Trichotillomania and Skin-Picking Disorder: An Update

Jon E. Grant, J.D., M.D., M.P.H., and Samuel R. Chamberlain, M.D., Ph.D.

Trichotillomania (hair pulling disorder) and skin-picking (excoriation) disorder are common neuropsychiatric disorders (each with a point prevalence of around 2%) but are underrecognized by professionals. Affected individuals repeatedly pull out their own hair or pick at their skin, and these symptoms not only have a negative impact on these individuals because of the time they occupy but can also lead to considerable physical disfigurement, with concomitant loss of self-esteem and avoidance of social activities and intimate relationships. The behaviors may also have serious physical consequences. Trichotillomania and skin picking frequently co-occur, and both disorders commonly present with co-occurring depression, anxiety, impulsive, and obsessive-compulsive disorders. Behavioral therapy currently appears to be the most effective treatment for both. Pharmacotherapy, in the form of *N*-acetylcysteine or olanzapine, may also play a role in treatment.

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CLINICAL CONTEXT

This article provides an overview of previously discussed key topics on these disorders (1), as well as new findings since our previous publication. New findings in this article, not covered previously, include recent data on prevalence from large-scale representative samples, subtyping of these conditions using latent phenotyping approaches, sex differences, and novel clinical trial data (e.g., milk thistle, *N*-acetylcysteine [NAC] in picking).

Trichotillomania

Trichotillomania (hair pulling disorder) is characterized by the repetitive pulling out of one's own hair, leading to hair loss and often to functional impairment (2) (see Box 1 for diagnostic criteria). Most people with trichotillomania commonly pull from the scalp, eyebrows, and eyelashes, but any bodily site with hair (e.g., the pubic region) can be affected (3, 4). Pulling from multiple sites is common, and pulling episodes can last from a few minutes to several hours (5).

Recent research has shed new light on the prevalence of trichotillomania. A study of university students (N=4,335) by means of an electronic survey found that 0.7% met the criteria for trichotillomania and that 4.8% reported subclinical pulling (6). An online survey of participants (N=1,378) in the community found that 2% met the criteria for trichotillomania (7). Finally, the first large-scale epidemiological survey of trichotillomania in the U.S. general population (N=10,169) found that 1.7% of 18- to 69-year-olds endorsed current trichotillomania (8).

Onset of hair pulling is typically in adolescence, although onset of pulling behaviors can occur at any age (5, 8). Trichotillomania has long been thought to be more common among females (9), but this may be due more to who seeks treatment because it now appears that it may be distributed equally between the sexes in the community at large (8). Trichotillomania also appears to have a similar clinical presentation across cultures (10). Trichotillomania is frequently associated with reduced self-esteem and increased avoidance of social situations as a result of shame and embarrassment from the pulling and its consequences (11, 12). Even though trichotillomania interferes with a person's quality of life, most individuals (about 65% or more) never seek treatment (4).

The clinical presentation of trichotillomania varies. Individuals may report one or many triggers for their pulling, including sensory triggers such as the feeling of the hair or the scalp; emotional triggers such as feeling anxious, bored, or angry; and cognitive triggers such as thoughts about hair and appearance or rigid thinking (4, 5). Many patients report not being fully aware of their pulling behaviors, also referred to as *automatic pulling*, whereas *focused pulling* generally occurs when the patient sees or feels a hair that is "not right"; the hair may feel coarse, kinky, or out of place (4, 5). Most patients pull with varying degrees of focused and automatic pulling, which can fluctuate over time.

Skin-Picking (Excoriation) Disorder

Skin-picking (excoriation) disorder is characterized by the repetitive and compulsive picking of skin, leading to tissue damage (2) (see Box 2 for diagnostic criteria). Although

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picking one's skin is fairly common from time to time in the general population, clinicians must differentiate between normal picking and more pathological forms. The diagnostic criteria for skin-picking disorder require that picking be recurrent and result in skin lesions, thereby reflecting the frequency and intensity of the picking (2). In addition, the clinical diagnosis requires that the picking result in the person feeling distressed or impaired.

Community prevalence studies in the United States have found that skin-picking disorder is relatively common. In one study among people (N=354) randomly selected in public places, 63% of respondents engaged in some form of picking, and 19 (5.4%) reported significant picking with associated distress or impact (13). Another study (N=2,513) found that 1.4% of respondents picked to the point of having noticeable skin damage and had distress or psychosocial impairment as well (14). In a Brazilian study, 7,639 participants recruited by means of an online survey found that 3.4% endorsed current probable skin-picking disorder (15). Finally, in a large U.S. community survey (N=10,036), 213 participants (2.1%) identified as having current skin-picking disorder (16).

Research has suggested that the onset of skin-picking disorder may occur in adolescence or middle adulthood (17). The clinical characteristics of skin-picking disorder appear to be the same across age cohorts and cultures (18). Many individuals with skin-picking disorder report that the behavior began with the onset of a dermatological condition such as acne, but the picking continues even after the dermatological condition clears.

Box 1. Diagnostic criteria for trichotillomania[a]

A. Recurrent pulling out of one's hair, resulting in hair loss.
B. Repeated attempts to decrease or stop hair pulling.
C. The hair pulling causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
D. The hair pulling or hair loss is not attributable to another medical condition (e.g., a dermatological condition).
E. The hair pulling is not better explained by the symptoms of another mental disorder (e.g., attempts to improve a perceived defect or law in appearance in body dysmorphic disorder).

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The phenomenology of skin-picking disorder bears striking similarities to that of trichotillomania. Individuals with skin-picking disorder spend a significant amount of time each day picking at their skin, with many reporting that the picking behavior occupies several hours each day (19). Although the face is the most commonly reported site of picking, other areas, such as the hands, fingers, arms, and legs, are also common targets. Picking in more than one body area is normal, with one study finding that people picked at an average of 4.5 sites (18, 19). The time spent picking, as well as the consequences of picking, such as scarring, results in dysfunction related to work and social activities (20). Triggers to pick vary greatly between individuals, and multiple triggers are the norm. Stress, anxiety, time away from scheduled activities, boredom, and feeling tired or angry have all been reported as triggers (18).

Clinical Characteristics Among Children and Adolescents

Trichotillomania has a peak age of onset of around 12–13 years, but it can begin at any age. Skin-picking disorder appears to have a more variable age of onset, with an unclear peak. The majority of research into these conditions has focused on adult samples; as such, knowledge of childhood forms is relatively limited. Dimensional forms of body-focused repetitive behaviors appear to be higher among children than among adults. For example, in a study using the Child Behavior Checklist, 10%−40% of children reported picking their skin, nose, or both (21), whereas rates of hair pulling in children are not known. In children with trichotillomania, comorbid conditions appear similar to those for adults, with anxiety or mood disorders and attention-deficit hyperactivity disorder (ADHD) being common (22), albeit with lower rates of anxiety or mood disorders than for adults (23).

Early case reports of trichotillomania suggested that hair pulling in very young children tended to resolve spontaneously without the need for intervention. This may mirror more recent findings from the Trichotillomania Impact Project in Young Children (TIP-YC) (24). The TIP-YC involved an online survey of parents with young children with a hair-pulling problem. The authors found that the clinical profile of childhood hair pulling seemed similar to that for adults (e.g., in terms of impairment); however, very young (defined as preschool-age) children had less impairment and fewer comorbid conditions.

Commonalities Between Trichotillomania and Skin-Picking Disorder

Much remains unknown about the neurobiological underpinnings of these two disorders. Because both picking and pulling may cause discomfort, recent research has

Box 2. Criteria for skin-picking disorder[a]

A. Recurrent skin picking resulting in skin lesions.
B. Repeated attempts to decrease or stop skin picking.
C. The skin picking causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
D. The skin picking is not attributable to the physiological effects of a substance (e.g., cocaine) or another medical condition (e.g., scabies).
E. The skin picking is not better explained by symptoms of another mental disorder (e.g., delusions or tactile hallucinations in a psychotic disorder, attempts to improve a perceived defect or flaw in appearance in body dysmorphic disorder, stereotypies in stereotypic movement disorder, or intention to harm oneself in nonsuicidal self-injury).

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questioned whether people with these disorders have dysfunction in pain perception. One means of understanding pain perception is via the cold pressor test; it is generally understood that noxious cold stimulation applied to the upper limbs is associated with activation of the amygdala and anterior cingulate cortex, regions classically implicated in aversive emotional processing, and may also implicate the hypothalamic-pituitary-adrenocortical axis (e.g., an increase in cortisol). In the case of both skin-picking disorder and trichotillomania, participants appear to exhibit a similar dampened autonomic response to pain (25, 26). Neuropsychological studies have also shown that patients with trichotillomania and skin-picking disorder exhibit deficits in cognitive abilities that are linked to the functioning of the frontal lobe and its related frontosubcortical structures, such as problems with motor impulsivity (27, 28).

Neurobiologically, trichotillomania and skin-picking disorder appear to share similar structures and functions that have been implicated in both disorders. Structural abnormalities of subcortical regions involved in affect regulation, inhibitory control, and habit generation appear to play a key role in the pathophysiology of trichotillomania (29). In one functional neuroimaging study, patients with trichotillomania exhibited dampening of nucleus accumbens responses to reward anticipation (but relative hypersensitivity to gain and loss outcomes) compared with patients in a control group (30). Other neuroimaging studies have found disorganization of white matter tracts involved in motor generation and suppression (i.e., bilateral anterior cingulate and right orbitofrontal and inferior frontal cortices) with both disorders (31, 32). Research has also indicated that the cerebellum, which contributes to cognitive and affective aspects of behavior, may be implicated in both skin-picking disorder and trichotillomania (33, 34).

Psychological theories of etiology are also remarkably similar for both disorders. Because negative emotions such as anxiety, tension, and sadness often precede pulling and picking episodes, the question arises as to the role of these behaviors in regulating emotional states or stressful events. Therefore, picking and pulling may function as a means for the person to escape from or avoid aversive experiences, and the temporary reduction in these negative emotions maintains the behavior through a negative reinforcement cycle (35). Studies that have measured emotional regulation in individuals with and without pulling and picking have found that individuals have greater difficulty regulating negative affective states than control individuals (36, 37). In a related fashion, boredom may also trigger picking and pulling for some individuals. This has led some to hypothesize that pulling and picking may similarly help to adjust negative emotions brought on by a feeling of perfectionism characterized by an inability to relax (38). This theory suggests that the perfectionism leads to feelings of frustration, impatience, and dissatisfaction when standards are not met and to boredom when productivity is impossible. Picking and pulling may therefore function as a means of releasing tension generated by these emotions. Pulling and picking are perhaps positively reinforced by a feeling of taking action.

TREATMENT STRATEGIES AND EVIDENCE

Diagnosis

Treatment strategies are based on an accurate diagnosis. Misdiagnosis of trichotillomania and skin-picking disorder is unfortunately common (Table 1). Individuals may receive a misdiagnosis of obsessive-compulsive disorder (OCD), an anxiety disorder, body dysmorphic disorder, or even drug addiction. For example, although both trichotillomania and skin-picking disorder may worsen under stress, these disorders are not merely symptoms of anxiety. Because treatments differ between these disorders and trichotillomania and skin-picking disorder, proper diagnosis is necessary.

Psychotherapy

The evidence base for psychotherapy for trichotillomania and skin-picking disorder is small but suggests the use of behavioral therapy for both disorders. Behavioral therapy for trichotillomania and skin-picking disorder has generally used habit reversal therapy (HRT) and may include components of acceptance and commitment therapy (ACT) and dialectical behavior therapy, as well as more traditional cognitive-behavioral therapy (CBT) elements using cognitive restructuring. There are nine controlled studies of behavioral therapy in trichotillomania and three controlled psychosocial treatment studies for skin-picking disorder.

HRT was first developed approximately 50 years ago by Azrin and Nunn for the treatment of nervous habits and tics (39). Although used in multiple forms throughout the years,

TABLE 1. Some common misdiagnoses among patients with trichotillomania and skin-picking disorder

Misdiagnosis	Reasons for and prevention of misdiagnosis
Obsessive-compulsive disorder (OCD)	Trichotillomania and skin picking are often misdiagnosed as OCD because they involve compulsive behaviors. Trichotillomania and skin picking, however, generally lack significant obsessional thoughts and do not appear to respond to traditional OCD treatments.
Anxiety disorder	Many clinicians assume that trichotillomania and skin picking are merely manifestations of anxiety—i.e., nervous habits. Although anxiety may worsen pulling and picking, the behaviors persist even when no anxiety is present.
Stimulant use, misuse, or addiction	It is not uncommon for individuals who use stimulants, either illicit or prescription, to report skin picking (either new onset or worsening) or possibly worsening of hair pulling.
Body dysmorphic disorder (BDD)	BDD is characterized by obsessions about and preoccupation with a perceived defect of one's physical appearance. In BDD, individuals may pull hair with the aim of correcting a perceived defect of their appearance (e.g., "I know that my arms are too hairy and disgusting to people") or pick their skin to improve their appearance.
Self-injurious behavior	Hair pulling and skin picking are not the same thing as self-injury. Pulling and picking are often used as a means of correcting a problem with the hair or skin and are not generated from the complex psychological factors that give rise to self-injury, such as cutting behavior.

the core aspects of HRT include self-monitoring (i.e., asking the patient to track their hair pulling or picking), awareness training, competing response training, and stimulus control procedures (i.e., modifying the environment to reduce cues for hair pulling or skin picking). Self-monitoring may begin by using a self-monitoring form that the patient fills out daily and maintains throughout the therapy period. Awareness training consists of having the therapist ask the patient to describe in detail and even reenact the picking or pulling. The patient also needs to identify triggers for the pulling and picking. In competing response training, patients are taught to, at the earliest sign of pulling or of the urge to pull, engage in a behavior that is physically incompatible with pulling for a brief period until the urge subsides. For example, people who pull their hair might clench their fists or place their hands underneath their legs upon identifying a warning sign for hair pulling. Competing responses must be opposite those of the targeted behavior (i.e., incompatible), must be maintained for 1 minute or until the urge to pull or pick subsides, and should be socially inconspicuous. Stimulus control consists of modifying the environment to reduce the triggers of pulling or picking. For example, if someone pulls at work only when the office door is closed, then the door should be kept open during the workday. HRT is similar to many other types of behavioral therapy, but it differs somewhat from standard CBT in that the focus of HRT is on behavioral change and not generally on cognitive strategies to address dysfunctional thoughts that precipitate pulling.

On the basis of controlled studies, HRT appears to be superior to waitlist and minimal attention control (40). In addition, HRT has shown benefit with the addition of components of ACT, dialectical behavior therapy, and more traditional CBT techniques such as cognitive restructuring (41–43). HRT can be delivered in person, online with a self-help method, or in a group format (43–45). Acute treatment gains obtained from HRT have generally been maintained for 3 to 6 months.

Typically, HRT is conducted weekly, although more severe disorder may necessitate more frequent sessions. HRT has shown benefit in many different frequencies formats (i.e. weekly to several times per week), and anywhere from four to 22 sessions (usually 60 minutes long) may be helpful. Although in practice many clinicians use a combination of HRT and more traditional cognitive therapy, the empirical data support HRT as the first-line psychotherapy treatment for these disorders.

Psychotherapy in Children and Adolescents

Very few treatment data are available for the childhood forms of these conditions. In an initial randomized treatment trial comparing 8 weeks of behavioral therapy with a minimal attentional control condition (three sessions and five telephone calls over 8 weeks) with 24 children and adolescents with trichotillomania (ages 7 to 17 years), symptoms of hair pulling were significantly lower after 8 weeks among those receiving behavioral therapy (46). In addition, the gains were maintained through an 8-week maintenance treatment phase.

Similar encouraging results were seen in a study of 40 participants (85% female; ages 7–17 years) who met diagnostic criteria for trichotillomania who were randomly assigned to either eight weekly sessions of HRT or 8 weeks of treatment as usual. Those receiving HRT had significantly greater reductions in trichotillomania symptoms at study endpoint than those receiving treatment as usual (76% of those in the HRT group versus 21% of those in the treatment-as-usual group) (47).

Another study examined 10 sessions of ACT as a standalone treatment (compared with waitlist) for trichotillomania in a randomized controlled trial of 25 adults and 14 adolescents. The study found that ACT resulted in significant changes in symptom severity and daily hairs pulled but not in daily urges (48).

Given that evidence suggests that trichotillomania and skin-picking disorder are characterized by impairment in response inhibition, one study sought to examine whether

computerized response inhibition training for children with trichotillomania would alleviate symptoms. Twenty-two children were randomly assigned to eight sessions of response inhibition training (N=12) or a waitlist control (N=10). Those assigned to training reported greater overall symptom reduction compared with those assigned to the waitlist (49).

Although these studies suggest that treatment may be promising, a literature review concluded that no particular treatment met criteria for "well-established status" (e.g., controlled studies demonstrating superior efficacy to another active treatment in at least two independent research settings) in the management of trichotillomania or skin-picking disorder in children or adolescents (50).

Pharmacotherapy

Currently, no pharmacotherapies have been universally accepted as first-line treatments for trichotillomania or skin-picking disorder. Eight double-blind studies have been published on the treatment of trichotillomania, and four double-blind, placebo-controlled clinical trials have been conducted on treatment of skin-picking disorder. A Cochrane review concluded that although clomipramine has demonstrated some benefit in treating trichotillomania, there is no strong evidence of a treatment effect of selective serotonin reuptake inhibitors (SSRIs) (51). The differential response to clomipramine compared with SSRIs may be due to the fact that clomipramine works on the noradrenergic and serotonergic systems, although data are lacking as to whether the ratio of clomipramine to *N*-desmethylclomipramine is important for its efficacy in trichotillomania.

Glutamatergic agents have shown some promise in the treatment of both trichotillomania and skin-picking disorder. One key example is NAC, which has demonstrated benefit in a double-blind, placebo-controlled study for trichotillomania and in a double-blind, placebo-controlled study for skin-picking disorder (52, 53). Previous research has used up to 3,000 mg a day as a target dose with expected clinical benefits being observed after approximately 9 weeks. Side effects are generally mild and usually only involve some bloated feelings and flatulence. Waiting as long as 9 weeks to see benefit may be frustrating for patients, so education about the need for time to see benefit, as well as adding behavioral therapy, may be needed to ensure compliance.

On the basis of data on their potential efficacy in OCD, antipsychotic medications have also been used in the treatment of trichotillomania. One small (N=23) double-blind, placebo-controlled study of olanzapine found that it was significantly beneficial in reducing the symptoms of trichotillomania after 12 weeks, using a mean dose of 10.8 mg per day (54). Olanzapine has been associated with metabolic syndrome, and so the decision to use it in the treatment of trichotillomania and skin-picking disorder needs to be tempered by its adverse side effect profile.

In terms of other medications, the opioid antagonist naltrexone, which reduces self-licking in dogs with acral lick dermatitis, may represent a viable option for people with hair pulling or skin picking, especially among those with a family history positive for alcohol use disorder or whose clinical profile suggests reward-driven symptoms (55). In addition, the cannabinoid agonist dronabinol may offer some benefits for pulling and picking, but any recommendations regarding this treatment await double-blind, placebo-controlled studies (56).

Pharmacotherapy in Children and Adolescents

Although limited studies with children and adolescents exist, there have been two randomized trials of pharmacotherapy. The first study examined the use of NAC among 39 children and adolescents (ages eight to 17 years) with trichotillomania who were randomly assigned to receive NAC or matching placebo for 12 weeks. No significant differences were found between NAC and placebo on any of the primary or secondary outcome measures (57).

In a second study, four children and 16 adults with trichotillomania were treated for 6 weeks with milk thistle (300 mg twice a day) and 6 weeks with placebo (a randomized, blind crossover design with a 1-week washout in between). There were no statistically significant treatment type × time interactions for the main outcome measure, but significant effects were seen for secondary measures (e.g., time spent pulling per day for the past week). From baseline to week 6, there was a significant decrease in Clinical Global Impression Scale severity among the milk thistle group but not among the placebo group (58).

Sequencing Treatment

Psychotherapeutic and pharmacological treatments have documented evidence of their effectiveness as monotherapies as well as in a combined treatment strategy (59). Although the optimal sequence of treatments has not yet been identified, we recommend behavioral monotherapy for individuals who are motivated to cooperate with therapy demands, do not have severe depressive symptoms, or prefer not to take medications. Medication treatment as monotherapy (e.g., NAC, olanzapine, clomipramine) is recommended for individuals who are not able to engage in behavioral therapy, who report a previous response to a medication, or who prefer medication treatments over psychotherapy.

Treatment of Comorbid Conditions

Co-occurring anxiety and depression are common among individuals with trichotillomania and skin-picking disorder. In a large-scale online study, 79% of individuals with trichotillomania reported one or more other mental health comorbidities; the most common were major depressive disorder, social anxiety disorder, OCD, posttraumatic stress disorder, and ADHD (8). The most common conditions comorbid with skin-picking disorder were social anxiety disorder, major depressive disorder, and panic disorder, but other comorbid conditions were quite common, too (16).

Assessment should attempt to understand, if possible, the temporal relationship of these comorbid conditions with trichotillomania and skin-picking disorder; for example, is the depression or anxiety secondary to the effects of the hair pulling or skin picking? If so, then focusing on the hair pulling or skin picking would be the recommended initial approach. If such a temporal relationship is unclear, however, then expanding the behavioral therapy to also include cognitive approaches would potentially be beneficial for people with both disorders. In terms of pharmacotherapy, many individuals may need an antidepressant for the comorbid diagnoses even when the data suggest that they are largely ineffective for trichotillomania and skin-picking disorder.

Prognosis

If trichotillomania and skin-picking disorder are left untreated, the course for the majority of people appears to be chronic, often with waxing and waning symptoms. Without treatment, response rates in adults are low (approximately 14%) (4). When diagnosed early and appropriately treated, however, as many as 50% of individuals may experience symptom reduction, at least for the short term (3–6 months). Therefore, accurate and early diagnosis followed by evidence-based treatment approaches are needed to prevent associated disability. Also, booster sessions are likely crucial for continued success. After short-term gains are achieved (say, in 3–6 months), we recommend monthly booster sessions for an additional 6–9 months, perhaps then gradually increasing the time between visits, monitoring improvement to see whether it is maintained. We should note that longitudinal studies of people with these conditions are lacking, and so knowledge about their longitudinal course comes from clinical impressions and cross-sectional work.

QUESTIONS AND CONTROVERSY

Clinical treatment trials for trichotillomania and skin-picking disorder have largely been short term and have predominantly involved young or middle-aged adults. Data are lacking on the long-term benefits or risks as well as what may work best for children or elderly people. More research is also needed to identify predictors of poor outcomes.

Although HRT has demonstrated some benefit for trichotillomania and skin-picking disorder, there are no data regarding how well HRT is performed in the community and what the results of HRT are when not performed by expert clinicians. Some of the psychological treatment trials used nonrigorous control conditions. HRT has shown some promise, but there are few if any data on whether more traditional therapies such as cognitive therapy or supportive therapy might also be beneficial for trichotillomania and skin-picking disorder.

The genetic features of trichotillomania and skin-picking disorder remain incompletely understood. Genes that confer susceptibility to these disorders have not yet been identified. Studies are needed to identify childhood and adolescent risk factors for these disorders and how these variables interact with genetic factors, ideally through longitudinal research. This may allow for the identification of children at risk and the development of early intervention strategies.

The clinical trial data have largely focused on the core symptoms of trichotillomania and skin-picking disorder, but effective treatments are also needed for associated cognitive impairment and social dysfunction. Identifying subtypes may in the future help to better direct the most useful treatments for particular individuals with these disorders. A recent international multisite study found three subtypes of trichotillomania and two subtypes of skin-picking disorder, with significant differences on measures of disability, automatic and focused symptoms, perfectionism, trait impulsiveness, and inattention and hyperactivity (60). Another avenue to explore is the role of trans-diagnostic compulsivity (i.e., the propensity to get stuck in repetitive, functionally impairing habitual responses) in potentially subtyping these conditions; compulsivity can now be measured across disorders (61). To fully understand neurobiological findings in trichotillomania and skin-picking disorder, it is also important to consider that some brain differences between people with these conditions and people without them may reflect vulnerability to a range of related symptoms (62, 63).

Although a range of etiological theories have been proposed, there is still a paucity of data examining this important area. Improved dissemination of information about psychotherapy and medication shown to be effective for these disorders is warranted because their availability remains limited.

RECOMMENDATIONS

Although our knowledge of trichotillomania and skin picking disorder is ongoing and evolving, we can make recommendations as to treatment approaches based on current evidence.

- If untreated, trichotillomania and skin picking disorder are often chronic illnesses and may result in substantial psychosocial dysfunction and may even lead to life-threatening medical problems (e.g., septicemia in skin-picking disorder or a trichobezoar in trichotillomania).
- Evaluation for trichotillomania and skin picking disorder must begin with a thorough psychiatric assessment to establish an accurate diagnosis, assess for co-occurring psychiatric disorders, and rule out other disorders in the differential.
- In the case of skin-picking disorder, a thorough evaluation from a dermatologist with knowledge about the disorder may be indicated, where available, to assess for underlying dermatological conditions that may cause or worsen skin picking.

- HRT has demonstrated benefit for both trichotillomania and skin-picking disorder, but finding someone trained in HRT is essential for appropriate treatment outcomes.
- In terms of pharmacotherapy, there is little evidence that SSRIs are beneficial, although they can play a role in treating comorbid conditions for some patients. On the basis of our clinical experience, we find that *N*-acetylcysteine in doses of as much as 3,000 mg a day has been quite helpful in reducing urges to pick and pull in adults and probably should be considered as the initial pharmacotherapy treatment. Naltrexone can also be considered for patients with a family history of alcohol use disorder or clinical features suggestive of reward-related involvement in the symptoms.
- Because treatment response is often only partial, attending to quality of life and long-term functioning is critical.

AUTHOR AND ARTICLE INFORMATION

Department of Psychiatry and Behavioral Neuroscience, University of Chicago, Chicago (Grant); Department of Psychiatry, Faculty of Medicine, University of Southampton, and Southern Health NHS Foundation Trust, both in Southampton, United Kingdom (Chamberlain). Send correspondence to Dr. Grant (jongrant@uchicago.edu).

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