



## GASTRIC TRICOBEOZOAR: AN UNUSUAL CAUSE OF GASTRIC OUTLET OBSTRUCTION IN A YOUNG GIRL

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### ABSTRACT

Tricobezoars are caused by large amounts of hair ingestion. The usual presentation of a tricobezoar of the gastric region is bilious vomiting and epigastric mass. This condition is usually found in young female children with a psychiatric problem as trichotillomania and is seen in normal adult females. Delayed presentation of a gastric tricobezoar is a rare condition. Here, we are presenting a case of a 15-year-old female child with a history of trichophagia for the last 2 years. After CECT of the abdomen and upper GI endoscopy, a large gastric tricobezoar was confirmed. Laparotomy was performed. The girl recovered uneventfully postoperatively and was referred to the psychiatric department.

**KEYWORDS:** Tricobezoar, epigastric, tricobezoar and trichophagia.

### INTRODUCTION

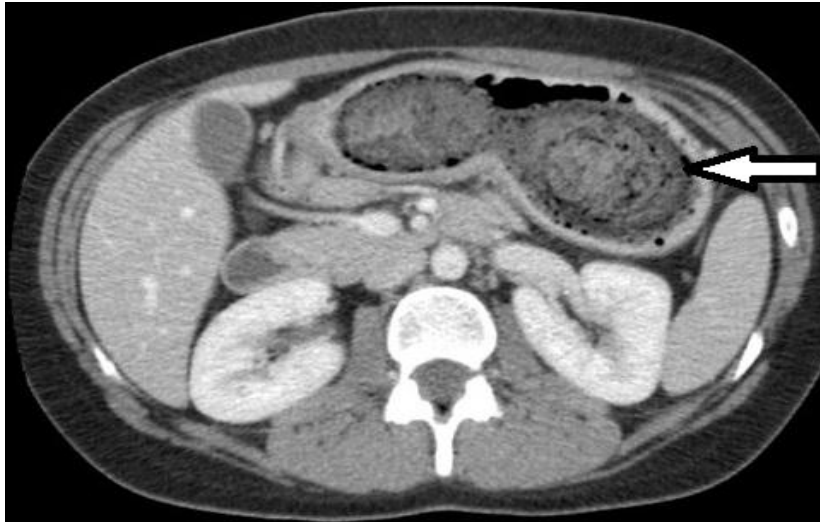
A bezoar is an abnormal collection of ingested matter in the lumen of the digestive tract.<sup>[1]</sup> Bezoars may be composed of hair (tricobezoar), food residue after surgery (phytobezoar), milk curd (lactobezoar).<sup>[2]</sup> Tricobezoar is an abnormal accumulation of ingested hair in the GI tract that is mainly found in the stomach and small intestine. It may cause mechanical obstruction. Tricobezoar is mainly found in adolescent girls due to trichotillomania—a disorder characterized by eating pulled-out one's own hair from the scalp and eyelashes.<sup>1</sup> Continuous ingestion of hair (trichophagia) leads to the formation of a tricobezoar.<sup>[3]</sup> It may cause mechanical obstruction in

stomach and elsewhere in GI tract. Obstruction should be relieved by surgical treatment and removal of tricobezoar. Hereby a young 15 year girl is reported with giant gastric tricobezoar leading to gastric obstruction.

### CASE REPORT

A 15 year old girl presented in our hospital OPD with history of mild abdominal pain and fullness for last six months. There was history of occasional nonbillous vomiting associated with decreased appetite and early satiety with poor weight gain. No h/o constipation or urinary symptoms. The girl was in middle school with average performance. There was history of trichophagia by girl last from 2 years as reported by parents. On physical examination weight was 4 kg below to the corresponding age group. She was mild anaemic but not jaundiced. There was reduced hair on lateral side of head. Vitals were stable: Pulse-98/m, BP-130/70mm/hg, Temperature: afebrile, RR-22/min. Per abdomen examination revealed soft non tender abdomen; however, there was a palpable lump at epigastrium region. The lump was intraperitoneal as on head raising test, the lump reduced. It was oval shaped lump 6x8 cm size with smooth surface, no visible pulsation or bruit on auscultation. On percussion, dull note was present, other systemic examinations were within normal limits. Laboratory investigations report included Hb-7.8gm/dl, TLC-9800 cells/cmm, RFT and LFT were within normal limits. X-ray abdomen show dilated stomach with no air fluid levels. USG abdomen finding was noncystic, hyperechoic mass in epigastric region. CECT abdomen showed heterogeneous mass in stomach (Figure 1). Upper GI endoscopy showed large collection of hair with residual food particles suggestive of huge gastric tricobezoar.

After complete pre anaesthetic evaluation, the patient was taken for laparotomy under GA. Upper midline skin incision was given. After peritoneum was opened, the stomach was held by babcock forceps and transverse incision was given in anterior stomach wall. A huge trichobezoar was removed that was extending up to proximal part of duodenum (Figure 2). The mass weight was near 2 kg and measured 6x8 cm in size (Figure 3). The stomach was closed in double layers by vicryl2-0 and silk2-0. There were no post operative complications. The patient was discharged on 5<sup>th</sup> postoperative day with iron supplement. The patient was referred to psychiatric department for further management of trichotillomania and trichophagia. No organic cause was found and the patient was advised to maintain a short hair style.



**Figure 1:** CECT abdomen showing a large heterogeneous mass in stomach.



**Figure 2:** Intraoperative picture showing a huge trichobezoar.



**Figure 3:** Post operative specimen showing trichobezoar of size 6x8 cm.

## DISCUSSION

Bezoar is abnormal accumulation of ingested material.<sup>[1]</sup> Phytobezoar (plant material) are found usually in previous gastric surgery patients.<sup>[2]</sup> Lactobezoar (milk, curd) are found mainly in infants. Infant formula milk can lead to formation of lactobezoar.<sup>2</sup> Trichobezoar (hair) are ingestion of large amount of hair that usually found in stomach and lead to gastric outlet obstruction.<sup>[3]</sup> In special type of case in which trichobezoar tail may be present up to ileocaecal valve called 'rapunzel' syndrome.<sup>[4]</sup> Trichobezoar is black, foul smelling mass. It is exclusively found in 90% cases in young girls up to 20 years.<sup>[5]</sup> Males are rarely affected. There may be associated psychiatric symptom such as anxiety, stress, anorexia nervosa, obsessive compulsive disorder etc.<sup>[6]</sup> Psychiatric treatment is also essential part of treatment after surgical removal of trichobezoar so that recurrence can be prevented.<sup>[2]</sup> Phytobezoar can be treated by enzymatically.<sup>[3]</sup> Small trichobezoar can be removed endoscopically but laparotomy should be done for large trichobezoar.<sup>[6]</sup> In our case, a 15 year female child having history of trichophagia from last 2 years was found to have a large gastric trichobezoar that was removed by laparotomy.

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