

Gastrointestinal Trichobezoars, How They Present?

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Abstract: We report a case of gastrointestinal trichobezoar in a female patient, aged 7 years who, presented by chronic abdominal pain and diarrhea for a duration of 6 month. She had anorexia and low weight (16 kgm). Many investigations were done including stool analysis, urinalysis, and abdominal ultrasonography without any result. By accurate abdominal examination a very irregular epigastric mass was felt. An abdominal CT was performed that revealed (as reported by the radiologist): "multiple enlarged mesenteric lymph nodes and thickened mesentery which suggests tuberculous enteritis". Tuberculin test was negative. A therapeutic test for T.B. lead to no improvement. Abdominal exploration revealed a mass inside the stomach which was extracted by gastrotomy and proved to be a huge trichobezoar taking the shape of the stomach and extending from the fundus till the first part of the duodenum. [Khalid A. Sanousy and Mohammad A. Osman **Gastrointestinal Trichobezoars, How They Present?**. Journal of American Science 2011;7(4):837-839]. (ISSN: 1545-1003). <http://www.americanscience.org>.

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Introduction:

A bezoar is a conglomeration of partially digested or non-digested foreign material in the gastrointestinal (GI) tract, most commonly found in the stomach (1). There are various types of bezoars of which trichobezoar is one. Though most of the gastric bezoars occur as a complication of gastric or ulcer surgery, gastric bezoars may also be seen in the normal stomach as a result of ingestion of various objects which do not pass through the pylorus such as hair, paper and cotton.(2). Less commonly, bezoars are found in the small intestine and the colon and only a few in the rectum are reported in the literature (3). Bezoars may cause a wide variety of signs and symptoms depending on their location and can range from asymptomatic to occlusion and perforation (4). Bezoars are classified according to the materials which they are composed of (named in order of frequency): Phytobezoar made of vegetable fibers or plant material, trichobezoars are a result of ingestion of human hair, drug-bezoar contain accumulated masses of medication, lactobezoars made of undigested milk described in premature infants and in full term infants and other less frequent materials are named miscellaneous bezoars or polybezoars (5).

2. Case presentation

A female patient, 7 years old, presented by chronic abdominal pain and diarrhea for a duration of 6 month. She had normal mentality and no behavioral disorders could be elicited by history. She had anorexia and low weight (16 kgm). Many investigations were done including stool analysis, urinalysis, and abdominal ultrasonography without any result and many medications were given to the

patient with no improvement. By accurate abdominal examination an epigastric mass was felt. The mass was firm and so irregular as if it consisted of many small masses amalgamated together. An abdominal CT was performed that revealed (as reported by the radiologist): "multiple enlarged mesenteric lymph nodes and thickened mesentery which suggests tuberculous enteritis". A tuberculin test was performed to the patient with a negative result. Antituberculous treatment was started as a therapeutic test. After two weeks of antituberculous treatment, there was no improvement, moreover abdominal pain became worse and very severe inspite of giving antispasmodic injections and strong analgesics so, we consulted the pediatric surgery department asking for abdominal exploration. During the operation the surgeon discovered that the mass, felt by abdominal examination, is present inside the stomach so, a gastrotomy was done revealing a huge mass inside consisted of hair, rubber pieces, and leathery substances. The mass was huge taking the shape of the stomach and extending from the fundus of the stomach till the first part of the duodenum (figure 1).

The mass was extracted and a complete exploration of the small and large bowel was made to exclude presence of any other bezoars. After the operation there was complete improvement of the condition, and the patient started to gain weight. CBC, performed to the patient before the operation, revealed no anemia. The patient was subjected to psychotherapy, and the mother was instructed to observe her daughter thoroughly.



Figure 1: The mass extracted from the stomach

Discussion

Bezoars are foreign bodies in the gastrointestinal tract that increase in size by accretion of non-absorbable food or fibre because of large particulate size, indigestibility, gastric outlet obstruction or intestinal stasis. The term “bezoar” is derived from Arabic “badzehr” or from Persian “panzehr”, both meaning counter poison and antidote (6). Trichobezoars are bezoars consisting of hair. They are seen most commonly in young people with normal gastrointestinal function and usually result from underlying behavioural disorders and mental retardation. In the classic review by DeBakey and Ochsner, 80% of trichobezoars were found in patients younger than 30 years of age (2).

Bezoars have been known to cause a wide variety of symptoms. In the stomach, they are associated with anorexia, bloating, early satiety, dyspepsia, malaise, weakness, weight loss, headaches, and a feeling of fullness or heaviness in the epigastrium (7). They may also present with gastrointestinal bleeding (6%) and intestinal obstruction or perforation (10%) (8). Plain X-rays are unique and lead to the diagnosis, however diagnostic difficulties arise in patients with radiolucent bezoars, and contrast studies of the GI tract by radiography and computed tomography (CT) scan are necessary in such circumstances. Upper GI endoscopy is the method of choice in detecting esophageal, gastric and duodenal foreign bodies. Occasionally, bezoars are found incidentally when an emergency laparotomy is done secondarily to bowel obstruction (4).

For small bezoars, endoscopy has been the treatment of choice (4). Most trichobezoars, however, require surgery for removal. The standard treatment is a gastrotomy and extraction of the bezoar (9). Frequently, synchronous bezoars are found in the stomach or other areas of the gastrointestinal tract; therefore it is mandatory to carry out a thorough exploration of the small intestine and colon to avoid recurrence of intestinal obstruction due to a retained bezoar (4). After discharge, recurrence has been reported in up to 14% of cases, especially in patients with psychiatric disturbances and with previous gastric surgery (10).

Conclusion

Bezoars require a high index of suspicion for diagnosis and should be considered in the differential diagnosis of epigastric swellings in young patients especially those having mental retardation or behavioral disturbances. Trichobezoars are most commonly seen in patients with normal gastrointestinal tract function but with behavioural disturbances like trichophagia, trichotillomania and mental retardation. It is very difficult to explain the cause of trichobezoars in such patients without a known psychiatric history. Investigatory tools like; ultrasonography and CT are good and very informative but more important is the human being who interpret what is seen by these tools.

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