

Case Report

Ileal Tricho-phytobezoar a rare cause of intestinal obstruction : a case report

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A bezoar is a ball of swallowed foreign material that collects in the gastrointestinal tract and usually fails to pass through. Trichobezoar (hair) and phytobezoar (vegetable fibres) are the most frequent forms. Rarely even their combination have also been seen as tricophytobezoar which is in our case. Stomach is the commonest site of occurrence. However it may also occur in the small bowel. Intestinal obstruction due to trichophytobezoar is an extremely rare entity, which should also be kept in mind while considering various differential causes of obstruction. A female patient of 26 years of age presented with complains of pain in abdomen, vomiting, abdominal distension and constipation since 8 to 10 days. Clinically she had tachycardia, abdominal findings were suggestive of distension along with tenderness, and guarding. On emergency exploration she was found to have a single ileal intraluminal mass, mobile in nature, which was removed through enterotomy. This mass was then identified as Tricho-phytobezoar. She was also consulted and treated by a psychiatrist. Primary small-bowel bezoars themselves are very rare but must be kept in mind as a possible cause of small bowel obstruction.

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Bezoar is a tightly packed collection of undigested material that is unable to exit the stomach. Most bezoars are of indigestible organic matter such as hair-trichobezoars; or vegetable and fruit the – phytobezoars; or a combination of both, but other rare substances has been also been described in literature¹. Trichobezoars, commonly occur in patients with psychiatric disturbances who chew and swallow their own hair. Only 50% will have history of trichophagia. Trichobezoars have been described in literature and they comprise 55% of all bezoars^{1,2}. In very rare cases the so called “Rapunzel Syndrome” occurs in which the hair extends through the pylorus into the small bowel causing symptoms and signs of partial or complete gastric outlet obstruction³.

Small-bowel bezoars normally come from stomach, and primary small-bowel bezoars are very rare. They are seen only in patients with underlying small-bowel disease such as diverticula, strictures, or tumors. Primary small bowel bezoars almost always present as intestinal obstructions. Here we present a case of small bowel obstruction due ileal trichophytobezoar.

CASE REPORT

A young female patient of 26 years of age, presented to the department of surgery with the complains of persistent abdominal pain, vomiting, constipation since 8 to 10 days. On admission her vitals were, pulse 110/min, BP-128/80mmhg. Her abdominal findings were suggestive of abdominal distention, guarding and rigidity.

Her routine blood investigations were normal. Standing abdo-

men X-rays were suggestive of multiple air fluid levels. Ultrasound report showed multiple dilated bowel loops.

So it was then planned to go for urgent laparotomy and exploration. On exploration, a single firm consistency bowel mass was palpated at about 20 to 25 cms proximal to ileocecal junction, which was intraluminal, not adherent to the bowel wall or mucosa and also was freely mobile. Enterotomy was done and an approximately 12x5 cms of longitudinal mass was extracted which was found to be a tricho-phytobezoar. The enterotomy was closed with silk in two layers. Rest of the bowel and other abdominal organs were normal.

The patient was discharged uneventfully on 10th post operative day. She was referred to a psychiatrist who had then counseled her and also started antipsychotics before discharge. Patient then had regularly followed up in surgical OPD at an interval of 20 days for two months and at 1 month interval for the next four months during which she did not have any complains. She also had followed up in psychiatric OPD for her regular counseling which continued for six months.

DISCUSSION

The origin of word “bezoar” derives either from the Arabic term “badzehr” or the Persian word “padzahr,” both of which denote counter poison or antidote. This word was applied to a greenish, hard concretion (stone like) found in the fourth stomach of the Syrian goat^{2,3}. The stone was felt to prevent poisoning and came to Europe as the bezoar stone, which was highly prized for its medicinal properties.

Trichobezoar (hairball) is a complication of trichotillomania that is recurrent hair pulling, and subsequent trichophagia or mouth-ing of the hair. Bezoars are foreign bodies in the lumen of the digestive tract, which increase in size over time by the accumulation of

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ingested non-absorbable food or fibers⁴.

The age of occurrence of intestinal bezoars has been reported to range between 10 and 58 years old; the most dominant fraction of age is between 15 and 30 years old with 90% being females. About 10% of patients have shown psychiatric abnormalities or mental retardation. Intestinal bezoars are associated with symptoms like abdominal pain, vomiting and irregular bowel habits. They might also occur with gastrointestinal bleeding and intestinal obstruction or perforation^{2,4}. Primary small bowel bezoars without any associated gastric bezoars are uncommon. Decreased intestinal motility is the most quoted factor in intestinal bezoar formation. It is usually caused by a portion of the gastric trichobezoar which becomes detached to cause

small or large bowel obstruction. In rare cases, it is caused by the bezoar itself; such is the profile of our patient. The most common sites of obstruction are the gastric outlet or duodenum where as obstruction of distal parts of the small bowel or the large bowel is extremely rare^{1,2,7}.

Blood investigations may reveal iron deficiency anaemia. Examination of the hair content of stool may also be done but is rarely used. Radiography may suggest a calcified rim delineate the bezoar. In ultrasonography, the typical trichobezoar appears curvilinear with bright echogenic band that does not allow transmitting the ultrasound waves, which generate a shadow over the left upper quadrant. Both, contrast radiography and endoscopy of the upper gastrointestinal tract are the procedures of choice for establishing the diagnosis⁵.

CT-scan is the most useful diagnostic tool in patients with bezoars because it reveals the localization of bowel obstruction. Recently, researchers have recommended magnetic resonance imaging to be good for the evaluation of small-bowel disease^{6,8}. Upper endoscopy might also be used for endoscopic retrieval of proximal small trichobezoars⁹.

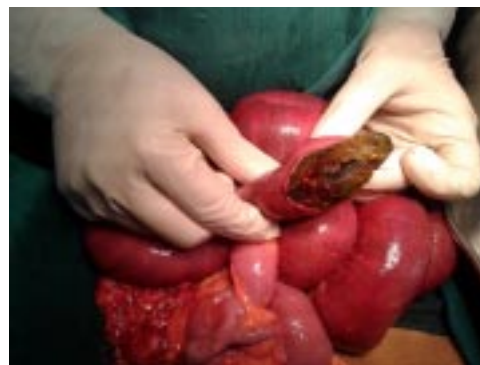
The treatment consists of removing the mass by a single enterotomy or resection of the bowel if it is not feasible. It is mandatory to perform a thorough exploration of all the small intestine and the stomach searching for retained bezoars. Laparoscopy is considered to create fewer intraabdominal adhesions than open laparotomy. The psychiatric follow-up is essential to prevent recurrences.

CONCLUSION

Trichophytobezoars are a rare clinical entity. Primary small bowel bezoars occur meagerly. Intestinal obstruction due to bezoars



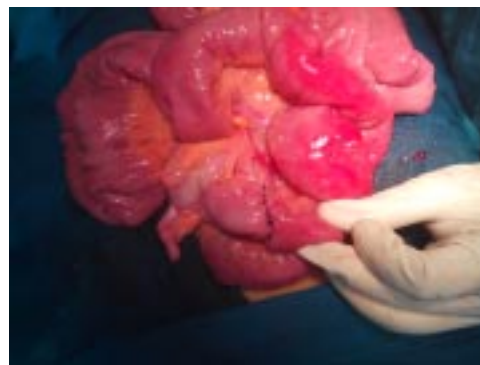
Enterotomy done



Extraction of Bezoar



Closure of Enterotomy done



Bezoar specimen

is extremely rare but still an entity to be kept in mind. Various imaging modalities have been recommended for revealing the pathology. Apart from endoscopic retrieval for small bezoars the treatment consists of removing the mass using a single enterotomy or resection of the bowel if not feasible.

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