

# Self-Harm Obsessions in Obsessive-Compulsive Disorder With Pica

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Obsessive-compulsive disorder (OCD) is a neuropsychiatric disorder characterized by the presence of obsessions and/or compulsions. Obsessions are recurrent, unwanted, and intrusive thoughts, urges, or images, while compulsions are repetitive motor or mental acts that an individual performs in response to an obsession.<sup>1</sup> The disorder manifests across various dimensions including contamination fears, harmful or aggressive thoughts, forbidden or taboo thoughts, and a need for symmetry.<sup>2</sup> Pica is characterized by an uncontrollable urge to consume non-nutritive substances such as mud, chalk, ice, and rice, and the behavior is frequently associated with iron deficiency anemia.<sup>3</sup> We present the case of a woman who presented with self-harm obsessions and compulsions with pica-like behavior in the background of iron deficiency anemia.

## Case Report

A 34-year-old married woman with premorbid history characterized by anxious avoidant traits and no family history of psychiatric illness presented to us with geophagia and intrusive repetitive thoughts of self-harm. These self-harm thoughts included behaviors such as biting hard materials to crack her teeth, injuring her eyes by poking her fingers into them, and inserting her fingers higher up into her nasal cavity to induce bleeding. She attempted to resist these intense urges but often succumbed to them, leading her to bite objects such as pens and pencils and to press her eyeballs firmly. She also exhibited reassurance-seeking behavior, repeatedly asking her family members if she would get better.

She consulted a psychiatrist due to her symptoms and was initially prescribed fluoxetine 20 mg, which was later increased to 40 mg with minimal improvement. During her evaluation, she was diagnosed with iron deficiency anemia, evidenced by a hemoglobin level of 8 g/dL and a peripheral smear showing a microcytic hypochromic picture, which required correction with iron dextrose injection.

During the mental status examination, the patient expressed severe self-harm obsessions and an intense urge to engage in such behaviors. She described a sense of relief from anxiety upon acting on these urges. She reported a depressed mood and expressed death wishes, attributing them to her inability to control her urges and the embarrassment stemming from these symptoms. The Yale-Brown Obsessive-Compulsive Scale (YBOCS)<sup>4</sup> was administered, yielding a score of 30.

The patient's treatment regimen was adjusted by gradually increasing the fluoxetine dose to 80 mg and initiating clomipramine at 25 mg, which was subsequently titrated to 75 mg. Due to residual symptoms, risperidone was introduced at a dose of up to 4 mg.

The patient underwent reassessment using the YBOCS scale, and after 8 weeks, she had significant improvement with a score of 5, representing more than an 80% reduction in symptoms. A concurrent improvement in her hemoglobin value to 10 g/dL was observed.

## Discussion

This case uniquely highlights the less commonly discussed dimension of self-harm obsessions. The patient's

compulsion to engage in self-harm acts, despite recognizing their irrationality, aligns with the diagnostic criteria for OCD wherein compulsions are performed to mitigate the anxiety provoked by obsessions. Geophagia, a subtype of pica, is frequently linked with nutritional deficiencies, particularly iron deficiency anemia. In our case, treatment for the anemia with iron dextrose injections was initiated concurrently with psychiatric interventions. A therapeutic approach combining selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants, augmented with antipsychotic medication, was employed due to the severity of the self-injurious compulsions. Pica has been frequently regarded as part of the obsessive-compulsive spectrum and has shown responsiveness to treatment with SSRIs.<sup>5,6</sup>

Our patient presented iron deficiency anemia with pica-like symptoms alongside obsessions and compulsions involving the biting of hard items and self-harm. Further research is warranted to explore the pathophysiological links between iron deficiency and OCD.

## Article Information

**Published Online:** October 10, 2024.  
<https://doi.org/10.4088/PCC.24cr03775>

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*Prim Care Companion CNS Disord* 2024;26(5):24cr03775

**Submitted:** May 23, 2024; accepted July 21, 2024.

**To Cite:** Mittal T, Jalaja Haridas N. Self-harm obsessions in obsessive-compulsive disorder with pica. *Prim Care Companion CNS Disord*. 2024;26(5):24cr03775.

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**Relevant Financial Relationships:** None.

**Funding/Support:** None.

**Patient Consent:** Consent was obtained from the patient to publish the case report, and information has been de-identified to protect anonymity.

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## References

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*. 5th ed. American Psychiatric Association; 2013.
2. Brock H, Rizvi A, Hany M. Obsessive-Compulsive Disorder. StatPearls [Internet]. StatPearls Publishing; Treasure Island, Florida: 2024. <https://www.ncbi.nlm.nih.gov/books/NBK553162/>
3. Ganesan PR, Vasauskas AA. The association between pica and iron-deficiency anemia: a scoping review. *Cureus*. 2023;15(4):e37904.
4. Goodman WK, Price LH, Rasmussen SA, et al. The Yale-Brown Obsessive-Compulsive Scale, I: development, use, and reliability. *Arch Gen Psychiatry*. 1989;46(11):1006–1011.
5. Rose EA, Porcerelli JH, Neale AV. Pica: common but commonly missed. *J Am Board Fam Pract*. 2000;13(5):353–358.
6. Stein DJ, Bouwer C, van Heerden B. Pica and the obsessive-compulsive spectrum disorders. *S Afr Med J*. 1996;86(12 suppl):1586–1588–1591–1592.

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