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Article · February 2023

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Review Article

Trichotillomania - An Ayurvedic Perspective

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BSTRAC

Trichotillomania (TTM) also known as a hair-pulling disorder is a debilitating psychiatric condition characterized by the recurrent pulling out of one's own hair, leading to hair loss and functional impairment. If untreated, TTM may lead to life-threatening medical problems. In DSM-5-TR, TTM is kept under the category of "Obsessive-compulsive and related disorders." As there is no established treatment in contemporary medicine for TTM, many patients seek other interventions such as Ayurveda (traditional Indian system of medicine). There is no clarity regarding ayurvedic diagnosis and management of TTM. This has created a major diagnostic and management dilemma in clinical ayurvedic psychiatry practice while approaching a patient of TTM. The aim of the present study is to understand TTM according to Ayurveda and to propose an ayurvedic diagnosis and treatment protocol for it. The present study has explored the similarity between Bhutonmada/Grahonmada (psychiatric condition having idiopathic manifestation) and TTM. Although some references related to hair-pulling behavior are available in ayurvedic texts, they may not represent TTM exactly as an independent disease entity. There is some similarity between Bhutonmada and TTM in terms of etiology, pathology, course and prognosis, and clinical features. Hair-pulling behavior and other self-injurious behaviors can be understood as Bhutonmada with the intention of *Himsa*. Spiritual or divine therapies, ayurvedic psychotherapy, and virtuous code of conduct, along with ayurvedic medicines, may provide relief to TTM patients. The present study provides new insights for diagnosing and managing the patients of TTM according to Ayurveda.

KEYWORDS: Ayurveda, ayurvedic psychiatry, Bhutonmada, Grahonmada,

hair-pulling disorder, self-injurious behaviors

Received: 28-05-2022 **Revised:** 29-07-2022 **Accepted:** 11-08-2022 **Published:** 20-02-2023

Introduction

Trichotillomania (TTM) (hair-pulling disorder) is a debilitating psychiatric condition characterized by the recurrent pulling out of one's own hair, leading to hair loss and functional impairment. TTM has been documented in the literature since the 19th century. Hair pulling can be undertaken at any bodily region, but the scalp is the most common site followed by eyebrows and pubic region. Some of the patients eat hair after pulling it out (trichophagia) that can result in gastrointestinal obstruction and the formation of intestinal hair balls (trichobezoars). If untreated, TTM may lead to life-threatening medical problems.^[1] In DSM-5, TTM is included in the chapter "Obsessive-compulsive and related disorders." The current diagnostic criteria for

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DOI: 10.4103/AYUHOM.AYUHOM_29_22

TTM are: "(1) recurrent pulling out of one's hair, resulting in hair loss; (2) repeated attempts to decrease or stop hair pulling; (3) the hair pulling causes clinically significant distress or impairment in social, occupational, or other important areas of functioning; (4) the hair pulling or hair loss is not attributable to another medical condition (e.g., a dermatological condition); and (5) the hair pulling is not better explained by the symptoms of another mental disorder (e.g., attempts to improve a perceived defect or flaw in appearance in body dysmorphic disorder)."^[2]

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How to cite this article: Mamidi P, Gupta K. Trichotillomania – An ayurvedic perspective. AYUHOM 2022;9:61-6.

TTM is part of obsessive-compulsive disorder (OCD) and is thought to be largely related to anxiety disorders. Genetic anomalies have been found in patients with TTM and other OCD-related disorders. Thickening of the right inferior frontal gyrus, reduced cerebellar volumes, higher cerebral glucose metabolic rates in the cerebellum and right parietal cortex, decreased perfusion of the temporal lobes, and significantly increased diffusivity in the tracts of the frontostriatal-thalamic pathway have been demonstrated by previous studies in TTM patients. Neuropsychology and cognitive components are the other etiological factors of TTM. Stressful situations have occurred before the hair-pulling behavior in TTM patients.[3] Psychiatric comorbidity in adults with TTM appears to be very common, with anxiety disorders, mood disorders, substance use disorders, eating disorders, personality disorders, anxiety, and disruptive behavior disorders.[4] TTM also frequently co-occurs with skin-picking disorder.^[5] Automatic pulling (pulling that takes place outside of awareness) is highly responsive to tactile antecedents (e.g., touching head with fingertips), whereas focused pulling is more responsive to cognitive or affective antecedents.^[4]

TTM leads to deficits in psychological, social, academic, and occupational functioning. Patients of TTM have shown negative affect, low self-esteem, feelings of unattractiveness, guilt, shame, embarrassment, isolation, fear, pain, anger and frustration (due to an inability to control hair pulling), substance abuse (to reduce negative feelings or to reduce urges associated with hair pulling), etc., TTM is commonly preceded by a number of environmental factors (i.e., antecedents) such as sensory stimulation (scalp irritation, itchiness, and skin sensitivity), cognitions (rigid thinking patterns and cognitive errors), and emotions (feeling anxious, bored, tense, stress, or angry). [6] The disease is a clinical diagnosis but can be confirmed by punch biopsy of the scalp. Noninflammatory, nonscarring alopecia with follicular damage can be seen in punch biopsy slides of TTM patients. The prognosis is better when TTM is diagnosed early, and its treatment begins early. A better prognosis is associated with a younger age of onset.[3] The availability of well-established interventions for TTM is limited, with only habit reversal training, and clomipramine seems to be efficacious in some trials. Despite the support for these interventions, they are limited in their efficacy, scope, and maintenance. Not all patients of TTM improve and many of those who improve do not stay improved.[6]

Ayurveda (traditional Indian system of medicine) has been in use for 1000 years, and it has a sound experimental and philosophical basis. Ayurveda is

known for its holistic approach that includes physical, psychological, ethical, and spiritual health.[7] Ayurveda has gained international recognition and reputation due to its ability to manage various chronic disorders successfully, which contemporary Western medicine has been unable to do.[8] Ayurvedic diagnosis and management of TTM is equivocal, and no studies have been published on this topic till now as per our search and understanding. The present work is intended to explore similar conditions to TTM in various classical ayurvedic texts, to diagnose TTM as per Ayurveda, and also to provide a protocol for its management according to Ayurveda. The present work has potential implications for therapy and research on TTM. New insights provided by the present work may have a significant impact on the diagnosis and management of TTM in ayurvedic psychiatry clinics.

REVIEW METHODOLOGY

Classical avurvedic such Charaka texts Samhita, Sushruta Samhita, Ashtanga Sangraha, Ashtanga Hrudaya, Bhela Samhita. Kashvapa Samhita, and others have been referred. Relevant ("Ayurveda-Trichotillomania," keywords "Indriya "Charaka indriya sthana," "Bhela indriya sthana," sthana," "Sushruta sutra sthana." "Unmada," "Avurvedic "Bhutonmada," "Grahonmada," psychiatry," "OCD," "self-injurious behaviours," "Body-focused "SIBs," repetitive behaviors," "BFRBs," "etiology of trichotillomania," "pathology of trichotillomania," "clinical features of trichotillomania," "signs and symptoms of trichotillomania," "diagnostic criteria of trichotillomania," "comorbidity trichotillomania," "prognosis of trichotillomania" and "management of trichotillomania") have been used for searching databases or web pages such as Google Scholar, Scopus, and PubMed both for ayurvedic and contemporary medical literature. Articles that failed to describe the factors of interest for the present work were excluded. Abstracts and full-text articles published in the English language were only considered. No Boolean operators or other search filters have been used while searching various databases. Articles published till May 2022 were only considered irrespective of their publication year and date of appearance.

DISCUSSION

Although exactly similar condition to TTM is not available in ayurvedic texts, there are some references that have shown some similarity with the TTM. Conditions associated with hair pulling have been documented in ayurvedic texts at various places in a scattered form. Conditions that have shown some

similarity with TTM have been explored in the following sections.

Ayurvedic diagnosis of trichotillomania

There is no perfect match in Ayurveda for TTM. *Unmada* (psychosis due to general medical conditions) or *Bhutonmada* (psychosis of idiopathic origin) are the most suitable conditions to diagnose TTM according to Ayurveda by considering the similarity among various factors such as etiology, pathology, course and prognosis, and clinical features. The similarity between *Bhutonmada* and TTM has been explored in the following sections [Table 1].

Similarity between *Bhutonmada* and trichotillomania

Unmada is the broad umbrella term in Ayurveda that includes various psychiatric illnesses. Unmada is characterized by the disturbances of various higher mental functions such as Manas (mind), Buddhi (cognition), Sangna Gnana (orientation and responsiveness), Smriti (memory), Bhakti (desires/wishes/cravings/urges), Sheela (personality), Cheshta (psychomotor activity), and Achara (conduct/behavior). Unmada is classified into five types, Vataja, Pittaja, Kaphaja, Sannipataja, and Agantuja or Bhutonmada. The first four types of Unmada, i.e., Vataja, Pittaja, Kaphaja,

and *Sannipataja*, are associated with somatic illness and their clinical features also predominant of somatic signs and symptoms whereas *Bhutonmada* have an idiopathic manifestation having a wide variety of clinical features that are not having any somatic basis.^[9]

Bhutonmada is a condition characterized by abnormal or inappropriate or odd behavior and psychomotor activity. There is no known mode of onset and also there is no specific time for aggravation or alleviation of the symptomatology of Bhutonmada. Bhutonmada can occur at any time and it is a mysterious condition explained in all classical ayurvedic texts. A person seized or possessed by a Bhuta or Graha (an evil spirit or an idiopathic entity) will behave inappropriately. Sushruta has described 8 types of Bhutonmada, i.e., Deva, Asura, Gandharva, Yaksha, Pitru, Naga, Rakshasa, and Pishacha. Eleven types of Bhutonmadas (Deva, Rishi, Guru, Vriddha, Siddha, Pitru, Gandharva, Yaksha, Rakshasa, Brahma Rakshasa, and Pishacha) are mentioned in Charaka Samhita. Eighteen types of Bhutonmadas, i.e., Deva, Asura, Rishi, Guru, Vriddha, Siddha, Pitru, Gandharva, Yaksha, Rakshasa, Sarpa, Brahma Rakshasa, Pishacha, Kushmanda, Nishada, Preta, Maukirana, and Vetala, are mentioned in Ashtanga Hrudaya. Bhutonmadas are innumerable in number,

Table 1: Similarity between trichotillomania and Bhutonmada		
Domain	TTM	Bhutonmada
Etiology	Unspecific; genetic anomalies; neuropsychological and cognitive components; abnormal brain radiological findings	Unknown; <i>Karma</i> (negative effects of past deeds); <i>Pragnaparadha</i> (cognitive errors)
Precipitating factors	Stressful situations; antecedents	Chidra Kaalaas
Comorbidities	TTM is commonly associated with anxiety disorders, mood	Bhutonmada is comorbid with Doshaja
	disorders, substance use disorders, eating disorders, personality disorders, disruptive behavior disorders, and skin-picking disorder	<i>Unmada</i> (psychiatric disorder due to general medical condition)
Pathology	Negative affect; cognitive errors such as rigid thinking patterns; feelings of unattractiveness; and cognitive and affective antecedents	Mano and Buddhi Vibhrama
	Tactile antecedents; sensory stimulations such as scalp irritation, itchiness, and skin sensitivity	Sangna Gnana Vibhrama
	Low self-esteem	Sheela Vibhrama
	Recurrent pulling out of one's hair, resulting in hair loss; repeated attempts to decrease or stop hair pulling; other associated SIBs, or BFRBs	Cheshta Vibhrama
	Behavioral changes such as feelings of guilt, embarrassment, isolation, shame, frustration, and aggressiveness.	Achara Vibhrama
Course	TTM is usually chronic, with some waxing and waning; the disorder may come and go for weeks, months, or years at a time in some individuals	Unpredictable
Clinical features	Recurrent pulling out of one's own hair	Bhutonmada with Himsa
Treatment	No established treatment available	Efficacy of <i>Daiva Vyapashraya Chikitsa</i> and <i>Sattvavajaya Chikitsa</i> , certain ayurvedic medicines including <i>Panchakarma/Samshodhana</i> needs to be ascertained
Prognosis	Not all patients of TTM improve and many of those who improve do not stay improved	Unpredictable Himsaatmaka (SIB) conditions are untreatable

TTM: Trichotillomania, SIBs: Self-injurious behaviors, BFRBs: Body-focused repetitive behaviors

and they are multifaceted and multifactorial origin. *Bhutonmadas* documented in various ayurvedic classical texts have shown resemblance with various psychiatric or neuropsychiatric conditions of contemporary psychiatry, according to the previous works.^[10-27]

Nomenclature of specific Bhutonmadas is done based on the resemblance of a patient's inappropriate behavior to a specific Bhuta or Graha. If the odd behavior of a patient bears a resemblance to a hero, or a politician, or a sports person, then the condition can be called as Bhutonmada with the name of that particular hero or politician or sports person. If a patient becomes highly obsessed with a particular object, then he/she can be called as afflicted with Bhutonmada with the name of that particular object. The numbering and naming of Bhutonmadas are only relative, and they can be innumerable. In Bhutonmada, the symptoms manifest suddenly without any visible reason or specific etiology. Sometimes, the onset of Bhutonmada may get triggered by Chidra Kaala (precipitating factors). The course and prognosis of Bhutonmada is also unpredictable. The prognosis of Bhutonmada depends on the purpose of affliction by a specific Graha or Bhuta. The purpose of affliction by Graha or Bhuta is of three types, *Himsa* (violence/aggression), *Rati* (cravings/urges), and Abhyarchanam (religious). Patients with Himsatmaka Grahavesha (demonic possession with aggressive intention) may display various SIBs. Bhutonmada with the intention of Himsa or associated with SIBs is said to be *Asadhya* (untreatable).[10]

In TTM, hair pulling or hair loss cannot be explained by a somatic cause^[28] similar to that of *Bhutonmada*. TTM is a multifaceted condition having a diverse psychiatric symptomatology,[1] similar to that of innumerable number of Bhutonmadas having a wide variety of clinical features. The antecedents or stressful factors that lead to the manifestation of TTM are similar to Chidra Kaalaas mentioned in the context of Bhutonmada. Chidra Kaalaas are traumatic and stressful life events, which may precipitate the manifestation of Bhutonmada. The intense urge to touch or pull one's own hair (comes under the category of SIBs/BFRBs) represents Bhutonmada with the intention of *Himsa*. Associated features related to multiple phenomenological domains such as abnormal sensations, emotions, cognitions, and repetitive behaviors are similar to that of Vibhrama (deviation) of Manas, Buddhi, Sangna Gnana, Bhakti, Cheshtha, etc., mentioned in the pathophysiology of *Unmada*. Similar to that of Bhutonmada (especially with the intention of Himsa), the prognosis is poor or unpredictable in TTM also.^[6] According to previous work, OCD has shown resemblance with Sangama Grahonmada (a specific type

of *Bhutonmada*). As TTM comes under the category of 'Obsessive-compulsive and related disorders', it could be diagnosed as *Bhutonmada*.^[2] There are no direct references pertaining to hair pulling in *Bhutonmada* context, but many obsessive-compulsive related features and SIBs are documented in *Bhutonmada* context.^[10-27] References that are similar to TTM are also available in *Indriya Sthanas* (specific section of various ayurvedic classical texts that contain the description of various fatal signs or untreatable conditions) of various *Samhitas* (classical ayurvedic texts),^[29-33] and they are explored in the following sections.

Dantai Chhindan-Rogaat Parimuchyate (Verse 18)

The above verse belongs to the eighth chapter (Avaak Shiraseeyam) of Charaka Indriya Sthana. Patients suffering from secondary TTM (Nakhaichhindan Shiroruhaan), nail-biting (Dantaichhindan Nakhaagraani), and other stereotypies (Kaashtena Bhumim Vilikhan) will not survive (Parimuchyate).[29] Nakhaichhindan Shiroruhaan in the above verse represents repeated pulling (Chhindan) of scalp hair (Shiroruhaan) with one's own nails (Nakhai) or fingers. Most commonly, the hands, particularly the thumb and forefinger (Nakhaichhindaan), are used to remove the hair in TTM patients. Scalp is the most common site from which pulling occurs (Shiroruhaan). BFRBs such as skin picking and nail-biting (Dantaichhindan Nakhaagraani) are commonly comorbid TTM. TTM is comorbid with conditions such as tic disorder, attention-deficit/hyperactivity disorder, and frontotemporal dementia (FTD). Various SIBs are seen in children with autism and mental retardation. Major stereotypies (Kaashtena Bhumim Vilikhan) and hair pulling (Nakhaichhindaan Shiroruhaan) can also be seen in pervasive developmental disorders. Complex motor stereotypies such as hair pulling (Chinndan Shiroruhaan), skin picking, and wriggling with leg movement (Kaashtena Bhumim Vilikhan) are associated with frontostriatal dysfunction. The above verse denotes stereotypies or TTM or BFRBs secondary to various other neurological syndromes.[30]

Pramuhya Lunchayet-Kaalachodita (Verse 17)

The above verse belongs to the eleventh chapter (Anu Jyoteeyam) of Charaka Indriya Sthana. The person suffering from loss of consciousness or fainting or severe confusion (Pramuhya), pulling one's own hair (Lunchayet Keshaan), and decreased energy or weight loss (Abala) associated with normal or excessive food intake (Swasthavat Aahaara) will not survive long (Kaalachodita). Lunchayet Keshaan denotes TTM. The patient with FTD may present with features such as TTM (Lunchayet Keshaan),

agitation (*Lunchayet Keshaan*), anger, disinhibition, food faddism or hyperorality (*Swasthavat Aahaara*), lack of insight (*Pramuhya*), and apathy (*Abala*). The above verse represents conditions such as TTM in advanced stages of frontotemporal or vascular dementia or hyperactive subtype of delirium or various major neurocognitive disorders.^[31]

Sprushannangaani Baalaamshcha-Pratyaakhyeya Stathavidha (Verses 4 and 5)

The above verse belongs to the eighth chapter (*Doota Adhyaya*) of *Bhela Indriya Sthana*. The word "*Doota*" denotes either a messenger or a caregiver (either a family member or relative or friend or nurse). As per the above verse, if a *Doota* display behaviors such as touching or pulling his/her scalp hair (*Sprushan Baalaamshcha*) while interacting with the physician, then the physician should avoid home visit to the concerned housebound patient. *Sprushan Baalaamshcha* denotes hair twirling or hair twisting or playing with one's own hair or TTM and it comes under the category of "body-focused behaviors" (*Sprushanti Angaani*). The quality of care provided by caregivers may get compromised or adversely affected due to his/her TTM.^[32]

Yashcha Loshtham-Karna Keshaamshcha (Verse 4)

The above verse belongs to the thirty-second chapter (*Swabhava Vipratipatti Adhyaya*) of *Sushruta Sutra Sthana*. The person (*Yashcha*), who pulls (*Aalunchati*) his/her own scalp hair (*Kesha*), indicates his/her imminent death.^[33] Hair pulling (*Aalunchati Kesha*) denotes TTM, and it comes under the category of BFRBs.^[34] The present verse seems to represent a condition of TTM associated with TS plus (Tourette syndrome associated with various comorbid conditions).^[35] The references of TTM-like conditions in *Indriya Sthanas* of various *Samhitas*^[29-33] denote the fact that TTM is untreatable or it is considered a poor prognostic condition according to Ayurveda.

AYURVEDIC MANAGEMENT OF TRICHOTILLOMANIA

Daiva Vyapashraya Chikitsa (spiritual/divine therapy), Sattvavajaya Chikitsa (psychotherapy), and Vyapashraya Chikitsa (treating with drugs, diet. and lifestyle corrections) are the three modalities of treatment mentioned for Unmada and Bhutonmada in Ayurveda. Yukti Vyapashraya Chikitsa includes Panchakarma/Samshodhana (body cleansing procedures) and Samshamana (pacifying disease with medicines and diet). [9] Bhutonmada Chikitsa could be implemented in the management of TTM as there is a profound similarity between both of them (Bhutonmada and TTM). Harsh therapeutic measures should not be used while treating Bhutonmadas such as Deva, Rishi,

Siddha, Pitru, and Gandharva. Techniques or procedures such as worship, sacrifices (Bali), offerings (Upahara), recitation of hymns (Mantra), collyrium (Anjana), rituals for clearing negative energy (Shanti Karma), offering oblation to the fire (Homa), meditation (Japa), auspicious activities (Swastyayana), and performing Vedic rites and expiations (Prayashchitta) are useful in the management of Bhutonmada. Various formulations such as Hingwadi Ghrtiam, Lashunadi Ghritam, Kalyanaka Ghritam, Maha Kalyanaka Ghritam, Swalpa Chaitasa Ghritam, Maha Paishachika Ghritam, and Siddharthakadi Agada are mentioned in the management of Unmada/Bhutonmada. [36]

Sattvavajava and Daiva Vvapashrava treatments play a pivotal role in the management of Bhutonmada. In the presence of somatic symptoms or comorbid medical illness (TTM comorbid with a medical illness), Yukti Vypashraya treatments could be adopted. Adravya Bhoota Chikitsa (nondrug therapies), adopting virtuous lifestyle, and also adopting the practices mentioned in the context of Achara Rasavana (virtuous code of conduct)[10] could be implemented in the management of TTM. Ayurvedic management protocol for TTM should be prepared according to the clinical features, and it may vary from patient to patient. Bhutonmada Chikitsa could be implemented to manage TTM. Ayurvedic treatment protocol may vary and depends upon the clinical features and associated comorbid conditions of TTM. As TTM represents Bhutonmada with the intention of Himsa, the prognosis seems to be poor. Further clinical studies are required to test the efficacy of Bhutonmada Chikitsa in the management of TTM.

Conclusion

As there is no established treatment in contemporary Western medicine for TTM, many patients seek other interventions such as Ayurveda and other complementary and alternative medicines. There was no clarity regarding ayurvedic diagnosis and management of TTM. This has created a major diagnostic and management dilemma in clinical ayurvedic psychiatry practice while approaching a patient of TTM. References related to hair-pulling behavior are available in Indriva Sthanas of Charaka and Bhela Samhita and Sutra Sthana of Sushruta Samhita. These references represent TTM associated with some other fatal neurological conditions such as dementia. Bhutonmada is the proper diagnostic entity of Ayurveda that is suitable for TTM. There is some similarity between Bhutonmada and TTM in terms of etiology. pathology, course and prognosis, and clinical features. Hair-pulling behavior and other SIBs can be understood as Bhutonmada with the intention of Himsa. Daiva Vyapashraya Chikitsa, Sattvavajaya Chikitsa, Achara Rasayana, Sadvritta (adopting a virtuous lifestyle), and ayurvedic medicines including Panchakarma/Samshodhana could be adopted to manage the patients of TTM. The present study provides new insights for diagnosing and managing the patients of TTM according to Ayurveda. The present work also paves the path for future research works on TTM in Ayurveda.

Financial support and sponsorship Nil.

Conflicts of interest

There are no conflicts of interest.

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