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Onychophagia (Nail Biting): A Body Focused Repetitive Behavior due to Psychiatric Co-morbidity

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ABSTRACT:

Onychophagia (nail biting): a body focused repetitive behavior due to psychiatric co-morbidity

Onychophagia is an habit of biting one's nails and finger tips. It is also called nail biting (NB). It is a stress relieving oral habit adopted by many children and adults. People usually do it when they are nervous, stressed, hungry or bored. All the above situations are having a common phenomenon between them which is anxiety. Here, we present a case of onychophagia (NB), who had psychiatric comorbidity. Onychophagia cannot be managed without considering some related factors such as comorbidities, precedent and consequences of the behavior. The best way to treat a nail biter is to educate them, encourage good habits and should provide emotional support and encouragement. Behavior modification therapy has proved to be a successful means of treatment along with drug management.

Keywords: onychophagia, nail biting, multidisciplinary approach, psychiatric comorbidity

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INTRODUCTION

Onychophagia (NB) is a behavior with a spectrum. It is characterized by putting the nail into the mouth in such a manner that contact occurs between a finger nail and one or more teeth. This could also it results in physical damage and is considered as a self-mutilative behavior (1,2). It is a stress removing habit common among children and adolescents. It is a habit of biting one's nails and described as a habit to release tension, self-mutilation behavior, or an impulse control disorder. In the he Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM–5), NB is classified as an obsessive-compulsive and related disorder (3). NB has been less published area in the literature of both psychiatry and dermatology (4,5) also medicine, psychology, and dentistry but have been unable to resolve the problem (6).

There is lot of controversies about the causes of NB. Research has produced theories about NB that includes it being a sign of self-hostility that result in self-mutilation. While some studies relate NB to behavioral problem (7), some theory portrays NB as a symptom of anxiety or a nervous habit (8,9). This condition is believed to be induced by nervousness, stress, or boredom and can be tied to emotional and psychological issues. Anxiety in children with NB is not a trait; it is a state (10). The trait which is accompanied with NB is oral aggression (10). Recent studies did not support the anxiety theory to NB (11), but supported that two of the largest contributing factors to NB were boredom and frustration.

NB usually does not start until age of 3 or 4 years. The prevalence of NB increases from childhood to adolescence, and then decrease in adulthood (6). Studies have found that between 28 percent and 33 percent of children between

ages 7 and 10 years, 44 percent of adolescents, and 19 to 29 percent of young adults engage in NB (12). It is not clear what percentage of the children with NB behavior stops it, and will not suffer from it later. NB is age-related, and its prevalence decrease with the increase of age (13). It is observed significantly higher in boys than girls as nail biters (14). However, NB, especially its benign forms, can also present without any accompanying psychiatric disorders but most of the comorbid psychiatric disorders in these are attention deficit hyperactivity disorder (74.6%), oppositional defiant disorder (36%), separation anxiety disorder (20.6%), enuresis (15.6 %), tic disorder (12.7%), and obsessive compulsive disorder (11.1%). The rates of major depressive disorder, mental retardation, and pervasive developmental disorder were 6.7, 9.5, and 3.2 percent respectively (15). The only study that investigated the parents of children with NB reported that about 56.8 percent of the mothers and 45.9 percent of the fathers were suffering from at least one psychiatric disorder. The most common psychiatric disorder found in these parents was major depressive disorder (15). More than half of the children with nail biting (65.1%) had at least one stereotypic behavior. The most common co-morbid stereotypic body focused repetitive behaviors were lip biting (33.3%) and head banging (12.7%) (15). NB in adults is under-recognized because patients often fail to seek psychiatric help due to feeling of shame and embarrassment, and, consequently the disorder has received little attention in the psychiatric literature.

In most cases, NB seems to be only a cosmetic issue, and no treatment is required. But, in severe cases need pharmacological treatment but it is sparse and limited to anti-depressant such as fluoxetine (16) and clomipramine (17) and non-pharmacological approach, best way to treat a nail biter is to educate them, stimulate good habits, develop conscious awareness, and thus guarantee effective results. During treatment, the child should be given emotional support and encouragement. A multidisciplinary approach should focus on efforts to build up the child's self confidence and self-esteem (6), sometimes also needs cognitive behavioral techniques for management of children's behaviors, such as using habit reversal techniques. Any treatment should be accompanied by educating the afflicted children as well as their parents, siblings, and teachers.

Case Description A 20-year old, well-built and socially active male student was referred by his family physicians for psychiatric evaluation. He has no past history of psychiatric illness but had family history of depression in his father. He is a 12th grade high school student. His family has high expectation from him to get admission into professional field.

On psychiatric examination; he had depressed symptoms and anxiety features for one year, when he was in 11th grade. He was always ruminating how he would meet his family's expectations. Therefore, he was unable to concentrate when studying, became anxious and sad, and started nail biting. Overall examination revealed habit of NB whenever he was in stress. Although initially, this habit was associated with his reaction to a stressful condition, gradually it had become more habitual; wherein he would revert back to his habit, whenever he would be in process of thinking and feeling satisfaction after nail biting, sometime he injured his fingers. The diagnosis of onychophagia (NB) was made on basis of structured clinical interview according to DSM-5 criteria and also comorbid diagnosis depression was made. There was no personality traits observed. His routine laboratory finding, including complete blood cell count, serum electrolyte, and renal and liver function tests, were all within normal range.

He was started receiving antidepressant fluoxetine 20 mg per day, and we referred him to our clinical psychologist for behavioral therapy to start cognitive behavioral therapy (CBT). CBT is a common type of psychotherapy. This is done to change behavior by becoming aware of negative emotions and related habits so that they can be dealt with more effective ways. It may involve one of the following methods or combination of them; competing response: with this technique, the person is provided with an alternative to nail biting such as chewing gum to satisfy orally-motivated urges, habit reversal therapy (HRT): this four-step process teaches an individual how to breath and feel grounded, achieve relaxation, and to complete muscle-response exercises, this self-control intervention tried to build self-confidence and self-esteem. Stimulus control: a behavioral treatment that helps to identify, get rid of, or transform the environmental circumstances, or emotions that trigger nail biting. The goal of this therapy is to control triggers through conscious behavior modification, and to channel the unhealthy urges into behaviors that are non-destructive also self-monitoring: since this is often an unconscious act, taking notes can create more awareness of

the behavior. many sessions of CBT were done and advised for his follow-up after two weeks but patient attended after one month with continuing his treatment and attended all session of psychotherapy. His mood was lifted resulting in a decrease in the habit of NB.

DISCUSSION

NB is a habit that cannot be managed without considering some related factors such as comorbidities, precedent and consequences of the behavior, and management is much more complicated without non-pharmacological approach.

Here, this case report has psychiatric comorbidity like depression. Patient has lot of expectation from parents, due to which he is always preoccupied in thought and in stressful situation; he used to bite nail and feeling relaxed after nail biting. In such cases, need to treat the patient, to educate them, stimulate good habits and develop conscious awareness. It is also very important patient should be given emotional support and encouragement. Multidisciplinary approach should focus on efforts to build up the child's self-confidence and self-esteem. Punishment is not effective and its effect is not more than placebo.

CONCLUSION

Nail biting is not an isolated symptom. It can be one symptom from a cluster of symptoms, all of which as well as the motivation behind NB should be evaluated, assessed, and managed. Behavioral modification techniques, positive reinforcement, and regular follow-ups are important for the treatment of nail biting or onychophagia with multidisciplinary approach, when necessary.

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