

Case Report**Trichobezoar with gastric perforation**Tak B¹, Anuragi G², Kumar L³, Dadhich Y⁴, Durgavati⁵, Ashopa J⁶, Mandia R⁷

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Received: 12-02-2016
Revised: 02-03-2016
Accepted: 26-03-2016

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ABSTRACT

Trichobezoar is a rare disorder in which a collection of swallowed hair and some undigested food particles are retained in the gut. The most common type of bezoar is gastric trichobezoar. It is frequently seen in psychiatric patients (trichotillomania). An unusual form of bezoar extending from the stomach to the small intestine or beyond has been described as Rapunzel syndrome. It may present with vague symptoms, such as anorexia, anemia, weight loss, abdominal mass, recurrent abdominal pain or symptoms and signs of intestinal obstruction. This report illustrates a 19 yrs old female who presented to our emergency department with diffuse peritonitis due to gastric perforation and found to have a huge trichobezoar. She was treated successfully by gastrotomy with complete evacuation of the trichobezoar.

Key words: Bezoar, trichobezoar, trichotillomania, rapunzel syndrome, perforation, gastrotomy

Introduction

A bezoar is persistent, ingested material that collects within the gastrointestinal tract. [1] Bezoars can be made up of vegetable or fruit fibers (phytobezoars), milk curds (lactobezoars) or any indigestible material (e.g. hairs) that is ingested. [2] Gastric trichobezoar is the most common entity and the underlying etiology is usually a psychiatric disorder. [3] Trichobezoar is relatively a rare surgical finding. In

approximately 1% of the patients with trichophagia, a trichobezoar is seen to develop. [4] Most cases of trichobezoar are reported in females.

Case report

A 19-years-old mentally retarded female was admitted to the emergency department with acute abdominal pain for past three days, with tachycardia, tachypnoea, hypotension and fever. On

examination, her general condition was poor and she was not able to communicate properly. On abdominal examination, tenderness, guarding and rigidity could be elicited. Routine blood investigations showed low hemoglobin and a raised total leucocyte count. Her abdominal X-ray showed gas under diaphragm. She also gave history of episodes of recurrent abdominal pain with vomiting. After resuscitation, an emergency laparotomy was done.

Per operatively, a 1.5cm × 1.5cm perforation was found on the greater curvature of stomach from which a tuft of dark hair was seen protruding and a soft pliable mass could be felt extending from perforation site till distal to duodeno-jejunal junction. Complete evacuation of trichobezoar by extending the perforation site along with primary repair of perforation was done with abdominal drains placement. Abdominal drains were removed out on 4th post operative day and she was discharged uneventfully on 6th post operative day on semisolid diet. On follow up of 2 month she had good abdominal scar without any infection and having good appetite. [Fig. 1, 2]



Fig.1 A tuft of hairs and a long tail of that called rapunzel

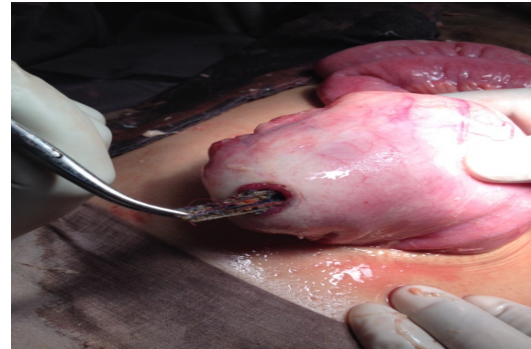


Fig. 2 A perforation over greater curvature of stomach with a tuft of hairs protruding out of it

Discussion

Human hair is resistant to digestion as well as peristalsis due to its smooth surface. Therefore it accumulates between the mucosal folds of the stomach. Over a period of time, continuous ingestion of hair leads to the impaction of hair together with mucus and food, causing the formation of a trichobezoar. In most cases, the trichobezoar is confined within the stomach. In some cases, however, the trichobezoar extends through the pylorus into jejunum, ileum or even colon. This condition, called Rapunzel syndrome, was first described by Vaughan et al. in 1968.^[5] The clinical presentation of trichobezoar varies from non-specific symptoms like; anorexia, anemia, weight loss, gastrointestinal bleeding and recurrent abdominal pain to a more serious presentation as intestinal obstruction and perforation.^[6-8] The most common complication is perforation of either the stomach or the intestine. In present case patient presented with features of peritonitis while Gonugunthla et al reported a 5 year old female with features of abdominal mass for which gastrotomy was performed and trichobezoar with a tapering tail extending into the small bowel was removed.^[2] Both contrast radiography and upper GI endoscopy are the diagnostic

procedures of choice. ^[9,10] The upper GI contrast radiography confirms the existence of the trichobezoar and also detect other complications such as gastric ulcers. Furthermore, the upper GI endoscopy is also used for retrieval of proximal minor trichobezoars. ^[10] The computed tomography is the most useful diagnostic tool because it reveals the localization of the bowel obstruction. The treatment of bezoars consists of the removal of these indigestible masses. It can be removed endoscopically or by laparoscopy in case of small trichobezoar, open surgery is still the choice for large trichobezoar removal, especially if it has an extension into bowel.

Conclusion

Trichobezoar, has to be considered in the differential diagnosis of abdominal pain and a non-tender abdominal mass even in adolescent female. Small trichobezoars may be extracted by endoscopic fragmentation and other methods. Bezoars like Rapunzel syndrome, on the other hand, need surgical removal. Many of these patients have psychiatric pathology with emotional problems, family discord, and history of neglect or mental retardation. Counselling by a psychiatrist is an important part of management to prevent recurrence.

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Cite this article as: Tak B, Anuragi G, Kumar L, Dadhich Y, Durgavati, Ashopa J, Mandia R. Trichobezoar with gastric perforation. *Int J Med and Dent Sci* 2016;5(2):1272-1274.

Source of Support: Nil
Conflict of Interest: No