Body-Focused Repetitive Disorder: A Case Report of Trichotillomania and Onychotillomania with Social Phobia in a 30-year-old Woman

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Abstract

Background: Trichotillomania (TTM) and Onychotillomania are defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) as dermatological conditions categorized as obsessive-compulsive disorders. Based on DSM-5, OCRD (Obsessive Compulsive and Related Disorders) includes BFRB (Body Focused Repetitive Behaviour), which includes Trichotillomania (TTM), Skin picking disorder (SPD), Onychoophagia, and Onychotillomania. TTM is characterized by repeated or repetitive hair pulling, which results in baldness/hair loss that is visible. Onychotillomania is defined as repetitive picking or pulling of the nail unit, causing damage to the nail matrix, nail bed, nail plate and periungual skin.

Case Report: We reported the case of a 30-year-old woman who initially came to the hospital with recurrent infection of the fingers and was diagnosed with Trichotillomania and onychotillomania. The patient experienced baldness on the right and left temporal scalps with irregular shapes. All the twenty fingernails and toes of the patient are short. Inability to withstand impulses and feelings of relief after doing chronic repetitive behaviour repeatedly felt clearly by patients for ten years. Due to her condition, she becomes afraid and anxious to meet new people, fears being judged by others, and avoids socialization. Patients get standard treatment for Trichotillomania and Onychotillomania through SSRI and Cognitive Behavioral Therapy and consult a dermatologist for hair and nail treatment.

Discussion: This Patient was diagnosed with Trichotillomania and onychotillomania because of fulfilling the five criteria according to the DSM-5, which are: the behaviour of pulling hair and nails repeatedly causing hair loss and nail damage, there is a repeated urge to hold the behaviour, there is a feeling of satisfaction, relief and/or enjoyment after pulling hair and nails, hair pulling behaviour causes social or occupational functioning to interfere with other vital functions, hair pulling behaviour is not caused by another medical condition (e.g., other dermatological conditions), and hair and nail pulling activities not caused by another mental disorder. The patient was given SSRI therapy in the form of Sertraline 50 mg/day to reduce their anxiety disorders. The patient was given CBT (Cognitive Behavioural Therapy) psychotherapy, especially habit reversal training (HRT), with the aim that the patient understand the causes of their illness so that attitudes and beliefs improve in the patient.

Conclusion: The Patient was diagnosed with Trichotillomania and onychotillomania with comorbid social anxiety. Stressors in patients are due to conflict in the family. Pharmacotherapy and psychotherapy are given to this patient. The patient also consulted dermatology for hair and nail treatment.

Keywords: Trichotillomania, Onychotillomania, Social anxiety
INTRODUCTION

Trichotillomania (TTM) is defined in the DSM-5 as a dermatological condition categorized under obsessive-compulsive disorder. Based on the DSM-5 classification, OCRD (Obsessive Compulsive and Related Disorders) includes BFRB (Body Focused Repetitive Behavior), and its divisions include TTM, SPD (Skin picking disorder), onychophagia, onychotillomania[1],[2]. TTM is characterized by pulling hair and recurring results in baldness/visible hair loss. Most patients usually pull the hair off the head but can also see eyebrows, eyelashes, the most rarely armpit and pubic hair. The pattern of hair loss varies from visible loss of hair density to prominent bald areas (alopecia) on the scalp. The form of alopecia is usually asymmetrical. The typical picture is of unequal-sized hair strands to baldness without scarring. [3],[4] Individuals diagnosed with TTM must experience increased tension before or when trying to resist hair pulling, accompanied by feelings of relief, satisfaction, or pleasure after hair pulling. [1],[3],[4],[5] Based on DSM-5 five criteria must be met to enforce Trichotillomania, namely: the behaviour of pulling hair repeatedly causes hair loss (A), there is a repeated urge to hold the behaviour (B), there is a feeling of satisfaction, relief and or pleasure after pulling hair ( C), hair pulling behaviour disrupts social or work functions, to other vital functions (D), hair pulling behaviour is not caused by other medical conditions (e.g.: other dermatological conditions), and hair pulling activities are not caused by other mental disorders (E). [1],[2],[3] Onychotillomania is defined as repetitive picking or pulling of the nail unit, causing damage to the nail matrix, nail bed, nail plate and periungual skin.[5],[6] This behaviour is self-induced using the patient's fingers and nails, although tools (e.g., nail clippers, scissors) can also be used for nail manipulation. A variation of Onychotillomania is a tic habit, a nervous habit characterized by repeated rubbing, picking, and pushing back of the cuticles.[6],[7] The exact pathophysiology of BFRB still needs to be fully understood. However, obsessive-compulsive behaviour is thought to be due to hyperactivity of the orbitofrontal cortex and striatum as an effect of increased glutaminergic excitation and decreased inhibition of GABAAergic.

The emotion regulation (ER) model proposes that people with BFRB have difficulty regulating negative emotions and engage in body-focused behaviour to avoid or reduce negative emotional influences. Thus, negative emotional experiences trigger BFRB, and relief from negative emotions sustains and reinforces the behaviour. Experimental studies show that emotions such as boredom, tension, and frustration are highly likely to induce BFRBs.[9] Boredom, tension, and anxiety are triggers for BFRB. The BFRB group has less emotional awareness and may have difficulty understanding emotions and accessing emotion regulation strategies. Emotion regulation refers to the way individuals identify and respond to emotional experiences. Emotion regulation plays a role in the persistence of BFRBs. It can be concluded that BFRB is characterized by general deficits in ER and episodes of BFRB due to the urge to experience certain affective states and a lack of alternative coping methods.[9]

The lifetime prevalence of major depression in patients with BFRB is between 29-56%. [10] The prevalence of anxiety disorders over twelve months is nearly 20%. Anxiety can occur from obsessive-compulsive conditions and phobias to overall anxiety. [11] For the diagnosis of social anxiety (social phobia) based on DSM-5, the individual must meet the following criteria:

A. The psychological, behavioural or autonomic symptoms must be the primary manifestation of the anxiety resulting from exposure to social situations

B. The individual fears that he or she will act in a certain way or exhibit symptoms of anxiety that will be responded negatively

C. Social situations almost always cause fear or anxiety

D. Social situations are avoided or faced by the individual with intense fear or anxiety

E. The fear or anxiety is disproportionate to the social threat in the actual situation or the socio-cultural context

F. OS experiences this for at least six months, can affect individual work and social life, is not caused by substance dependence, and is not caused by other disease conditions. The presence of comorbidities will be accompanied by increasing severity of BFRB symptoms. The relationship between BFRB and depression is reciprocal. Hair pulling and other symptoms can lead to a depressed mood, and depression or anxiety can trigger pathological hair pulling to regulate mood.
Until now, the non-pharmacological therapy considered effective for BRFB conditions is Cognitive Behavioral Therapy (CBT). The choice is Habit Reversal Training (HRT). HRT is a highly effective, evidence-based behavioural therapy for people with repetitive, unwanted behaviours. HRT has five parts: awareness training, competition for response training, motivation and obedience, relaxation, and generalization training.

**CASE REPORTS**

A thirty-year-old woman, single, last education undergraduate (S-1), the fifth child of six siblings in her family, hobbies: watching movies and listening to music. Initially, the patient came to the emergency room to have her left thumb checked because it was painful, red, swollen and had pus. She admitted that her fingers often hurt but healed independently by cleaning and covering the wound with plaster. At first, the patient was silent when asked about the cause of the condition, but after an interpersonal approach, the patient admitted that she had pulled out her nails and hair. She admits that she started pulling her hair about ten years ago and pulling her fingernails in the last year. At first, she pulled her hair out whenever something went wrong, for example, after seeing her parents quarrel. In addition, since last year, the patient has started pulling out her hair and fingernails. In fact, she did it in the last three months whenever she had free time. She admitted that she often pulled out her hair and nails despite trying to refrain. She felt more at ease when she pulled her hair and nails. After this repetitive behaviour, she would feel satisfied and relieved, so it became repetitive. Last year, the patient started using tweezers to pull out newly grown hair.

She admitted she was not close to her parents when she was little. Her parents were busy working, and their older siblings looked after her. Since childhood, she often saw her parents fight and make her cry. She said that she loves her parents despite often disagreeing with them. She feels her mother constantly criticizes her, primarily because of work, her fat body, and the pressure to marry soon. After finishing college, she worked in Jakarta for five years, but since there was no promising career and a low salary, her mother asked her to return home to help her mother's business a year ago. She also admitted that it was difficult to get along with others. She still had several close friends, even though she never told anyone about her condition. She realized she was bald and felt embarrassed, so she tried to cover it up. She is afraid of being considered weird and ugly because of her condition. She often feels that other people will insult her and be embarrassed to befriend her. She prefers to stay home because she often worries when she has to meet other people or in a crowd. This made her even more afraid to go to the doctor.

History of using alcohol, drugs or other substances was denied. History of hearing voices ordering to pull hair and nails was denied. History of being sad, depressed, or overly excited was denied. History of frequent anxiety for no reason denied. She admits she had trouble sleeping, but it did not last long. The history of other family members experiencing the same and other mental disorders was denied.

Examining was found that all of her fingers and toenails were short. There was inflammation and pustules on the left thumb. Examination of the scalp found that the right and left temporal regions were bald with irregular shapes and hair growing in different sizes. She then consulted a psychiatrist and was given therapy in the form of pharmacotherapy and non-pharmacotherapy. The patient then consulted a dermatologist to repair damaged hair and nails.
Figure 1. The clinical picture of the patient with baldness in the scalp’s right and left temporal region and the appearance of all short fingers. Toenails are also short.
DISCUSSION
In this patient's case, Trichotillomania and onychotillomania were in the BFRB group. This is consistent with references where covariation often occurs between BFRBs, meaning the same patient can experience several BFRBs.[10] This Patient was diagnosed with Trichotillomania and Trichotillomania because of fulfilling the five criteria according to the DSM-5, which are: the behaviour of pulling hair and nails repeatedly causing hair loss and nail damage, there is a repeated urge to hold the behaviour, there is a feeling of satisfaction, relief and/or enjoyment after pulling hair and nails, hair pulling behaviour causes social or occupational functioning to interfere with other essential functions, hair pulling behaviour is not caused by another medical condition (e.g., other dermatological conditions), and hair and nail pulling activities not caused by another mental disorder.

In Trichotillomania and onychotillomania, there is a disturbance of emotion regulation (ER). There is a generalized deficit in ER, resulting in episodes of BFRB behaviour due to the urge to experience certain affective states and a lack of alternative coping methods. This follows the patient's condition, where the patient will pull out hair and nails when faced with a stressor. Initially, the stressors in these patients were associated with family problems, which made the patient depressed, but over time, boredom, anxiety and sadness made the patient's behaviour appear. In this patient, comorbidity was found in the form of social anxiety disorder.[10] The diagnosis of social anxiety disorder was made because the patient had complaints that met the criteria according to the DSM-5 in the form of the patient being afraid of being responded negatively to his behaviour, social situations almost always caused fear or anxiety, inpatient fulfilled where the patient will feel anxious when meeting other people and triggers symptoms of pulling out hair and nails, social situations are avoided or faced by individuals with intense fear or anxiety also fulfilled in patients because patients are afraid to meet other people, and this complaint has been experienced by patient more than six months.[1]

This patient's differential diagnoses are alopecia for hair loss or paronychia for nail disorders. However, the patient did not meet symptoms other than symptoms of psychiatric disorders that caused her complaints. A dermatologist consulted the patient to get treatment for her damaged hair and nails. Social anxiety disorder is managed with pharmacotherapy and non-pharmacotherapy. The choice of therapy is an SSRI with a minimal dose as an initial dose for 10-12 weeks. Therapy can be given. The patient was given SSRI therapy in the form of Sertraline 50 mg/day to reduce their anxiety disorders. [4],[5] patient was given CBT (Cognitive Behavioral Therapy) psychotherapy, especially habit reversal training (HRT), aiming to understand the causes of their illness so that attitudes and beliefs improve in inpatient.

CONCLUSION
The patient was diagnosed with Trichotillomania and Trichotillomania, with comorbid social anxiety. Stressors in patients are due to conflict in the family. Pharmacotherapy and psychotherapy are given to this patient. The patient also consulted dermatology for hair and nail treatment.

Conflicts of interests: none reported.
Contribution: LDS was involved in the conception, wrote and conducted the case report, and VC was involved in editing, revising and approving the final version.
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