

# Cognitive Behavior Therapy for Trichotillomania: Report of a Case Resistant to Pharmacological Treatment

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**Objective:** To report a case of trichotillomania that was resistant to pharmacological treatment but responded well to a behavioral therapy program based on habit reversal.

**Method:** The patient was a 47-year-old lady. Her problem had started at the age of seventeen. She had experienced several treatments including full doses of antidepressants, mood stabilizers, antipsychotic, and benzodiazepines as single treatments or in combination. The mentioned medication did not affect her condition. In addition, she was drowsy during the daytime and her function was seriously impaired. At the time CBT was started for the patient, she was receiving fluoxetine 40 mg daily, which she had received during the treatment period. Initial assessments included a detailed behavioral interview, daily chart of activities, record of hair pulling behavior with a description of patient's emotional and situational status during the action. The treatment procedures included self monitoring, pulled hair saving and competing response. The patient was followed for 18 months.

**Results:** Only 2 bouts of hair pulling were reported, both of which occurred in the first 6 months of the treatment. The patient's hair became thicker, and she was very satisfied with the therapy. Her social relations and function improved markedly, and her anxiety and sadness left her.

**Conclusion:** This case showed that certain components of habit reversal such as awareness, self-monitoring, pulled hair saving, and competing response were effective in our patient.

### Keywords:

*Aversive therapy, Cognitive behavioral therapy, Habits, Trichotillomania,*

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**T**richotillomania is presently categorized as an impulse control disorder (1). A diagnosis of trichotillomania requires recurrent episodes of hair pulling resulting in noticeable hair loss; increasing tension experienced prior to pulling or while trying to resist pulling; pleasure, gratification, or decreasing tension associated with pulling; significant distress or impairment in social, occupational, or other important areas of functioning because of hair pulling; and the verification that hair pulling is not the result of a general medical condition or another mental disorder (1).

Several psychodynamic, behavioral, and biological theories have been proposed to account for the etiology of trichotillomania (2, 3). The current attitude is that researchers assume the disorder is of a heterogeneous nature, implying that trichotillomania consists of etiologically diverse subgroups (4). In general it seems that, the etiology of hair pulling for any individual client may well be a complex interaction of biological, psychological and social factors (2). Behavioral theories can provide a context in which understanding the operation and expression of mechanisms associated with hair pulling is provided (5).

Azrin and Nunn assumed that trichotillomania is learnt through a process similar to other habits. It appears that hair pulling is a coping behavior in response to stress, and is reinforced by means of tension reduction as negative reinforcement (6). Craving for the physical sensations associated with hair pulling may also become conditioned (7). Ultimately, through both classical and operant conditioning processes the hair pulling behavior is accompanied by a large number of internal and external cues ending up in a habit that is beyond the individual's awareness and control (8).

Based on these theories, various cognitive behavior therapies (CBT) have been proposed for trichotillomania, one of which is "habit reversal", which encompasses a large body of experimental evidence (2). Habit reversal is a combination of behavioral methods that are applied to habit disorders such as tics, trichotillomania, and thumb sucking (9). This method was first deployed by Azrin and Nunn, and was later developed by others (2). This article reports a case of trichotillomania that was resistant to pharmacological treatment but responded well to a behavioral therapy program based on habit reversal, and this therapeutic effect remained for a relatively long time.

## Case Report

### *Case presentation*

The patient was a 47-year-old female married homemaker, with a High School Diploma, who was admitted to Roozbeh Hospital for resistant trichotillomania and referred for CBT by the attending psychiatrist. Her problem had started at the age of 17. Ever since, the patient would start pulling her hairs after becoming depressed and upset. The disorder fluctuated over the 30 years, and by starting each new course of treatment the patient was partially relieved but shortly afterwards, the symptoms would relapse. Also, the disorder would get worse by stressful life events. Her mother and brother had obsessive compulsive disorder and her nephew had kleptomania.

The hair pulling spells mostly occurred at night just before bedtime. The patient was usually anxious and had an itching sensation then, which was alleviated by pulling the hairs out. The patient had tried several ways to prevent the itching sensation and hair pulling (such as soaking hair before she went to bed, brushing her hair, and applying homemade hair-mask).

The disorder had deteriorated her social and interpersonal relations. She had undergone several treatments including full doses of antidepressants, mood stabilizers, antipsychotics, and benzodiazepines as single treatments or in combination. Prior to her recent hospitalization, she was receiving lithium, carbamazepine, clonazepam, chlomipramine, fluoxetine and antipsychotics simultaneously, which were at their therapeutic levels. Therefore, one reason for her admission was to taper and cut these medications. The mentioned medications did not affect her situation, and she was drowsy during the daytime and her function was seriously impaired.

About 15 years before, she had taken a course of individual psychotherapy which had temporarily helped her with symptom relief and improvement of function. Also, the patient had undergone hypnotherapy, which had not been of much use. At the time CBT was started for the patient, she was receiving fluoxetine 40 mg daily, which was continued during the assessment period. Other medications were discontinued.

### *Assessments*

Initial assessments were carried out according to the method introduced by Hawton et al. (10) and included a detailed behavioral interview, filling a daily chart of activities, recording the hair pulling behavior with a description of patient's emotional and situational status during the action.

### *Treatment procedures*

The treatment procedures were planned based on the habit reversal techniques (6). The first four sessions were spent on the patient's cognitive behavior assessments,

explaining the nature of the problem, explaining the therapeutic method, practicing the therapy, and assessing the patient's compliance.

One of the adopted techniques was "self-monitoring", which required the patient to record daily activities and hair pulling in two separate tables. On the hair pulling chart, she recorded the date, time, situation, emotional status (and intensity), simultaneous thoughts and the duration of hair pulling.

Another technique was 'pulled hair saving', in which the patient was asked to collect the pulled hair in a bag to show to the therapist in a later session. This technique had two advantages: the therapist would use the amount of pulled hair as an objective measure of response to treatment, and second, the difficulty of collecting the pulled hair and patient's discomfort at the time she showed the hair to her therapist would possibly serve as an aversive technique.

And finally, 'competing response' was the last technique, which instructed the patient to clench her fists whenever she had a strong urge to pull out her hair and hold the position for 3 minutes. After 3 sessions, the treatment program was established, and then the patient was followed for 18 months. Follow-ups were weekly in the first 2 months, biweekly for another 4 months, and monthly thereafter.

### *Findings*

Throughout the follow-up period (18 month), only 2 bouts of hair pulling were reported, both of which occurred in the first 6 months of the treatment and following stressful personal experiences. The number of pulled hair was fewer than 5 in either of occasions. The patient's hair became thicker, and she was very satisfied with the therapy. Her social relations and function improved markedly, and her anxiety and sadness left her.

### *Discussion*

The treatment of trichotillomania improves as a result of increased awareness of the problem. As more practitioners become familiar with the available treatment options, it is probable that overall level of care will improve in the near future.

This report may provide evidence for the effectiveness of habit reversal in treatment of trichotillomania in combination with fluoxetine. Habit reversal has been stated as an effective treatment for trichotillomania (2, 5, 11). The technique in the classical form has several therapeutic components; therefore, therefore the importance of each separate component cannot be definitely determined (12).

This case showed that a combination of certain components such as awareness, self-monitoring, pulled hair saving, and competing response were effective in our patient.

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