement were intact and biodrives adequate. She was treated with fluoxetine with partial improvement.

Case Report - 2

A 34 year old married lady presented with the complaints of irritability, heaviness of head, and itching over scalp which was relieved only after pulling out her hair. Onset of illness was in 1997 during her second pregnancy. She used to feel tense, irritable and had heaviness of head which was relieved by pulling out her hair. After her delivery, her habit continued resulting in complete hair loss. Though she felt bad about her hair loss she was unable to control her impulse. There was no past or family history of mental illness. She was third of four siblings from a rural, agrarian family. She had neurotic traits in the form of nail biting in childhood. She was educated up to class five. She was married at 16 years of age and had no marital disharmony. First pregnancy ended in a stillbirth. She has two living children. Sexual relations were unsatisfactory. She complained of itching and burning over vulva after coitus. Physical examination showed her scalp was nearly totally bald, with areas of

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scarring and wisps of dark hair. She always kept her head covered with her sari. On mental-status examination she was cooperative and communicative. She had mild depressive and anxiety symptoms, but no suicidal thoughts. There was no evidence of psychosis. Judgement and insight were unimpaired. Biodrives were normal. Her score on Carroll rating scale for depression was 10, State-Trait Anxiety Scale (State) score was 46, TTM severity score (TSS) was 17 and TTM impairment score (TIS) was 8. She showed no response to treatment with clomipramine along with psychotherapy. Subsequently, addition of fluoxetine and behaviour therapy resulted in partial improvement. Despite reduction in TSS and TIS scores after three years she continues to remain symptomatic.

Discussion

TTM cases are divided into those with onset in early childhood and those that begin during adolescence or later. In early onset TTM, symptoms usually begin before 2 years of age. The hair pulling appears similar to rocking or thumb sucking, in that, it occurs mainly at bedtime, when the child is tired or bored and during periods of separation and other stresses. The hair pulling is considered a habit disorder and frequently remits by the time child enters school. TTM that begins later in childhood (after age 8) or adolescence is similar to the adult disorder in that it is typically chronic and potentially severe (as in our cases). TTM is associated with two predominantly different styles of hair pulling. One type, reported by 25% of patients having phenomenological similarities to compulsive rituals in Obsessive Compulsive Disorder (OCD), is "focused" hair pulling that is associated with mounting tension before pulling or when one is attempting to resist pulling and relief after the act (seen in case 2). The other style reported by 75% of patients is referred to as "automatic" or habitual pulling. It often occurs in the context of sedentary, contemplative activities in which focused attention to a specific task is required, but the patient is generally inactive. Such activities include watching television, reading (seen in case 1), driving, speaking on the telephone and lying in bed at night in a state of contemplation or anticipation [1-2].

Several hypotheses have been put forth regarding the causes of TTM, from dysregulated grooming to complex autoimmune or neuroimmunocutaneous-endocrine interactions that suggest etiological relation to a number of different neuropsychiatric disorders. Abnormal neuropsychological functioning, specifically regarding visuospatial functions, suggests some overlap with OCD.

A functional neuroimaging study using PET showed resting brain metabolic differences in global, bilateral cerebellar, and right parietal regions. A structural magnetic resonance imaging study revealed decreased left putamen volumes, a finding consistent with previous studies of Tourette's disorder but unlike brain abnormalities described in OCD [1,2].

The scalp is the most commonly affected hair site for TTM (seen in both cases), although lash, brow, pubic, facial and extremity hair may also be affected [3]. Complications include alopecia, scarring, skin infections and trauma to the hair (seen in our cases), trichobezoar, muscle strain, chronic back, neck or arm pain (caused by the repetitive pulling) and overuse injuries such as carpal tunnel syndrome. Self-esteem in young women has been found to decrease as the frequency of hair pulling increases (as seen in our cases). Surprisingly, high rates of body image dissatisfaction, including body dysmorphic disorder, are found in this group. Psychiatric co-morbidity includes major depression (51%), generalized anxiety disorder (27%), OCD (13%-27%) and alcohol abuse/dependence (19%).

Antidepressants, pimozide, lithium, naltrexone and psychotherapies including behaviour therapy, psychodynamic psychotherapy, and hypnotherapy have been reported to be successful in uncontrolled studies of TTM. Recent controlled studies have shown that clomipramine, a serotonin reuptake blocker, was more effective than desipramine, a noradrenergic reuptake inhibitor [4] and cognitive-behavioural therapy was more effective than clomipramine [5].

References

1. O'Sullivan RL, Keuthen NJ, Christenson GA, Mansueto CS, Stein DJ, Swedo SE. Trichotillomania: behavioral symptom or clinical syndrome. *Am J Psychiatry* 1997;154:1442-9.
2. O'Sullivan RL, Mansueto CS, Lerner EA, Miguel EC. Characterization of trichotillomania. *The Psychiatric Clinics of North America* 2000;23:587-604.
3. Christenson GA, Mackenzie TB, Mitchell JE. Characteristics of 60 adult chronic hair pullers. *Am J Psychiatry* 1991;148:365-70.
4. Swedo SE, Leonard HL, Rapoport JL, Lenane MC, Goldberger EL, Cheslow DL. A double blind comparison of clomipramine and desipramine in the treatment of trichotillomania (hair pulling). *N Engl J Med* 1989;321:497-501.
5. Ninan PT, Rothbaum BO, Marsteller FA, Knight BT, Eccard MB. A placebo-controlled trial of cognitive-behavioral therapy and clomipramine in trichotillomania. *J Clin Psychiatry* 2000;61:47-50.