Case Report

# Management of Pica associated with relational stress in an adult woman: A case report

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## ABSTRACT

Pica is a feeding and eating disorder where there is the consumption of non-nutritive substances not consistent with cultural practices or social norms. Its etiology is still unknown, and its presentation seems to vary with patients' characteristics and the specific behaviors involved. Here, we are reporting a late-onset case of a 23-year-old female, presenting with consumption of wall scrapings, with some underlying early maladaptive schemas, and psychosocial triggers leading to eating scrapings off the walls.

**Key words:** Cognitive behavior therapy, Pica, Psychotherapy, Stress

Pica is defined by the diagnostic statistical manual 5 as the consumption of non-nutritive substances not consistent with cultural practices or social norms for at least 1 month. Pica has been related to mental and emotional disorders and stressors such as emotional trauma, maternal deprivation, and disorganized family have been strongly linked to pica as a form of comfort [1]. Across cultures, pica is mostly associated with pregnancy and childhood, except for few recent studies that found pica in men and non-pregnant adult women [2]. We present a case of pica in an adult woman without any underlying medical cause.

## CASE REPORT

A 23-year-old woman, belonging to a nuclear urban family of middle socio-economic status, with well-adjusted premorbid personality, and no history of psychiatric illness in the family or any major physical illness or psychiatric illness presented with the chief complaints of scratching walls of the home and eating the scrapes when alone for the past 2 years. She reported an intense craving to eat the scrapings from the wall followed by a feeling of relief after eating the wall scrapings. During the day, she would anticipate as to when she would be alone so that she could eat the scrapings. She would hide and lie about it and stay alert while doing the activity to avoid getting caught. The frequency was once or twice a day for about 5–10 min every time when she indulged in this behavior and although it did not lead to functional impairment in her routine activities, it would lead to social embarrassment if the patient was found doing so by others. The patient decided to seek treatment after her family found about it and accompanied shame and social embarrassment.

She initially consulted a general physician. Her general physical examination and systemic examination revealed no abnormality. Her blood pressure was 116/80, pulse rate was 83/min, respiratory rate was 16/min, and body mass index was 22.

Complete blood count revealed hemoglobin of 11.3 mg/dl. Serum ferritin, serum electrolytes, liver function tests, and kidney function tests were found to be within normal limits. Urine routine examination, X-ray abdomen, and ultrasound abdomen were found to be normal. Pregnancy tests in both blood and urine were found to be inconclusive.

She was prescribed multivitamin and iron supplements and referred to a psychiatrist for further management. On detailed psychiatric investigation, the patient was not found to suffer from syndromal depression or anxiety symptoms which were supported by scores on the Hamilton depression rating scale and the Hamilton anxiety rating scale as 5–4, respectively. She was currently pursuing her postgraduation and had above-average intelligence. The patient was also evaluated for underlying obsessive-compulsive disorder, but she did not report ego-dystonicity for her urge to consume the scrapings. However, she reported a strained relationship with her father since childhood due to which she would avoid any interaction with him. The patient was referred to a clinical psychologist for further evaluation and management.

Cognitive behavior therapy (CBT) was planned as the mainstay of psychological management in this patient. The focus was to understand the association of her psychosocial triggers [3,4] within

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the family context causing stress which results to eating scrapes. CBT was done keeping in view the objectives of learning how to set goals that are realistic in face of triggers and problem-solving, manage stress, and anxiety triggered by interaction with father, and to identify situations that were avoided and gradually approaching feared situations in the family context. Over the course of therapy, she learned to be more assertive in communicating her emotional needs; she was able to manage stress using relaxation techniques that were taught in sessions and the use of distraction technique like deep breathing to calm the energy whenever the urge arises. She could build tolerance around stress and be comfortable in situations that she might normally avoid which would maintain the stress triggering the "scraping" behavior. The cognitive restructuring was done to identify cognitive errors such as blaming or emotional reasoning to develop mental awareness and challenge own conclusions which helped in reframing thoughts and see things in a new light thus replacing faulty beliefs. With the building of this emotional and cognitive awareness, she could identify and manage her stress using more adaptive ways of coping. The overall functioning and mood improved as an outcome of CBT.

Due to the societal influences, admittance to certain behaviors is unacceptable which results in individuals suffering from pica to remain silent or deny the pica occurrences resulting in a high likelihood of the individuals not presenting truthful information [5]. By enabling a trusting relationship with the client and fostering an environment that promotes acceptance of pica, the client could work on changing behavior, reducing her feelings of shame and embarrassment.

## DISCUSSION

Pica in adults without any underlying nutritional deficiency or intellectual disability is a relatively rare and poorly understood phenomenon. Previously pica has been reported in association with major depressive disorder, and obsessive-compulsive disorder with underlying ego-dystonicity for the urge to consume the non-nutritive substance. In the Indian context, pica has presented as secondary to depression [6] and pica of adult-onset with psychosexual aspects [7]. Pica has been found to be linked with pregnancy over years [8]. The incidence of pica has also been linked to iron and zinc deficiency [9], whether the pica is an eating disorder or obsessive-compulsive disorder is still controversial [10]. In this case, the patient presented with pica without any underlying comorbid psychiatric diagnosis and solely as a reaction to her relational stress and interpersonal conflict with her father; therefore, only psychological management was planned for her disorder.

At present, there are no clinical guidelines for situations regarding pica and cases often go unreported. Since pica is mostly associated with underlying medical conditions, the detailed psychological investigation of the phenomenon is often missed. The clinician must also identify any triggers that permit an individual to continue pica-engaging behaviors [11]. Etiological theories of pica have reported it to be a self-soothing mechanism to ease either physical or psychological discomfort [10]. In this case, addressing and alleviating her psychological stress related to her relationship with her father through CBT resulted in subsequent improvement in the symptoms of pica. CBT was planned as the mainstay of psychological management in this patient. The goal of treatment was to reduce the number of pica experiences to zero. The focus was to understand the association of her psychosocial triggers [4] within the family context causing stress which results in eating scrapes. With the building of this emotional and cognitive awareness, she could identify and manage her stress using more adaptive ways of coping.

Environmental enrichment was used as a treatment method with the purpose of the removal of reinforcing features and triggers associated with engaging in pica behavior. Triggers for pica were identified as components critical to the establishment of environmental enrichment. These included arguments with her father over daily chores, events in which her father would have arguments with others publicly, etc. When such events would occur, she was asked to identify it as a possible trigger and engage in emotional regulation. Since such events reinforced pica's behaviors, intervention techniques were planned with her father to communicate better, learn strategies to solve problems, and work together more effectively.

For emotional regulation, she was explained the relationship between emotions, thought, and behavior, in this case, pica behavior which would arise from negative emotions and thoughts following an argument with her father. She was asked to note down her body responses (physical sensations, body language, facial expressions, etc.), thoughts (including memories, images, judgments), urges (what she would feel like doing at that time, e.g., eating wall scrapes), behaviors (what would she actually do), and consequences (impact or effect of behavior such as self-judgment) to better understand emotions. She was then asked to practice the self-validation of emotions. This included acknowledging the presence of emotion rather than judging it, allowing, that is, giving yourself permission to feel the feeling and understanding, that is, going beyond not judging and knowing that it is okay to feel it. It was also further emphasized on practicing accepting reality [12]. This included accepting painful experiences to decrease the amount of suffering.

The cognitive restructuring was done to address her maladaptive thought patterns. Early maladaptive schemas of self-sacrifice, unrelenting standards, emotional inhibition, and insufficient self-control were addressed in therapy. Schemas activated due to the father's parenting were emotional deprivation, enmeshment, emotional inhibition, and insufficient self-control [13]. With the building of this cognitive awareness, she could identify her triggers and manage her stress using more adaptive ways of coping. Focusing on the realistic expectations with her father made her reappraise her relationship with him. Focusing on strength-based skills, her feelings of shame, and embarrassment were reduced. She became aware of her schemas of emotional deprivation, emotional inhibition, and insufficient self-control getting activated whenever she was faced with

any stress in the context of her relationship with father leading to the act. She could replace the behavior with more adaptive ones like working on irrational thoughts, emotional regulation strategies. Due to societal influences, admittance to certain behaviors is unacceptable, which results in individuals suffering from pica to remain silent or deny the pica occurrences resulting in a high likelihood of the individuals not presenting truthful information [5]. By enabling a trusting relationship with the client and fostering an environment that promotes acceptance of pica, the client could work on changing behavior, reducing her feelings of shame, and embarrassment.

## CONCLUSION

The present case presented a unique combination of psycho-social factors occurring in parenting and familial context resulting in individual response to stress that contributed to the expression of pica. However, the aspect that stands out in this case is the emotional awareness of the young woman which led to seeking psychological treatment. This case had an evident cause and effect relationship with stressful triggers and outcome in the form of pica behavior in absence of any other psychiatric comorbidity as well as medical reasons. This necessitates the need to investigate psychological triggers and psychodynamic reasons which could perpetuate pica independently.

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