

A pica case confused with renal and bladder stones

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Abstract

Pica is considered as an eating-nutritional disorder in childhood and is generally analysed within obsessive-compulsive disorders. A 15-year-old female patient was admitted to the urology clinic with nausea, vomiting, and stomach-ache. A 23×23 mm opacity was identified in left T-11-12 level in direct urinary graph. Full abdomen ultrasonography was reported to be normal. Later, it was learned that the patient had the habit of eating stone. The patient was diagnosed with obsessive-compulsive disorder following psychiatric consultation, and appropriate treatment was given.

Keywords: Pica, Renal stone, Bladder stone.

Introduction

According to the Diagnostic and Statistical Manual of Mental Disorders, Pica is defined as "persistent eating of nonnutritive substances for a period of at least one month."¹ Ingestion of the substance is inappropriate to developmental level, is not part of a culturally sanctioned practice, and not merely symptomatic of another mental disorder (e.g., pervasive developmental disorder, mental retardation, thought disorder).¹ Pica was first defined by Hippocrates and the scientific name for the Common Magpie is Pica, which is a bird thought to have indiscriminate appetite, similar to those who ingest inedible substances.² Pica is considered as an eating-nutritional disorder in childhood

and is generally analyzed within obsessive-compulsive disorders.¹ It might be related to psychological factors such as lack of stimulus, lack of care, love, and affection or lack of breast milk. Pica ratio was found to be relatively higher in populations with psychiatric disorders such as schizophrenia, mental retardation, and autism and most widely known adverse effects of pica involves the stomach and intestines. Potential complications include constipation, stomach-intestinal cramps, pain, intestinal obstructions, and perforations.²

Case Report

A 15-year-old female patient was admitted to the urology clinic with nausea, vomiting, and stomach-ache. Test results of urine showed 3-4 erythrocytes and 5-6 leukocytes. Biochemical analysis; and blood reports were normal. A 23×23 mm opacity was identified on the left side at the level of T11-T12 on X-ray of KUB (kidney, ureter, bladder) (Figure-1). Ultrasonography of abdomen was reported to be normal. The medical history was taken and was investigated for the presence of the opacity in the gastrointestinal system or other intra-abdominal organs, which might be mistaken for a renal stone. It was learned that the patient had the habit of eating stones. This condition was concealed by the inpatient but later declared by her attendants. The patient vomited the stone 1 hour after admission to hospital. The patient was subsequently followed for approximately 3 months. Although she reported that she had quit the habit of ingesting the stones, she continued to eat stones according to the attendants. Opacities identified in plane X-ray abdomen which confirms that the patient continued eating stones. The patient was diagnosed with obsessive-compulsive disorder following psychiatric consultation, and appropriate treatment was given. Though the patient received psychiatric therapy for 6 months, partial remission was achieved.

Discussion

Cases of pica are generally interesting and those manifested evoke certain questions. It is possible to conceptualize these cases from a bio-psychosocial perspective. From a biological perspective, there is no clear etiology or medical factor related to repeated and long-term

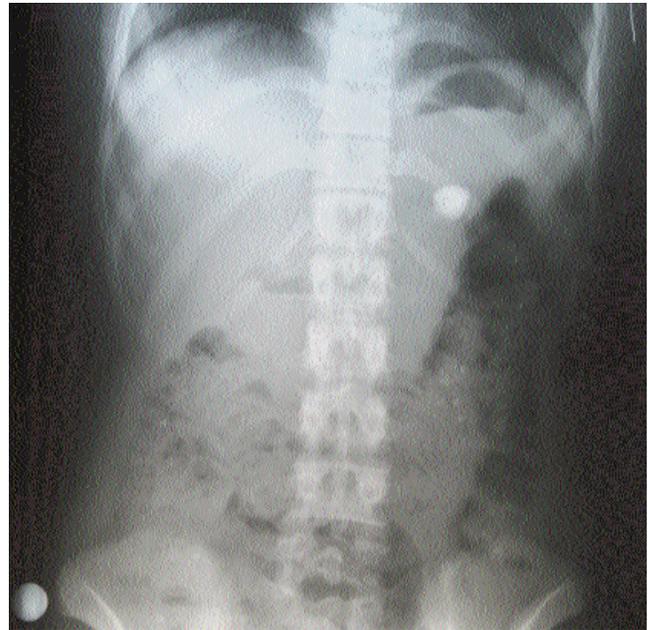


Figure: Plain X-ray showing a 23×23mm opacity at left T-11-12 level.

ingestion of pica substances.³ However, it remains unclear whether the ingestion of these substances meets certain biochemical needs. Pica cases should include psychological evaluation. However, the costs may be very high and probably require inclusion within a research project fund. On the other hand, behavioural strategies or pharmacologic agents might provide effective psychological treatment.⁴ Calcifications in pelvic veins, renal artery, mesenteric lymph glands or vascular structures may be confused with urinary stones. Opacities on plane X-ray abdomen seen in the gastrointestinal system with pica can be confused with renal and bladder stones in KUB.

References

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4 ed. Washington, DC: Amer Psychiatric Pub; 2000; pp 943.
2. Young SL. Pica in pregnancy: new ideas about an old condition. *Annu Rev Nutr* 2010; 30: 403-22.
3. Hackworth SR, Williams LL. Pica for foam rubber in patients with sickle cell disease. *South Med J* 2003; 96: 81-3.
4. Stein DJ, Bouwer C, van Heerden B. Pica and the obsessive-compulsive spectrum disorders. *S Afr Med J* 1996; 86(12 Suppl): 1586-8, 91-2.