

An unusual case of bezoar from Sudan

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ABSTRACT

أن أكل المواد عادة غذائية غير طبيعية حيث يأكل المرضى مواد غير غذائية بشكل مستمر والتي تؤدي إلى عواقب صحية. نستعرض في هذا التقرير مريض شخص لعدة أشهر بآلام الظهر وإمساك بدون استفراغ وألم المعدة أو الانتفاخ. كما كان يعاني من عزلة اجتماعية وانفعال الشخصية أكثر من 5 أعوام. تم التأكد من التشخيص بعد نتائج الأشعة وظهر عدة أجسام غريبة مظلمة. هنالك عدة أنواع لأكل المواد الغريبة صنفت طبقاً للمادة المتناولة. ونتيجة لذلك، قد تظهر كتلة عالقة في الجهاز الهضمي نتيجة ابتلاعها. وتعد المواد الحصوية الصلبة في المعدة من الأنواع النادرة للكثرة العالقة في الجهاز الهضمي. كما أن العلامات المهمة لتشخيص الكتل العالقة في الجهاز الهضمي هي إمساك حاد، وآلام بطن وظهر متكررة وآلام التبرز. قد يتأخر التشخيص لسنوات خاصة أنها غير مرتبطة بالتاريخ المرضي، وفحص البطن، أو نتائج الأشعة.

Pica is an abnormal eating behavior in which patients persistently eat non-food materials, which can lead to health consequences. A man presented complaining of several months of back pain and constipation without vomiting, abdominal pain, or distension. He experienced increasing social isolation and emotional lability over 5 years. Radiological findings confirmed the diagnosis, noting multiple radiopaque foreign bodies. Several types of pica are described based on the substance consumed. Bezoars may develop in the gastrointestinal tract as a result of these ingestions. Lithobezoars are rare types of bezoars, more common in males and psychiatric patients. An important clue to the diagnosis of lithobezoars is severe constipation, recurrent abdominal or back pain, and painful defecation. The diagnosis might not be made for years if such symptoms are not related to careful history, abdominal examination, or radiological findings.

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Pica is defined according to ICD-10 classification as an abnormal eating behavior in which patients persistently eat non-food materials or crave abnormal foodstuffs. It was an ancient habit recognized by Hippocrates in the 4th century BC. A number of health risks are related to pica including intestinal obstruction, iron deficiency, poisoning, parasitic infestations, and dental related abnormalities.¹⁻⁵ Pica is usually diagnosed when a patient presents with such complications. Presentation may be nonspecific and without a thorough history, diagnosis may be missed. Morbidity resulting from chronic pain may be limited by maintaining an astute clinical suspicion for pica and bezoars in a patient presenting with nonspecific, ongoing back, or abdominal pain. We could not source similar reports from Sudan after performing a literature search of the Cochrane Library and PubMed databases. Our objective in presenting this case is to highlight the diagnostic challenges of bezoar, which can be elicited by performing comprehensive clinical history and examination.

Case Report. A 36-year-old African man presented to an academic emergency center in Sudan with a history of several months of back pain and constipation. This was not associated with vomiting or abdominal distension. There was no history of rectal bleeding. He denied any loss of weight or appetite. Vital signs were within normal limits. His abdomen was neither tender nor distended. Bowel sounds were normal and rectal examination revealed a full rectum with small pellet-like fecal matter. Notably, his smiling demeanor was inconsistent with his reported degree of pain. Blood investigation results, including his complete blood count, were unremarkable. The plain abdominal x-ray showed numerous opaque stones of different sizes scattered within the rectosigmoid and descending colon (Figures 1 & 2). This finding was an important clue in diagnosing the patient.

Further history revealed the tendency and craving of the patient to different types of non-food substances such as asphalt stones, pebbles, sack cloth, and Guena, a woody roofing material. This habit started 5 years

prior to presentation, and he had become socially isolated with emotional lability since then. He was treated with lactulose laxative and paraffin oil. One week later, the symptoms resolved and he was pain-free. Post evacuation plain x-ray did not reveal any residual stones in the colon (Figure 3). A psychiatric assessment

was arranged with the liaison of a psychological counsellor. A definite diagnosis of an anxiety disorder (obsessive compulsive disorder) was made. Treatment of his underlying psychiatric illness would reduce the recurrence of his abnormal eating habits.

A formal consent was taken from the patient and the author declares no conflict of interest.

Discussion. Different types of pica are described in the literature, including geophagia (eating earthy substances such as clay or chalk), chthonophagia (eating dirt), amylophagia (eating uncooked starch), lithophagia (eating stone, or gravel), and ingestion of other substances such as paper, glass, and ceramics.^{6,7} Bezoars are foreign bodies or materials found in the gastrointestinal tract that generally increase in size by accretion of food or fibers. Bezoars, most often are found in the stomach as persistent concretions of plants (phytobezoar), persimmons (diospyrobezoars), and hair (trichobezoar). Bezoars may arise from ingestion of the suspected substances for a long time or in large quantities. Bezoars may cause intestinal obstruction and severe constipation by occluding the lumen of the colon, especially at the rectosigmoid level.^{8,9}

Lithobezoars are rare types of bezoars, and we were only able to find very few reported cases on literature review.³⁻⁹ Lithobezoars are more common in males and usually found among psychiatric patients.⁴ The “colonic



Figure 1 - Lateral view of the spine showing multiple radio-opaque filling defects in the rectum, sigmoid, and descending colon.



Figure 2 - A plain abdomen x-ray showing multiple radio-opaque filling defects in the rectosigmoid, descending colon, and part of transverse colon.



Figure 3 - A plain abdomen x-ray of the same patient, one week after treatment showing just a few radio-opaque filling defects in the rectosigmoid colon.

crunch sign,” which is the prickly fecal mass sensation felt during per rectal examination, is characteristic of lithobezoars.¹⁰ An important clue to the diagnosis of lithobezoars is severe constipation, recurrent abdominal or back pain, and painful defecation. The diagnosis might not be made for years if such symptoms are not related to careful history, abdominal examination, or radiological findings. A plain x-ray of the abdomen with scattered radio-opaque shadows named as “corn on the cob” is pathognomonic for lithobezoars.⁹ Underlying psychiatric disorders and mental illness associated with lithobezoars should be evaluated and corrected.

The type and cause of pica will determine the treatment modalities for each case. A nutritional deficiency can be corrected by supplementation of the insufficient items (for example, iron-containing vitamins). Such repletion may quench the urges and cravings in some iron-deficient patients. Psychological consultations are appropriate for some patients and play an important role in treatment for many patients with pica. Constipation should be treated with a regimen of stool softeners and laxatives as appropriate.

In conclusion, pica resulting in lithobezoars should be suspected in patients with abnormal behavior presenting to the emergency center with constipation and severe back pain. Careful history including ingestions and psychiatric symptoms should be elicited as well as the completion of a full abdominal and rectal exam. Radiographs confirm the diagnosis.

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Case Reports

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