

A Cognitive Approach for Treating Trichotillomania

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Trichotillomania has been largely ignored in the treatment literature. Existing work shows that some pharmacological and behavioral interventions may be useful; however, cognitive factors have not been addressed. A cognitive view and treatment of trichotillomania are outlined here. This approach suggests that high-risk situations trigger negative affect, basic beliefs about pulling, urges to pull, and finally the behavior. Strategies for intervening at each of these stages are discussed.

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Trichotillomania is a disorder that has received scant attention across therapeutic orientations. The behavioral and pharmacological literatures have addressed it to some degree; however, previous work has been largely limited to case studies and symptom reduction, and a comprehensive model has not been developed. In this article I discuss prior work and outline a cognitive model of trichotillomania with suggested interventions. A broad review of the literature is included to provide a thorough description of the disorder and available treatment; this background is necessary because it highlights aspects of trichotillomania that must guide intervention. The cognitive conceptualization is offered in the hope that it will provide a framework for therapists working with this population.

Trichotillomania may be more common than previously suspected. Christenson et al.¹ surveyed over 2,500 college freshmen at three universities. They report a 0.6% lifetime prevalence of hair pulling that meets DSM-III-R criteria. However, when they were questioned about hair pulling that resulted in visible hair loss but did not meet the criteria of tension and relief, the rates were higher. Of the female respondents, 3.4% met this criterion; 1.5% of the males responded affirmatively. Christenson and co-workers² also used this criterion with an outpatient population of

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60 adult chronic hair pullers. Although all of the subjects had either tension before pulling (95%) or relief after pulling (88%), 17% did not have both factors, and thus would not fulfill DSM-IV criteria. This work suggests that the defining requirements for a diagnosis of trichotillomania may need to be reconsidered.

Although nosology remains problematic, it is clear that hair pulling is a devastating and distressing disorder. Winchel¹ points out that patients may avoid a broad range of activities, such as work or close relationships, because of their embarrassment and fear of rejection. Because the disorder is usually chronic, this avoidance can have profound repercussions.

Recent work has begun to delineate many aspects of trichotillomania not previously studied systematically. Christenson et al.² describe characteristics of the pulling episodes. In their sample, 67% pulled primarily from the scalp, 22% pulled their eyelashes predominantly, 8% pulled from their eyebrows, 2% from facial hair, and 2% from pubic hair. The majority of the sample (62%) pulled from two or more sites, 38% pulled from a single site, 33% pulled from three or more locations, and 10% pulled from four or more areas. Almost half of the sample (48%) performed at least one oral behavior with the pulled hair: 33% of this subgroup bit off or chewed the end of the hair, 25% rubbed the strand around their mouths, 8% licked it, and 10% ate the strand. Trichophagia, hair eating, can cause medical complications and thus is additionally problematic.

Christenson et al.² also examined comorbid psychopathology, finding that 18% of the sample had no history of current or past Axis I disorders, 65% had had a mood disorder at some point in their life, and 57% had a history of some anxiety disorder. Lifetime prevalences for substance use (22%) and eating disorders (20%) were also significant. The majority (85%) of the sample indicated a problematic impulse history with other body areas, such as nail biting, knuckle cracking, nose picking, thumb sucking, tongue chewing, cheek chewing, lip biting, head banging, body rocking, and scab or acne picking. In a sample

of 43 patients, Swedo and Leonard⁴ report that 38% had a personality disorder. Within this subset, 26% of the disorders were histrionic; 18% were borderline, 16% were passive-aggressive, and 5% were dependent; 2% each met the criteria for schizoid, narcissistic, or avoidant personality disorders. These results suggest that comorbid psychopathology is common in trichotillomania. The prevalence of impulse-control disturbance is especially noteworthy.

Some debate has centered on whether trichotillomania should be viewed as a variant of obsessive-compulsive disorder. Swedo and Leonard⁴ found that 16% of their subjects had some past obsessive-compulsive behavior, but none of these subjects met the criteria for obsessive-compulsive disorder as defined by DSM-III-R. Because they had excluded subjects with current obsessive-compulsive disorder, the overlap between these two disorders remains unclear. Stanley et al.⁵ compared a sample of trichotillomania patients with obsessive-compulsive patients. The trichotillomania subjects reported that often the hair chosen to be pulled feels "special" or "different" in some way. For example, it may be kinky or gray. Some hair pullers do have certain rituals or rules about pulling, but this differs from pure obsessive-compulsive disorder in that the pulling does not function to neutralize an obsession. Stanley and colleagues found that the hair pullers reported more pleasure from pulling than the obsessive-compulsive patients derived from their compulsions. In addition, the intensity of the urge and the severity of associated thoughts was significantly less in the hair pullers. These authors conclude that trichotillomania should not be conceptualized as an obsessive-compulsive variant. This diagnostic issue remains unresolved, and future work with larger samples is necessary.

Another aspect of trichotillomania that may distinguish it from obsessive-compulsive disorder is that the patient may at times be unaware that he or she is pulling. Christenson et al.² found that 80% of their sample varied between complete and partial awareness of the

Researchers obtained contrasting results with the same drug, and symptoms frequently recurred when the medication was discontinued. These factors suggest that pharmacological interventions alone may be insufficient for treating trichotillomania.

Behavioral Treatments

Behavioral interventions appear to produce more lasting and significant improvement. Azrin et al.¹⁵ (see also Horne¹⁶) developed a multifaceted behavioral treatment. Their habit-reversal procedure was taught in a 2-hour single session and included the following components: competing reaction, awareness training, identifying response precursors, identifying habit-prone situations, relaxation training, prevention training, habit interruption, positive hair care activity, practice of the competing response, self-monitoring, seeking out avoided situations, enhancing social support, and annoyance review. They compared this procedure to negative practice in which the subject acted out hair pulling, without actually removing the hair, for 30 seconds every hour. The 34 subjects were randomly assigned to one of these conditions. Habit reversal was twice as effective in decreasing the number of hair-pulling episodes as well as the number of subjects who remitted completely or almost entirely. Assessing the long-term efficacy of this treatment is difficult because the investigators provided booster sessions as needed to prevent relapse. Friman et al.,¹⁷ in their review of the literature, concluded that habit reversal was the most effective treatment available, but they acknowledged that more robust research was needed.

More recently, Vitulano et al.¹⁸ modified the procedures of Azrin et al.¹⁵ to treat 3 patients. They provided six sessions bi-weekly, including the following components: self-monitoring, relaxation, habit interruption and prevention training, competing reaction training, positive practice, awareness training, annoyance review, and

tangible reinforcers. Two of the 3 patients had moderate improvement, which was maintained at follow-up.

Other researchers have reported case studies with similar interventions that proved effective. Bornstein and Rychtarik¹⁹ treated a 21-year-old woman with a 13-year history of trichotillomania. Their combination of self-monitoring, relaxation, and systematic desensitization led to decreased pulling over 40 weeks. Tarnowski et al.²⁰ treated an 11-year-old female with a habit-reversal procedure in two sessions. However, she continued to see the therapist once a month for 6 months. Changes were maintained for up to 6 months after the final contact with the therapist. DeLuca and Holborn²¹ report success with relaxation training and a competing response. Their patient had a 14-year history of trichotillomania and nail biting. They had six sessions, and both symptoms were alleviated. This change was maintained at a 2-year follow-up.

Two researchers have addressed cognitive factors, but only peripherally. Ottens²² addresses the importance of calming and coping self-statements. In addition, he stresses that patients must become aware of their self-dialogue that is associated with pulling. Rothbaum²³ has developed a 9-session treatment that includes the following: information gathering, habit reversal training, relaxation, thought stopping, cognitive restructuring, self-dialogue, covert modeling, and relapse prevention. She reports on 2 patients who did well with this intervention. She is the first researcher to explicitly report including a cognitive component, although it is employed only for a single session.

The behavioral literature cited above describes useful tools that enable trichotillomania patients to control their pulling. However, these interventions are insufficient in that they do not address precipitating factors. Although they can help control the symptom, they do not modify the underlying mechanisms, so that relapse may be more likely to occur. These behavioral treatments do not reflect

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individualized interventions based on an understanding of the person's vulnerabilities, triggering events, and stressors. The behavioral techniques are therefore limited because individuals cannot generalize these skills and apply them to diverse situations. Consequently, patients do not enhance their general coping strategies and self-efficacy.

A cognitive approach may overcome some of the inadequacies of pharmacological and behavioral models. Because this approach is based on individual conceptualization and teaches widely applicable skills, coping may be heightened and distress and relapse diminished. However, behavioral and pharmacological interventions should not be disregarded. These treatments may be useful adjuncts to the cognitive therapy. They may be particularly important in initially reducing hair pulling while the client learns how to apply cognitive techniques. These other forms of treatment decrease pulling, but the cognitive approach may also address the activating mechanism.

A COGNITIVE MODEL OF TRICHOTILLOMANIA

It is clear from the literature reviewed above that we do not have a comprehensive model of trichotillomania. A cognitive approach developed from the work of Beck and his associates^{24,25} on anxiety and substance abuse may elucidate the mechanisms driving this behavior. This cognitive conceptualization can then also guide treatment.

Beck et al.²⁵ outline a model of substance abuse that can be readily adapted to trichotillomania. They view substance abuse as the result of a cycle of triggering stimuli, belief systems, cravings and urges, and behavior. Initially the individual is confronted with some high-risk stimuli, such as seeing drug associates or experiencing an unpleasant emotional state. This cue activates deeply held drug beliefs such as "Drugs make me feel good" or "Drugs enable me to cope." At the conscious level, the individual may then have

automatic thoughts of "I'd like to get high" or "I'll feel better if I use." Subsequently, he or she will begin to crave the drug and have an urge to use. Certain facilitating or permission-giving beliefs may then be activated, including "I've been clean awhile—I deserve this" or "I'll only use a little and won't let it get out of control." At this point, the person will begin to carry out strategies that will lead to using, such as getting money for drugs or calling up his or her contacts. Beck et al.²⁵ suggest that therapy with this population must diminish the intensity and frequency of the urges by evaluating the beliefs and thoughts that precede them. In addition, clients must be taught strategies to control and manage the urges when they do occur.

Beck et al.²⁵ have identified several predisposing factors for substance abuse that apply just as readily to hair pullers: a sensitivity to and limited tolerance for unpleasantness; low motivation to control the behavior (at least initially); poor coping skills; a style of giving in to the impulses automatically; a low tolerance for boredom and a tendency to seek excitement; a limited ability to cope with frustration; and a lack of focus on the negative outcome of the behavior. Hair pulling is also similar to substance abuse in that it can be linked to several emotional states, primarily anxiety or boredom. Each of these two states may be associated with specific cognitions. The progress from the initial stressor to hair pulling can be traced with the cognitive substance abuse model. As with substance abusers, interventions can occur at several points. Besides pulling triggered by anxiety and boredom, a third condition, which is not shared by substance abusers, is hair pulling that occurs automatically and habitually. Cognitive interventions useful in this situation will also be outlined.

For the conditions of anxiety and boredom, the cognitive model of substance abuse can be easily adapted. As with substance abusers, the hair puller is initially confronted with a *high-risk situation* that produces some emotion. Patients frequently report this experience

in the workplace or with school requirements. For example, a patient may be faced with a challenging assignment and think, "I can't do this; I'll never get it finished." Subsequent to these automatic thoughts, she will feel anxious. Conversely, she may be given an assignment that is too simplistic and not at all demanding. She might then have thoughts such as "This is so boring" and "Tasks like this don't challenge me at all." She might then feel bored or understimulated.

Such a high-risk situation may activate deeply held *beliefs* about the value of hair pulling as a compensatory strategy. These beliefs typically include "Pulling will make me feel better," "It will decrease my boredom," "It will distract me," and "It will keep me busy." These beliefs are strongly held because there is much historical data to support their accuracy. These rules are so entrenched that the patient may not be aware of how they operate.

The individual may then have *automatic thoughts* about the situation that produce the negative affect of anxiety and boredom. Besides those discussed above, other examples of automatic thoughts that clients have reported include "I can't handle this," "I won't do a good job," and "This boring task will never end." After experiencing the high-risk stimuli and activation of automatic thoughts, basic beliefs about pulling, and a negative emotion, the individual will feel an urge to pull. As Beck et al.²⁵ note concerning substance abusers, cravings and urges may produce a sense of uncontrollability or helplessness. These urges have been repeatedly paired with a sense of relief and thus are extremely difficult to resist.

The urge to pull or to use substances is exacerbated by *permission-giving beliefs*. Common beliefs in trichotillomania include "I'll just pull one," "I'll stop when I pull the perfect one," "It will help me get more accomplished," and "I've been good lately—I deserve it." These permission-giving statements may be the final stage in the sequence that results in hair pulling.

COGNITIVE THERAPY FOR TRICHOTILLOMANIA

Breaking down the hair-pulling process into this sequence is useful in forming a treatment strategy. It suggests that trichotillomania can be treated with cognitive therapy by intervening at different points in the process. Treatment should include identifying and restructuring thoughts and beliefs, teaching behavioral control techniques, and increasing awareness of habitual pulling. These strategies are outlined below.

Treatment should begin with an introduction to the cognitive model of therapy and a detailed assessment of hair pulling. In the first session, the client is taught about the association between thoughts, affect, and behavior. The pulling is conceptualized as a behavioral response to distressing thoughts. A recent pulling episode can be broken down into this sequence as an applied example. This is recommended because it shows the client that the pulling does not arise spontaneously and that she can learn techniques to halt the negative outcome. The habitual component is also addressed. Analogies of nail biting, snacking, or driving absentmindedly are useful for conveying this aspect of the behavior. The client is assured that she will be taught techniques for both distress-related and habitual pulling. An initial sense of hope and control is instilled, contributing to motivation and the therapeutic alliance. Other aspects of cognitive therapy are explained in the first session, including the importance of homework, collaboration, and a structured agenda.

Assessment should cover frequency and intensity of pulling, sites pulled from, number of hairs lost per episode, typical and high-risk situations, rules (for instance, pulling only gray hairs), and behavior after the hair is pulled (such as eating it or biting the follicle). These clients are often ashamed or believe they are abnormal and may be reluctant or embarrassed to discuss their pulling. Educating them and normalizing their behavior as an anxiety response makes them feel validated and may

decrease some of their initial distress. For example, after the first session, clients typically make comments such as "This is the first time I haven't felt like a freak," "I feel optimistic that this approach can help," and "I really feel understood."

The first session should end with a homework assignment to begin self-monitoring. Patients are asked to keep a pulling log in the following categories: situation, automatic thought, emotion, habit versus anxiety pulling, number of hairs pulled, duration of the episode, intensity of pulling (1-100), and why they stopped. In addition, they are asked to collect pulled hair in envelopes and bring these to the subsequent session. These assignments are maintained throughout treatment. An additional column on the log is added after the second session for developing alternative responses to the automatic thought.

Despite the uniqueness of the symptom of hair pulling, standard cognitive therapy can be applied to the automatic thoughts evoked by the high-risk situation. For example, a patient may have thoughts such as "I'll never get this work finished" and "I won't be able to please my boss" when confronted with work demands. She can easily be taught techniques for evaluating these anxiety-producing thoughts and for developing alternatives. She can learn to look for evidence supporting or refuting the automatic thoughts and learn how to avoid cognitive distortions. Socratic questioning is a valuable technique for teaching the client how to refute negative thoughts. When asked, "What is another way of looking at the situation?" or "What is the worst possible outcome, and how likely is that?", the client begins to see that her thinking is distorted and that she can change it. Gradually, this approach becomes internalized and the client can evaluate her negative thoughts without the therapist's help. When the anxiety is reduced with standard techniques in the high-risk situation, the negative affect will be avoided. Because the patient is then not distressed, she may not have an urge to pull.

A common high-risk situation is associ-

ated with completing schoolwork. Patients typically report automatic thoughts such as "I have too much to do and not enough time," "I don't understand the material; I know I'll get a bad grade," and "I'll look foolish if I have to discuss the assignment in class." The client is encouraged to monitor these thoughts and write them on her pulling log. In the subsequent session, she and the therapist can systematically examine them. Through Socratic questioning, the therapist might ask about prior academic performance, inquire about accuracy of past predictions of achievement, or begin to discuss techniques for organizing study time so that the task becomes less overwhelming. Over time, the therapist can address the underlying meaning of these thoughts and alter longstanding belief systems. For example, core beliefs might include themes of inadequacy, uncontrollability, unlovability, or vulnerability. After the therapist has obtained many samples of automatic thoughts, these themes may become apparent and can also be modified.²⁶

While the patient is learning techniques to control her anxiety-producing thoughts, the therapist can also help her work on basic beliefs about the pulling. Initially, patients are often unaware that they even hold these assumptions about pulling. A useful early assignment is to have clients develop a list of underlying beliefs. They are often surprised by the number of these beliefs they hold and how strongly they endorse them.

The patient can be taught to develop alternatives to common beliefs such as "Pulling gives me relief" and "I won't be able to control my urges." She might want to write out the disadvantages of pulling, as well as generating other, less harmful strategies that decrease anxiety or boredom. A list of disadvantages might include hair loss, embarrassment, limited social activities, and not learning better ways of coping with anxiety. Other means of alleviating the distress could include relaxation, deep breathing, or keeping a record of dysfunctional thoughts. The function of these assignments is twofold—not only to diminish

the immediate negative affect, but also to counteract the underlying beliefs about the pulling. After learning that "I do have control over the urge" and "I have other options for decreasing anxiety," the client will not feel as powerless to resist the urge in the future.

The principles outlined above also guide the work on facilitating beliefs. When the client has thoughts such as "I'll just pull one" or "Pulling now would make me feel better," she can learn to think instead, "I know that if I start, I'll pull out many" or "It will make me feel better temporarily, but at a tremendous cost." When the client is helped to identify and then evaluate her beliefs about pulling, a new belief system can be developed that focuses on the detrimental aspects of the behavior. In addition, the client will become more aware that these silent beliefs are operating. She will develop an enhanced vigilance for them and will be able to counteract them more rapidly.

In addition to teaching clients generalizable cognitive techniques for decreasing anxiety and coping with boredom, the therapist can incorporate techniques such as those outlined above under "Behavioral Treatments." These strategies can be presented as a means of decreasing the behavior early in treatment when the client is first learning how to identify and evaluate thoughts and beliefs. These interventions provide the client with rich data that show she can control the behavior. Using these specific behavioral strategies powerfully contributes to changing beliefs from "This behavior is out of my control; I can't do anything to stop it" to "I have the skills to overcome this." This evidence strengthens basic beliefs about her efficacy and coping ability.

Hair pulling can also occur automatically and outside of the patient's immediate awareness. This category of pulling does not seem to be preceded by anxiety or boredom-provoking thoughts. The initial goal in this condition is to enhance awareness of the behavior. Self-monitoring techniques, such as counting pulled hairs and putting them in envelopes, are useful for increasing the client's vigilance

about the behavior. As the client gains a heightened awareness of the conditions in which she pulls habitually, the automatic response should decrease. In addition, behavioral techniques for changing these situations can be introduced. For example, a client who pulls habitually while driving can become more consistent in keeping both hands on the wheel. An individual who pulls while reading can learn to hold the book with both hands.

Cognitive techniques can also be useful in generating coping beliefs for these situations. Clients may feel hopeless or believe they cannot control the pulling if it occurs without awareness. Specific thoughts may include "I don't even know when I do it, so I can't control it" or "I've pulled for so many years that I'll never be able to get rid of this habit." A coping card with a series of calming statements may be a valuable tool for combating these beliefs and generating hope. The coping card, which should be generated primarily by the client, typically includes statements such as "I was successful at (stopping smoking, eating healthier, etc.)—I thought that would be impossible but I've done well with it"; "I now have specific techniques for coping that I didn't know before—it makes it a lot more manageable"; and "I can control my pulling—I've changed already after only being in treatment a short time. The evidence suggests that I should continue to do well." The client should be encouraged to read her coping card when she is feeling discouraged or unmotivated and to continue to add to it.

Clearly, much remains unknown about trichotillomania. Because the disorder is rare, it has not been the focus of much study. Some work has shown the utility of several medications and behavioral techniques, but a cognitive model had not been previously developed. I have outlined here a cognitive conceptualization of trichotillomania that can guide therapists treating this disorder. The model has shown promise with a small sample of clients. Before treatment, these clients had each been pulling up to several hundreds of strands of hair per day. All had noticeable

patchy spots; several chose to wear wigs or scarves because they were almost completely bald. Most have had significant decreases or a complete elimination of their hair pulling, with few lapses. For example, one client was pulling about 100 strands daily. By the end of treatment, she was not pulling at all. She was seen for a follow-up visit 3 months later and reported two episodes in which she pulled

approximately 10 strands of hair. All of the clients have reported that the model gave them a useful framework for viewing their pulling, as well as concrete skills for coping with it. Although an empirical study must be undertaken to prove the validity of this cognitive model, it appears to offer a useful approach in guiding work with this population.

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