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Giant Trichobezoar Leading to Gastric Perforation: A Case Report

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Abstract: ***Trichobezoar is a rare disorder commonly seen in the psychiatric patients having habit of plucking and eating their own hair. This leads to formation of ball of hair mixed with gastro-intestinal secretions that leads to blocking of passage of food particles. Presentation of disease is variable, ranging from an asymptomatic bloating, distension to severe complications including bowel obstruction and perforation. We report a case of a 21 year old female patient who presented with an acute abdomen and on laparotomy, gastric perforation secondary to large gastric trichobezoar was found. The patient was treated with en bloc removal of the gastric trichobezoar.***

Keywords: trichobezoar, trichophagia, trichotillomania, gastric perforation, peritonitis, Rapunzel syndrome

1. Introduction

Bezoars are concretions of foreign materials found in stomach and intestine [1]

Can be made of up fruit or vegetable fibers (phytobezoars), hair (trichobezoar), milk curds (lactobezoars), or any indigestible material that is ingested. [2]

The most common type of bezoar, gastric trichobezoar, is made up of human hair and found in stomach. Human hair, being indigestible material is prone to collect between mucosal folds of stomach because of the peri-staltic contractions and the smooth surface of hair. [3]

Gastric bezoar presentation varies based on size. When small may be asymptomatic, or may present with non specific symptoms such as epigastric pain, bloating, nausea, vomiting. As trichobezoar enlarges more serious complications can develop such as protein-losing enteropathy, malabsorption and nutritional deficiencies including the iron deficiency anemia.

The hair mass itself can limit blood supply to gastric mucosa leading to the ischemia ulceration, or hemorrhage. Less commonly. Stomach obstruction can occur due to inability to pass contents through pyloric sphincter, leading to gastric perforation.

2. Clinical Details

21 year old deaf and dumb female who was brought to casualty by her relatives with acute pain in abdomen since 5 days. Patient relatives gave no history of any known psychiatric illness or psychiatric medication. Patient had passed stools 2 days ago. On examination she was febrile, hypotensive bp-96/58 mmhg, tachycardic P-136 bpm, tachypneic RR-26 p. m. Patient had abdominal guarding, rigidity and tenderness with a palpable mass in the epigastrium. Bowel sounds were absent.

Abdominal ultrasound revealed moderate free fluid in abdomen with dense internal echoes.

CECT-Abdomen revealed pneumoperitoneum, grossly distended stomach and a mass showing mottled gas pattern within the gastric lumen suggestive of trichobezoar.

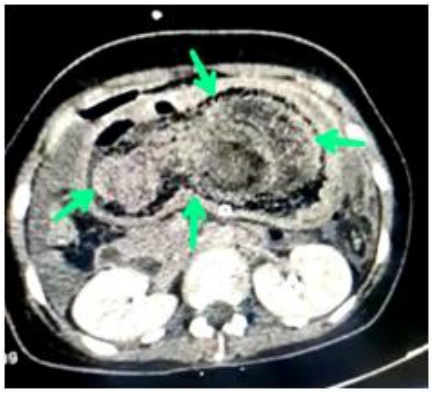

Figure1: CECT abdomen-reveals mottled gas pattern-trichobezoar

3. Treatment

Patient underwent emergency exploratory laparotomy. Intraoperatively there was evidence of a grossly distended stomach with a 1cm × 0.5 cm perforation present on the anterior wall of stomach near the greater curvature with strands of black hair protruding out. Gastrotomy was done and the trichobezoar was extracted. At 0.9 kg and a maximum length of 23 cm the trichobezoar took the shape of the stomach and the first part of duodenum. After surgery, patient was immediately shifted to ICU on pressor support in an intubated state. She was in septic shock with severe metabolic acidosis for which correction was given. 12 hours later patient with acute renal failure and ARDS, patient succumbed despite all the intense efforts.

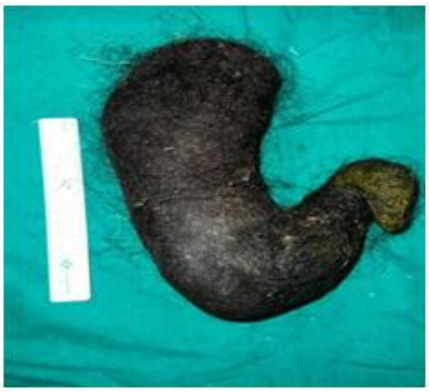

Figure 2: gastric trichobezoar

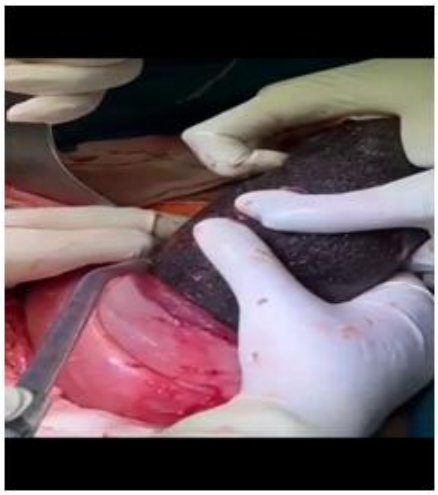

Figure 3: Intra operative picture showing gastric bezoar from gastrotomy

4. Discussion

Gastric perforation is rare complication of gastric trichoberoar formation. The patient is usually asymptomatic unless the trichobezoar attains substantial size, which can present as intestinal obstruction, abdominal pain vomiting, weight loss and loss of appetite. [4]

Without the history of trichotillomania or trichophagia, or findings on radiological investigation, one would not easily include this entity on their differential diagnosis of acute abdomen. Patient with the psychiatric disorder with patchy alopecia due to the habit of trichotillomania, require close watch if they have associated abdominal pain or non specific symptoms like nausea and vomiting since it could be due to the complications associated with the bezoar of GI tract early identification of life threatening complications of trichobezoar, which can save the lives of such psychiatric patients with disease if identified beforehand.

5. Conclusion

In patients of psychiatric illness complete history, with adequate investigations and early intervention can reduce mtotality and morbidity in case of gastric bezoar

References

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