Gastric Trichobezoar Extending Into Duodenum In An Adolescent Girl

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ABSTRACT

A trichobezoar results from ingestion of hairs. Trichobezoars are often associated with trichotillomania. Trichobezoars are rare and more commonly reported in patients with some psychological issues. We report a girl of 16 year who presented with symptoms of upper intestinal obstruction. On exploration she had a single large mass in stomach extending into first part of duodenum.

Key words *Trichobezoar, Rapunzel Syndrome, Trichotillomania, Trichophagia.*

INTRODUCTION:

Trichobezoars consist of a compact mass of hair in stomach with variable extension into other part of the gastrointestinal tract.[1] Trichobezoars most commonly present in the second decade of life. They account for 12% of bezoars. Up to 90% of the all trichobezoars occur in girls younger than 20 years of age. Males are rarely affected.[2] Trichobezoars may present with abdominal mass and at times with acute abdomen and gastric outlet obstruction.[3-5] The diagnosis of trichobezoar is based on ultrasonography and CT-scan. It may help in estimating the size and extent of the bezoar. Presence of additional gastrointestinal bezoars may be detected as well. The unequivocal diagnosis is established by endoscopy.[6,7] We report a case of adolescent girl who presented with mass epigastrium and abdominal pain.

CASE REPORT:

A 16 year old girl presented with abdominal pain for the last 10 years, hair ingestion for 5 years, vomiting on and off for one month and constipation on and off for one month. Abdominal examination revealed a stony hard mass palpable in epigastric region measuring 5cm x 8 cm in size. Her complete blood count showed slightly increased neutrophil count with normal biochemical profile. CT scan showed distended stomach. A mixed density area noted in the body of stomach measuring approximately 5.6 cm x 6.9 cm. It appeared inseparable from stomach wall. (Fig I). No evidence of obstruction was seen in the region of pylorus. These finding raised the possibility of gastric bezoar.

Upper GI endoscopy revealed a large trichobezoar extending up to second part of duodenum causing narrowing of lumen however scope negotiated with little difficulty. Endoscopic removal of mass was not possible because it was stony hard. Surgery was planned and on exploration stomach was found distended. On opening the stomach a thick ball of hair found which was extracted. Size of trichobezoar was 25 cm x 15 cm x 10 cm, extending from fundus to 2nd part of duodenum (Fig II). Postoperative recovery was uneventful.

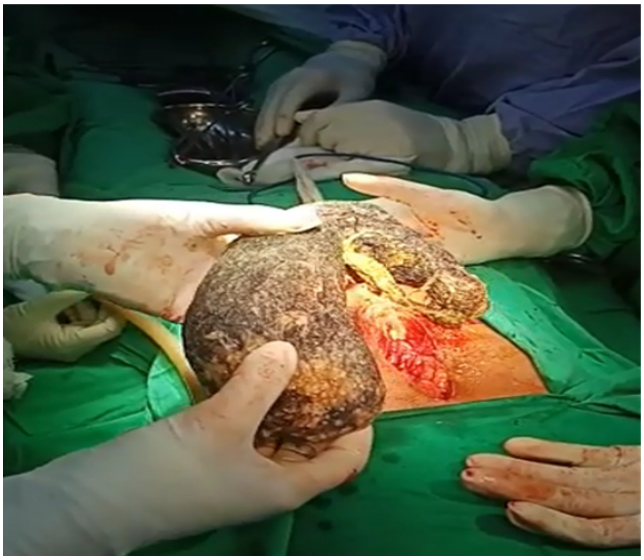

Fig I: A large trichobezoar removed at gastrotomy.

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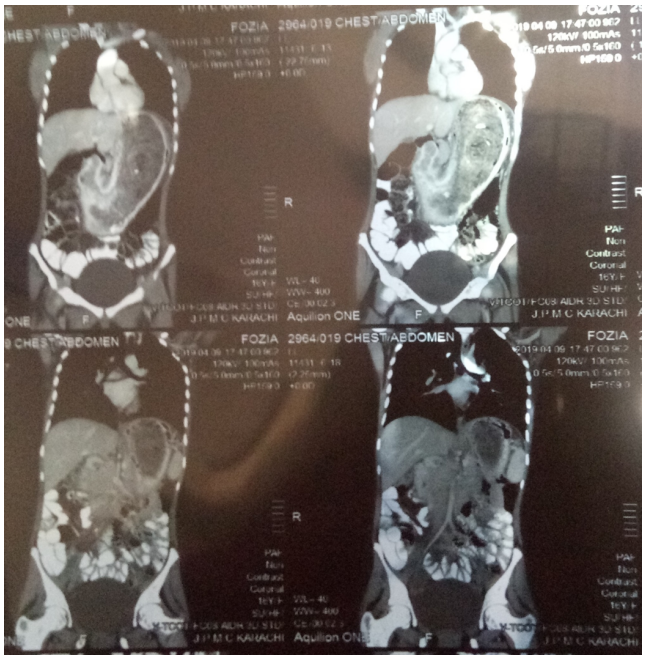

Fig I: CT scan showing large bezoar in stomach with extension into duodenum.

DISCUSSION:

Bezoars are concretions of foreign material in the gastrointestinal tract, mainly the stomach. Different types of bezoars are described in humans and according to the composition are named as phytobezoar (containing vegetable fibres), lactobezoar (milk products), pharmacobezoar (medications) and trichobezoar (hairs).[1] Although the stomach is the most common location, bezoars have also been found in the duodenum, jejunum, ileum, colon, appendix and Meckel's diverticulum. In our patient it was present in stomach and partly extending into duodenum.

The incidence of trichophagia is up to 18% in patients with trichotillomania. One-third of the patients with trichophagia develop trichobezoars. In this case too, the patient did not show any psychiatric history. Human hair can not be digested because of enzyme-resistant properties, and slippery surface. It can stuck in the GI system which results in the formation of a hair ball along with food and mucus.[2] Few cases showed extension of the hair ball from the stomach into the distal part. This condition is named Rapunzel syndrome.[8] Our patient had open surgery for removal of trichobezoar and postoperative recovery remained uneventful. Our patient had psychiatric consult and was found normal. Advise was given as to changing her habits.

CONCLUSION:

Presence of hard mass in epigastrium in a patient with history of trichophagia should be considered as trichobezoar. CT scan provide further details and endoscopy confirm the diagnosis. Psychiatric evaluation is important in such cases.

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