

Onychotillomania: 2 Case Reports

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GOAL

To gain a complete understanding of onychotillomania

OBJECTIVES

Upon completion of this activity, dermatologists and general practitioners should be able to:

1. Understand the clinical presentation of onychotillomania.
2. Describe the psychopathology associated with onychotillomania.
3. Explain the treatment for onychotillomania.

CME Test on page 194.

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Onychotillomania is an uncommon condition characterized by self-destruction of the fingernails and/or toenails by compulsive manipulation.

We report 2 cases of onychotillomania with differing presentations in a young man and in an older man. Onychotillomania may be a form of obsessive-compulsive disorder (OCD), and we discuss the psychologic factors and current treatments for this condition.

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Emotional and psychologic factors have the ability to influence the underlying disease process in at least 33% of patients with a

dermatologic condition.¹ In some cases, such as onychotillomania, a psychiatric condition can be the underlining cause. Onychotillomania, a condition whose true incidence is unknown, is characterized by the compulsive or irresistible urge in patients to pick at, pull off, or harmfully bite or chew their nails. This urge may be conscious or unconscious. The word onychotillomania is derived from the Greek *onycho*, nail; *tillo*, to pull; and *mania*, madness or frenzy. In psychiatry, onychotillomania has been classified as an impulse control disorder that includes conditions such as compulsive gambling, kleptomania, pyromania, habit-tic deformity, and obsessive-compulsive disorder (OCD). The more well-documented trichotillomania, or pulling of the hair, is estimated to occur in up to 1 in 200 individuals.² The incidence of onychotillomania is thought to be much lower and widely underreported. However, the incidence may surpass that of trichotillomania when nail biting, nail chewing, or habit-tic deformity is included, though this thought is controversial. In this report, we document 2 patients with slightly different presentations of onychotillomania and the approaches to their therapy.

Case Reports

Patient 1—A 72-year-old white man was referred to the dermatology clinic with an 8-month history of fingernail loss and pain. On physical examination, he was missing 2 nails on the left hand. Prominent longitudinal ridging was observed on the remaining nails, which were thick and yellow and showed some loss of the distal nail plate. All nails on the right hand were normal. Results of a biopsy showed epithelial necrosis with no evidence of lichen planus or inflammation. Fungal culture results were negative.

The patient was confrontational during the visit, protesting the nail examination. He continually drew back in protest, not wanting his nails examined. His wife reported the same, stating that he would slap her hands away anytime she tried to look at his nails. He also reported that there was a “clear goo” under his nails that he thought was necessary to remove by picking. Past medical history was significant for essential tremors, chronic obstructive pulmonary disease, and congestive heart failure. Medications included primidone and gabapentin for essential tremor and alprazolam at night for insomnia.

Based on examination findings and the patient’s own admission, the diagnosis of onychotillomania was made. Results of plain film radiographs that were obtained to rule out

osteomyelitis were negative. Attempts to use occlusive dressings were made, but the patient refused to keep the nails covered because he was unable to manipulate the remaining nails or nail beds. Also, referral for psychiatric evaluation was vehemently refused. The patient did not return for follow-up.

Patient 2—A 22-year-old white man presented to the dermatology clinic with a several-month history of pain in his toenails. On physical examination, he was missing all nails on his right foot. He had blood on and under all the remaining toenails, blood on all nail beds, and blood under most of his fingernails and on his fingertips. On questioning, the patient adamantly denied pulling his nails, even after confronted with the blood evidence on his fingers and fingernails. His mother reported that he constantly picked at his toenails.

Due to our suspicion of onychotillomania with secondary infection, the patient was treated initially with oral cephalexin followed by placement of an Unna boot on the involved foot with modifications to cover the entire foot and digits. This was changed once weekly. After one month, new healthy nail was noted, but the patient refused our recommendation for psychiatric evaluation and did not follow-up with us as recommended.

Comment

In both of our cases, the diagnosis of onychotillomania was made by the obvious physical signs on examination, as well as by self-admission in patient 1. Although we believed a psychiatric evaluation was necessary for proper treatment, it was refused by both patients.

Psychodermatologic problems can be grouped into 3 categories. Psychophysiologic disorders are exacerbated by emotional stress and include atopic dermatitis and psoriasis.³ Primary psychiatric disorders (anxiety, depression, delusion, and OCD) may present as delusions of parasitosis, neurotic excoriations, trichotillomania, and onychotillomania. In secondary psychiatric disorders, patients endure psychologic or emotional distress as a result of physical or visual deformity caused by primary skin disorders such as acne, leprosy, psoriasis, and vitiligo.⁴

The term *onychotillomania* previously has been used to include nail biting in addition to physical deformities caused by self-induced damage to the nails or periungual tissues by picking or pulling. However, it is generally reserved for the manual removal of the nail plate. Examination of individuals with onychotillomania may show periungual

erosions and crusts associated with nail-plate surface abnormalities.⁵ The damage simply may be diminished or missing nails. The matrix melanocytes can be stimulated by chronic trauma, which may result in longitudinal melanonychia.⁶

Onychotillomania has been classified as a habit-tic deformity that may occur after psychological and emotional stress or as a form of OCD.⁷ However, the habit-tic deformity may not fit the true definition of onychotillomania, though pharmacologic treatment is similar. Paranoid delusions and psychoses also have been associated with onychotillomania,⁸ as has Smith-Magenis syndrome. This congenital anomaly associated with mental retardation is estimated to occur in 1 in 25,000 individuals. Self-mutilatory behavior is seen in 70% of patients and includes onychotillomania.⁹ The differential diagnosis also should include Lesch-Nyhan syndrome.

Treatment of the underlying psychologic disorders should be considered in those with onychotillomania. In addition to onychotillomania, the more common manifestations of OCD in dermatology include trichotillomania, onychophagia, acne excoriee, and neurotic excoriations.¹⁰ OCD most frequently is manifested in childhood, though behavior such as obsessive hand washing, AIDS phobia, and other psychosomatic dermatoses can be observed in all age groups.

However, not every patient with onychotillomania has OCD as the underlying psychopathology. Before coming to a conclusion that a patient with onychotillomania has OCD, one must rule out other psychiatric diagnostic possibilities, mainly delusion and simple habit disorder (habit-tic deformity). The key distinction between obsession and delusion is the presence or absence of insight on the part of the patient. Obsessive patients have more insight than delusional patients do. Often, patients with OCD are apologetic for their behavior.¹⁰ Patients with habit-tic deformity may be differentiated from true onychotillomania in that they may only rub their nails unconsciously and not actually pick off their nails.

It is important for the underlying psychiatric disorder to be defined by psychiatric evaluation and subsequent treatment with psychoactive medications.¹¹ Common treatments for OCD include individual psychotherapy and behavioral therapy. In addition, there are 3 oral medications commonly used for their anti-obsessive-compulsive effect, namely, clomipramine, fluoxetine, and fluvoxamine.⁹ Paroxetine, sertraline, the mixed uptake inhibitor venlafaxine, and citalopram are the latest additions for the treatment of OCD.¹²

Fluoxetine hydrochloride also has been found helpful, specifically in the treatment of onychotillomania.¹² In addition, pimozide has been used specifically to treat onychotillomania.⁸ Topical treatments also have been approached using distasteful preparations applied to the nails to discourage nail biting and chewing.⁵ The physical barrier method appeared to work quite well in our younger patient, though it was not effective in the treatment of our older patient.

Onychotillomania has been cited in the literature to include both nail pulling and nail biting, but our 2 patients exhibited the most classic form of onychotillomania of picking and pulling of the nails, as the term was originally coined. Neither of our patients had what would be classified as habit-tic deformity. We speculate that onychotillomania can be divided into a nail-pulling/picking group, a nail-biting group, and a combination of the 2. In any case, it is advisable to explore etiologies other than self-inflicted trauma, such as mechanical or friction trauma, fungal infection, or another form of nail dystrophy. However, when the diagnosis of onychotillomania is reached, in addition to occlusion to prevent the self-induced damage, referral to and treatment by a psychiatrist is warranted because of the strong association with underlying psychiatric conditions, namely, OCD.

REFERENCES

1. Koo JY, Pham CT. Psychodermatology: practical guidelines on pharmacotherapy. *Arch Dermatol.* 1992;128:381-388.
2. Tynes LL, Winstead DK. Behavioral aspects of trichotillomania. *J La State Med Soc.* 1992;144:459-463.
3. Krueger G, Koo J, Lebwohl M, et al. The impact of psoriasis on quality of life: results of a 1998 National Psoriasis Foundation patient-membership survey. *Arch Dermatol.* 2001;137:280-284.
4. Alam M, Moossavi M, Ginsburg I, et al. A psychometric study of patients with nail dystrophies. *J Am Acad Dermatol.* 2001;45:851-856.
5. Tosti A, Piraccini BM. Treatment of common nail disorders. *Dermatol Clin.* 2000;18:339-348.
6. Baran R. Nail biting and picking as a possible cause of longitudinal melanonychia. a study of 6 cases. *Dermatologica.* 1990;181:126-128.
7. Vittorio CC, Phillips K. Treatment of habit-tic deformity with fluoxetine. *Arch Dermatol.* 1997;133:1203-1204.
8. Hamann K. Onychotillomania treated with pimozide (Orap). *Acta Derm Venereol.* 1982;62:364-366.
9. Moldavsky M, Lev D, Lerman-Sagie T. Behavioral phenotypes of genetic syndromes: a reference guide for

- psychiatrists. *J Am Acad Child Adolesc Psychiatry*. 2001;40:749-761.
10. Koo JYM, Gambla C. Psychopharmacology for dermatologic patients. *Dermatol Clin*. 1996;14:509-523.
 11. Koo JYM, Smith LL. Obsessive-compulsive disorders in the pediatric dermatology practice. *Pediatr Dermatol*. 1991;8:107-113.
 12. Swerdlow NR. Obsessive-compulsive disorder and tic syndromes. *Med Clin North Am*. 2001;85:735-755.

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