Small intestinal obstructing bezoar mimicking mass

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Section: Abdominal imaging
Case Type: Clinical Cases
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Patient: 72 years, male

Clinical History:

A 72-year-old male patient was admitted to our hospital with the complaint of a severe abdominal pain, which he told he had been suffering from during the last couple of days. His pain was permanent, with infrequent episodes of acute attacks.

Imaging Findings:

A 72-year-old man was admitted with the complaint of a severe abdominal pain, which he told he had been suffering from during the last couple of days. His pain was permanent, with infrequent episodes of acute attacks. He also had bilious vomiting. His systemic findings included hypertension and diabetes mellitus, which he had been having for decades. He had undergone a coronary bypass operation six years ago. The results of his stool tests were found to be negative for the presence of amebiasis and other parasitic infections. He was first examined by a barium passage study of the upper gastrointestinal system. A filling defect was noted in the ileum (Fig. 1). An ultrasound (US) examination was then performed, and which showed the presence of an ovoid mass lesion with a typical bull's eye pattern: a hyperechoic center and a hypoechoic rim (Fig. 2). The results of a computed tomographic (CT) study revealed the presence of a mass pattern causing a filling defect (Fig. 3).

Discussion:

The incidence of bezoars is reported as about 0.4% in large endoscopic series. The main predisposing factors are mental retardation, previous gastric operations, loss of teeth, the use of dentures, etc. Bezoars may be classified as phytobezoars (vegetable contents), trichobezoars (hair contents), lactobezoars (milk product contents), and mixed bezoars. Phytobezoars make almost 55% of all bezoars. The formation of phytobezoars is usually due to the ingestion of vegetables which are rich in fibers. The most frequently affected organs are the stomach, jejunum, and the ileum, with regard to their rates of being affected. The disease may cause necrosis, perforation, and even peritonitis. Trichobezoars are frequently seen among children and young adults. They are also frequently encountered in women and the retarded people. Gastroduodenoscopy is helpful in the diagnosis and treatment of the disease. Several imaging studies may be performed in the radiological follow-up of the disease. An erect abdominal X-ray study when done may reveal the existence of a nonhomogeneous mass, together with an air-fluid level. Barium studies usually demonstrate filling defects, together with partial or complete obstruction. At US, intestinal dilatation and luminal thickening may be seen, frequently together with a mass pattern, which may mimic an intestinal tumor. The CT scan will eventually verify these findings. In our case, it was learned later from the patient's family that the patient was a beeswax eater. Operational findings verified the diagnosis. Beeswax has a thick structure and may, as seen in our case, lead to an obstructing bezoar.
**Differential Diagnosis List:** Partial ileal obstruction due to a bezoar.

**Final Diagnosis:** Partial ileal obstruction due to a bezoar.

**References:**

Description: A barium study of the small intestine revealing a filling defect in the ileum. **Origin:**
Figure 2

Description: An US image showing the presence of a lesion. Origin:
Figure 3

Description: A CT image showing the presence of a lesion causing a filling defect. Origin: