Section: Surgery

Case Report

GIANT TRICHOBEZOAR RARE SURGICAL EMERGENCY

Received : 25/04/2024
Received in revised form : 11/06/2024
Accepted : 26/06/2024

Keywords: Trichobezoar ; Trichotillomania ; Psychiatry , Laparotomy

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DOI: 10.47009/jamp.2024.6.3.202

Source of Support: Nil,
Conflict of Interest: None declared

Int J Acad Med Pharm
2024; 6 (3); 983-985

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Abstract

Trichobezoar is a rare condition that may pose a diagnostic challenge. It is characterized by the accumulation of ingested hair in the gastrointestinal tract, typically presenting in the stomach and sometimes extending into the small intestine, known as Rapunzel syndrome. Trichobezoar occurs when a trichotillomanic patient eats his or her hair after extraction leading to surgical emergency. Patients with this condition often have an underlying psychiatric illness, and history may not be easily forthcoming. The condition should be entertained especially in young females. Delay in diagnosis may lead to futile complications. The Authors report the case of a 18-year old girl with a gastric trichobezoar. The diagnosis was made with a plain CT-abdomen scan. Surgery consisted of a laparotomy, and subsequent evacuation through a gastrotomy. This approach is highly effective in the treatment of gastric trichobezoars.

INTRODUCTION

A Trichobezoar is a mass of undigested hair within the gastrointestinal tract. Trichobezoars are often associated with trichotillomania (hair pulling), and trichophagia (hair swallowing). Trichotillomania is a one's tendency to pull his or her hair which may subsequently be eaten, It may be unconsciously or unintentionally done and is part of the DSM IV psychiatric classification of impulse control disorders. The site of hair pulling is most commonly from the scalp, but can occur from the eyelashes, eyebrows, and pubic area. Early diagnosis and prompt management is highly recommended to avoid various medical and surgical emergencies.

For a patient to be diagnosed as a case of trichotillomania should met with the following criteria:

- Repeated attacks of hair pulling leading to considerable hair loss.
- Tension felt while trying to resist or prior to the attacks.
- Gratification, pleasure or subsiding the tension associated with episode completion.
- Crucial impairment or distress in occupational, social or other essential areas of functioning because of the complaint.
- Providing that hair pulling is not resulted from other mental or medical diseases.

AIM:

The Aim of this study is to report a case of giant trichobezoar with gastric outlet obstruction (GOO) presenting as abdominal pain, distension and vomitting.

CASE PRESENTATION

We Report a case of 18 Year old female presented to our Emergency room with complaints of upper abdominal pain more in epigastric region associated with an abdominal distension and feculent vomiting since 2 days. History of Loss of Weight and Loss of Appetite. No History of Fever noted in the patient. Patient has a history of psychiatric illness otherwise patient had no past medical and surgical history. Patient is Anemic and underweight. Abdominal examination revealed a palpable mass in the upper abdomen with diffuse abdominal distension. Bowel sounds were normal and Patient had no signs of peritonitis. Other Laboratory investigations were within normal limits.

Vitals: Pulse Rate = 110 BPM; Respiratory Rate = 22; BP = 90/70 mmhg; Weight: 38 Kgs Height: 152 cm BMI: 16.4

Ultrasound and Computed Tomography (CT) scan of the abdomen both confirmed the presence of a large intragastric mass with internal air loculi involving the entire stomach extending into the First part of the duodenum. [Figure 1,2]

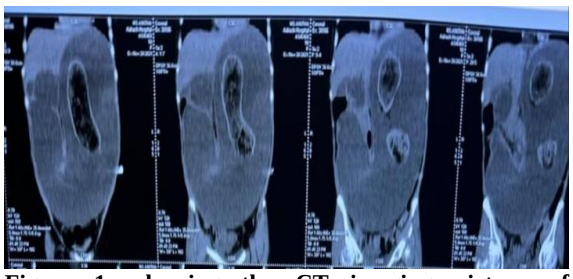

Figure 1: showing the CT imaging picture of trichobezoar

ISSN (O): 2687-5365; ISSN (P): 2753-6556

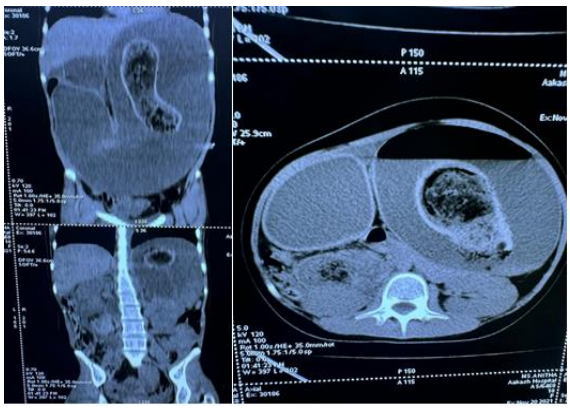

Figure 2: Coronal and Axial view of CT abdomen

The above [Figure 1,2] shows the CT images of the Trichobezoar extending into the duodenum

The patient diagnosed as having trichobezoar. Due to the size of the trichobezoar and potential for complications, The patient underwent the successful surgical removal of the trichobezoar was undertaken successfully via Mini Laprotomy and gastrostomy. Under General Anaesthesia with all the surgical precaution and preparation; Through an upper midline incision, abdomen entered; gastrostomy was done, feculent content was drained Giant Trichobezoars was removed with minimal spillage with less contamination [Figure 3,4] and wash given with normal saline. Gastrotomy closed with absorbable sutures. Abdominal layers closed with Non Absorbable sutures. The patient admitted for three days and patient kept in the surgical ICU for observation; Postoperatively, psychiatric evaluation and intervention were initiated to address the underlying trichotillomania and prevent recurrence. fluid management given and discharged home after 7th post-operative day. Mild wound with discharge present; pus sent for lab culture and sensitivity test.

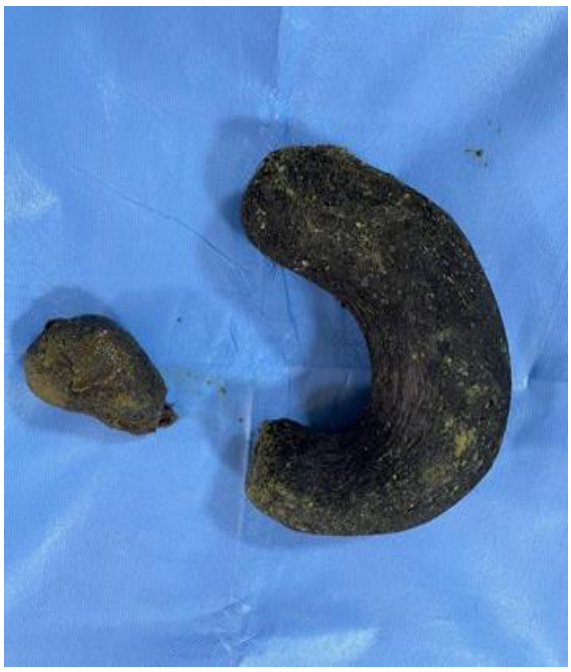

Figure 3: Trichobezoar after extraction from abdomen

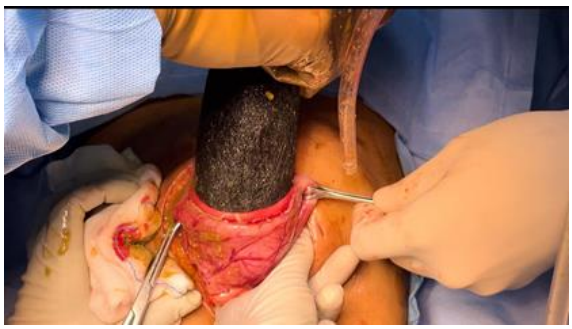

Figure 4: Trichobezoar on Extraction

DISCUSSION

A trichobezoar commonly occur in adolescent females, often with an underlying psychiatric or social problem. It is an extreme rare surgical disorder consisting of a hair ball in the proximal part of the gastrointestinal tract. This may lead to obstruction and subsequent acute abdomen. The current case was a Female with only 18-year of age with history of psychiatric illness on medication Trichobezoars usually occur due to underlying psychiatric conditions, such as, on the top, trichotillomania, followed by depression, obsessive-compulsive disorder and body dysmorphic disorder. However, their prevalence and co-morbidity is unclear. Depending on the case series, 5 to 30% of the patients with trichotillomania engage in trichophagia while 1 to 37.5% of these will develop a trichobezoar. When eaten, because of its loose surface, hair confronts peristalsis and digestion, and assembles in the mucosal folds. Impaction of hair may result from continuous intake of hair which is usually mixed with mucus and food, leading to trichobezoar. In addition, intestinal obstruction may occur due to pieces of the broken tail. Trichobezoars continue to grow in size with continued ingestion of hair and this increases the risk of severe complications. The most common of these complications that have been reported over the years include gastric mucosal erosion, ulceration, and perforation of the stomach or the small intestine, gastric outlet obstruction, intussusception, obstructive jaundice, protein-losing enteropathy, pancreatitis, and death. Presentation of the trichobezoar cases delays in most of the time, this is might be explained by low index of suspicion. The most common presentation is palpable abdominal mass followed by abdominal pain, gasterointestinal upset (nausea and vomiting), weight loss and fatigue, constipation or diarrhea and rarely haematemesis. Low level of hemoglobin has been reported in about 62% of the cases. The diagnosis of trichobezoars is based on imaging evidence. Ultrasound is competent in diagnosing of the condition however CT-scan is more authentic in demonstrating bezoar characteristics and increasing the chance of identification of gastrointestinal bezoars. Endoscopy gives the definite diagnosis. Management options include endoscopic removal, laparoscopic removal, or via laparotomy. it was noted that 5% of attempted

ISSN (O): 2687-5365; ISSN (P): 2753-6556

endoscopic removals were successful, 75% of attempted laparoscopies were successful. However, laparotomy was 100% successful and thus favoured as their management of choice. laparotomy appears to be the most widely used technique, even today. We opted for amini laparotomy with gastrostomy.[1-5]

CONCLUSION

Trichobezoars should be considered as a differential diagnosis in a young female patient with a mobile epigastric mass. It is a very rare disorder which may lead to surgical emergency. Diagnosis can be easily made with the use of CT scan and endoscopy. Management almost always requires surgical removal. It is emphasized that the majority of these patients have an underlying psychiatric or social disorder. This case report highlights the importance of a multidisciplinary approach in the diagnosis, surgical management, and psychiatric follow-up of patients with trichobezoar to ensure optimal outcomes and prevent recurrence. Early recognition and treatment are crucial for improving patient prognosis and quality of life.

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ISSN (O): 2687-5365; ISSN (P): 2753-6556