Lithium Treatment of Chronic Nail Biting

To the Editor: Nail biting or onychophagia has been variously described as a habit to release tension, self-mutilation behavior, or an impulse control disorder. In the *DSM-5*, nail biting is classified as an obsessive-compulsive and related disorder.[1] Studies have found that between 28% and 33% of children between ages 7 and 10 years, 44% of adolescents, and 19%–29% of young adults engage in nail biting.[2] Nail biting usually occurs in combination with other problematic body-focused repetitive behaviors such as hair pulling disorder and skin picking disorder. Nail biting in adults is underrecognized because patients often fail to seek help due to feelings of shame and embarrassment, and, consequently, the disorder has received little attention in the psychiatric literature.

In most cases, nail biting seems to be only a cosmetic issue, and no treatment is required. But, in severe cases, untreated nail biting can result in a host of complications such as severe damage to the cuticles and nails, paronychia and secondary bacterial infection, dental problems, and temporomandibular dysfunction.[3] Studies on drug treatment of nail biting are sparse and limited to antidepressants and *N*-acetylcysteine.[4] We present a case of chronic, severe onychophagia comorbid with bipolar II disorder and substance use disorder and discuss the successful treatment of these disorders with lithium monotherapy.

Case report. Ms A, a 28-year-old woman, was referred by her family physician for assessment and management of depression. She met *DSM-5* criteria for bipolar II disorder and was noted to be in remission for substance use disorder (alcohol dependence and cocaine use). At the time of initial assessment, Ms A endorsed various symptoms of depression including thoughts of suicide. Due to concerns regarding her safety, lithium 900 mg daily was started, and the dose was optimized to achieve a serum level of 0.7 mmol/L. Within 2 months of lithium treatment, Ms A experienced remission of depression and has been symptom free for 2 years. A serendipitous finding was remission of symptoms of chronic nail biting that Ms A had struggled with since she was 12 years old. Various strategies including habit reversal training, self-monitoring, and competing response had been ineffective.[5] The condition was severe because Ms A had to regularly cover the nail beds with Band-Aids to control the bleeding. Moreover, it affected her self-esteem and caused a great deal of emotional distress. The marked improvement following lithium treatment was noted by Ms A's family and friends, who had not seen her undamaged nails in at least 15 years.

Clomipramine and selective serotonin reuptake inhibitors are generally recommended in severe cases of nail biting, but the use of these drugs can cause treatment-emergent mania in individuals with bipolar disorder. Thus, the drug choice for onychophagia should be informed by the nature of the comorbid psychiatric disorder. There are reports of effectiveness of lithium in body-focused repetitive behaviors such as hair pulling disorder and skin picking disorder with comorbid bipolar disorder. It is not known if lithium is effective in patients with onychophagia in the absence of bipolar disorder. To our knowledge, this is the first reported case of lithium effectiveness in nail biting. Studies are needed to clarify the role of lithium in the management of severe nail biting in the absence of comorbid bipolar disorder.

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