



Case Report

Uncovering the Compulsion Behind Pica: A Case of Obsessive Compulsive Disorder and Geophagia: A Case Report

Manpreet Kaur Sidhu¹, MBBS, Soumitra Ghosh¹, MD, Kavary Bora¹, MD, Aritra Mondal¹, MBBS

¹Department of Psychiatry, Assam Medical College and Hospital, Dibrugarh, India

*Corresponding author:

Dr. Manpreet kaur Sidhu,
Department of Psychiatry,
Assam Medical College and
Hospital, Dibrugarh, India.

preetigrewal052@gmail.com

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ABSTRACT

The extended ingestion of nonfood substances like paper, ice, clay or soil – which is prohibited in some cultures – is known as pica. Pica – so named because of the magpie, which is known for consuming nonfood objects. Aristotle called this consumption of earthly things “Geophagia.” A 15-year-old displayed an obsession with consuming mud and wall paint. She has unsettling, intrusive thoughts about this behavior. She was diagnosed with obsessive-compulsive disorder (OCD) with good insight with Pica, and she improved favorably to cognitive behavioral treatment and fluoxetine. Pica can manifest within the OCD spectrum and is frequently associated with nutritional deficits and stress. This example demonstrates effective selective serotonin reuptake inhibitor (SSRI) treatment, confirming earlier research. Even if pica’s etiology and treatment plans are still unknown, it is possible to classify pica as OCD in those cases where there is no developmental impairment.

Keywords: Obsessions, Compulsions, Pica, Selective serotonin reuptake inhibitors, Iron, Cognitive behavioral therapy

INTRODUCTION

“Mad with desperation, Rebeca got up at midnight and ate handfuls of earth in the garden, crying with pain and fury, chewing tender earthworms and chipping teeth with snail bones.”^[1] Pica is defined as the consumption of nonnutritive, nonfood substances for at least one month. It is culturally unacceptable, and the subject must have normal mentation.^[2]

The disorder is named after the magpie (Pica Pica), which is known to store all kinds of nonfood materials. Aristotle named the disorder “Geophagia,” which is the habit of eating earth materials.^[3] A type of pica called Geophagia is frequently linked to iron and zinc deficiencies. But there are also a lot of cultural, psychological, and environmental elements at play. Pica is a prevalent condition in children with intellectual disabilities. It is most frequently connected to pregnancy in adults. Although there are no specific screening tests for pica, a quick and accurate diagnosis can prevent numerous nutritional and psychological consequences. Even after it is diagnosed, there are no recognized cures for pica.^[4]

CASE REPORT

A 15-year-old girl presented to the Psychiatry outpatient department with the chief complaint of eating dried mud and wall paint at home. One year back, after a quarrel with her mother, she was noticed eating mud; she started roughly with two to three pinches for about a year until she

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felt the urgency to increase the quantity of mud she used to have every day. Conflicts with family and friends triggered her mud consumption. After that, the quantity of mud increased to 40–60 g daily of dry mud. According to her, the mud eating was preceded by a strong desire and relief after eating mud. She increased the consumption to about 100 g of mud every day to manage her anxiety. Although she knew it was inappropriate to eat mud, her craving was so intense that she could not resist eating the mud, which caused her agitation. Over the previous six to seven months, she had reduced appetite. Before, she used to have three meals a day, along with a midday snack. During every meal, she would have two chapattis served with a bowl each of rice, vegetables, and lentils. But now, she simply takes one chapatti and a bowl of vegetables and lentils.

Owing to the increasing frequency and intensity of the problem, her relationship with family members and friends has been disturbed. She has started to remain withdrawn and does not enjoy going out with friends like before. Her appetite has decreased too. She had increasingly developed this habit over the last few years; to such an extent in the last few months that her parents resorted to physical punishment, but with no use. The clinical interview revealed that she has repeated thoughts and images of eating mud and wall scrapings, which are alien, intrusive, and distressing in nature; this does not go away until she does the act. She acknowledged that she doesn't really enjoy the experience, but is unable to put an end to the activity. The important negative histories elicited to rule out other diagnoses included the absence of childhood trauma, and a detailed description of the patient's mother's history of consuming raw lentils and grains was insignificant. Specifically, depression was considered due to the patient's withdrawal and decreased socialization, which was secondary to obsessive thoughts but was ruled out during the assessment as there was no persistent low mood.

On examination

No healed or active lesion was there in and around the oral cavity; dental hygiene was maintained. On the mental status examination, she was evasive and guarded initially; rapport was established with difficulty. In possession of thought, there was obsession, including intrusive thoughts and images related to consuming mud and wall scrapings; she had the insight regarding her illness and wanted help for the same.

Investigation findings

Complete blood count with peripheral blood smear, serum magnesium, calcium zinc, stool examination for parasite ova, and ultrasound of the whole abdomen were suggested. All the reports came out to be normal.

Management

She was diagnosed with Obsessive-Compulsive Disorder (OCD), with good insight with Pica according to Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, (DSM-5) and Yale-Brown Obsessive Compulsive Scale (Y-BOCS) score of 24 which indicated moderate OCD.

She and her father were psycho-educated about the disorder. The patient was started on Tab Fluoxetine 40 mg, and taught thought-stopping and relaxation techniques. The follow-up visits were conducted to monitor the patient's progress. Initially, the patient did not attend the follow-up after one month but reported a gradual reduction in symptoms while taking medication. Despite attempts to schedule further appointments, the patient did not return.

However, a subsequent follow-up after six months revealed that the patient was doing well, symptom severity and frequency of compulsive behavior and the intensity of obsessive thoughts decreased, and she has improved interaction with family and friends. Thereafter, medications had been discontinued by patient.

DISCUSSION

Pica is more common in children with nutritional deficiency, psychosocial stress, maternal deprivation, and impoverished family situations. In adults, pica is associated with pregnancy, severe mental impairment, and psychosis.^[5,6] However, there is no single theory accepted universally to explain the etiology of pica. The role of the most widely recognized factor, that is, iron deficiency, is also controversial.^[7] Adolescents without developmental delay raised the possibility that some form of it fit under the umbrella of obsessive-compulsive (OC) spectrum disorder. Both the phenomenology, negative history, and the successful treatment with selective serotonin reuptake inhibitor (SSRI) in our case indicate that it was indeed a case of OCD, which mirrors the findings in some case reports which support the possibility that pica can present as OCD itself.^[7-9] Pica and OCD, along with the manifestation of iron deficiency anemia, underscore the need for comprehensive clinical investigations to elucidate the underlying etiological factors.^[10]

CONCLUSION

As far as I am aware, this may be the first recorded case of OCD with pica in the pediatric age group within the Eastern region of our country. Pica is still a phenomenon whose cause and course of treatment are poorly known. Sometimes, pica may be seen as OCD, especially in individuals who exhibit it immediately.

Ethical approval

Institutional Review Board approval is not required.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflicts of interest

There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of AI-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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