



GASTRIC TRICHOBEZOAR-A CASE REPORT PINKY M MUHAMEDRASUL

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Abstract : Background Bezoars are conglomerates of food or fiber in the alimentary tract of humans and certain animals, mainly ruminants. In adults, bezoar are most frequently encountered after gastric operation, but in children bezoars are associated with pica, mental retardation and coexistent psychiatric pathologic disorders (1,2,3). Although the prevalence of bezoars in humans is low, if treatment is not administered, associated mortality rates may be as high as 30 primarily because of Gastrointestinal bleeding, intestinal obstruction, ulceration, perforation and peritonitis. This report describes a 16 year old girl with trichotillomania in whom a gastric trichobezoar resulted in failure to gain weight, iron deficiency anemia, and epigastric mass. Case study We had a case of pain abdomen and vomiting. On examination stomach was distended. OGD was done. To our surprise gastric trichobezoar was found. Exploratory laparotomy was done and a contiguous trichobezoar cast of stomach and duodenum was extracted. Patient did well postoperatively and discharged on 10th POD after psychiatric consultation. Conclusion In a child with symptoms of Gastric outlet obstruction and upper abdominal mass bezoar should be considered in the differential diagnosis.

Keyword : trichotillomania, trichobezoars, trichophagia, gastric outlet obstruction, rapunzel syndrome

INTRODUCTION:

The first report of a trichobezoar case occurred in 1779 by Baudamart. The first surgical excision was performed by schonborn in 1883 (4,5). They usually present with signs and symptoms due to mass in the stomach and may rarely extend into the jejunum as a tail (Rapunzel syndrome) (6,7) stomach bezoars if detected in time may be treated by endoscopic retrieval but if presentation is in the form of obstruction with or without perforation management is by a formal exploratory laparotomy followed up by psychotherapy.

CASE STUDY:

16 year old girl who weighed 18kg was admitted in surgical ward with complaints of vomiting, abdominal pain, upper abdominal distension for past one week. On retrospective questioning her mother agreed history of trichophagia in the girl. Patient vitals were stable her conjunctiva and skin

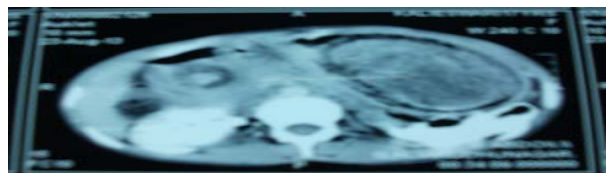
were pale. She had no evidence of icterus. Chest and cardiac finding were unremarkable. The upper abdomen was distended and a firm non compressible mass in the epigastrium that was smoothly contoured, mobile and nontender no focal neurological deficits were apparent.



Complementary exams:

Laboratory test result were notable for a hemoglobin concentration 5g /dl . Electrolytes and liver function test results were normal. Erythrocyte morphology was consistent with severe microcytic hypochromic anemia. Abdominal roentgenography demonstrated normal bowel gas pattern.

Ultrasound report shows a crescentic echogenic area in left hypochondrium in the region of stomach and dense, acoustic shadowing posterior to it suggesting bezoar. OGD revealed large hairball seen in stomach extending into duodenum. Duodenum couldn't be entered. OG junction normal. A computed tomographic scan of abdomen revealed a large, free, floating, solid mass in the hugely distended stomach. A gastric bezoar was diagnosed.



Description Of The Surgical Procedure:

An exploratory laparotomy through an upper midline abdominal incision was performed. A longitudinal 5cm gastrotomy was made on the anterior surface of the stomach. At operation an intraluminal, smoothly, contoured mass was found occupying the bulk of the stomach and duodenum. The rest of the abdominal viscera was normal the gastrotomy was closed in two layers. The patient was put on cephalosporins, metronidazole and analgesics. Oral feed insisted on third post operative day. Patient was given supportive psychotherapy and 20mg fluoxetine daily for trichotillomania. The patient was discharged on 10th POD



DISCUSSION :

Therapy for any bezoars necessitates removal and prevention of recurrence. Novel therapies include extracorporeal shock wave lithotripsy, endoscopic removal with a gallstone lithotripter and removal by a modified percutaneous approach using laparoscope and a laser miniexplosive technique through an endoscope. In our patient, endoscopic interpretation of the bezoar was that it was firm, calcified, intertwined and of sufficient size that fragmentation was impossible. Gastric trichobezoar can be easily extracted through a small gastrotomy.

PATHOPHYSIOLOGY:

Trichobezoars are commonly found in young females usually with an underlying psychiatric disorder (11). Formation of trichobezoars occurs when the hair strands are retained in the folds of the gastric mucosa because their slippery surface prevents propulsion by peristalsis. As more hair is added peristalsis causes it to be enmeshed until a ball, too large to leave the stomach forms causing gastric atony due to its large size.

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This large quantity of hair becomes matted together and assumes the shape of stomach usually as a single mass (12,13). The increased incidence of these casts forming in the stomach is probably because of the initial hold up by the pylorus and the churning action of the stomach which helps entangle new hair into the already formed casts. Decomposition and fermentation of fats in the intestines give it a putrid smell (14). The acidic contents of the stomach denatures the hair protein giving it its black color regardless of the original color of hair (15,16)

MANAGEMENT:

Medical treatment and enzymatic degradation, endoscopy with mechanical and laser fragmentation technique, laparoscopy retrieval although attractive because of their non invasiveness have been reported as ineffective (8,9). Due to 100% success rate, the relatively low complication rate, the low complexity and the ability to carefully examine the entire gastro intestinal tract for satellites in a short period of time, laparotomy is still considered the treatment of choice.

CONCLUSION:

The main focus of this paper is trichobezoar should be considered as a differential diagnosis in young females who present with non-specific symptoms such as epigastric pain, fatigue, weight loss and epigastric mass. Our patient suffers from trichotillomania with gastroduodenal trichobezoar. In addition to the surgical treatment psychiatric consultation is necessary in order to prevent relapses (10).

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