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A Case Report of Double Trichobezoar Causing Gastric and Jejunal Obstruction in an Adult Female

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Abstract: ***A trichobezoar is a rarely encountered finding causing intestinal obstruction. Young age female with h/o psychiatric illness-trichotillomania and trichophagia-are involved here commonly. Here we present such rare case of double trichobezoar causing gastric and jejunal obstruction in a 26 years old female with no known h/o psychiatric illness. The clinical and radiographic features with its postoperative findings are mentioned in literature.***

Keywords: Trichobezoar, double trichobezoar, small bowel obstruction, trichophagia

1. Introduction

Bezoars are defined as intraluminal solid foreign body which is resistant to digestion. There are mainly four types; named after the composing material. Trichobezoars-made from ingested hair; Phytobezoars -made of vegetables and fibres; Lactobezoars-resulted from precipitated milk or curd-commonly seen in infants and Pharmacobezoars-made of medicative drugs-most common type; generally caused by antacids, cholestyramine.

Trichobezoar occur most commonly in young age females with h/o psychiatric illness; such as trichotillomania-habit of pulling out hair and trichophagia-eating of pulled out hair. It is usually black regardless of hair colour due to contact with acid. Hair are usually of patients but it can be from animal, carpet or toys. It can occasionally present as bowel obstruction but most commonly there are nonspecific clinical symptoms like vague abdominal pain, early satiety, anorexia, nausea, vomiting, abdominal distention, foul smelling odour, halitosis. There may be no clinical symptoms in early stages. It can rarely become large enough to cause obstruction of gastric outlet-most common site for bezoar is stomach; or small bowel. There are different pathologies causing small bowel obstruction that includes postoperative changes-adhesions, hernia, volvulus, tumour, intussusceptions etc. Symptoms include abdominal pain, abdominal distention, nausea, vomiting, unable to pass flatus or stool, fever. Bezoars are rare cause of intestinal obstruction. They can cause ulcerative lesions, bleeding and rarely, obstruction. Here, we report one case of an adult married female with double trichobezoars, presenting as small bowel obstruction, treated with surgical laparotomy.

2. Case Report

A 26 years old female patient presented to new civilhospital Surat, emergency department with three days history of abdominal pain, palpable lump in epigastrium and umbilical region, decreased appetite, vomiting.

Patient had no past history of any surgical intervention. However, no history of any psychiatric illness was found in patient or any family member; but patient was showing abnormal non-specific behaviour.

On physical examination, abdomen was tense and movable abdominal lump was palpable in the epigastrium and umbilical region. No signs of apparent hair loss were noted. Intestinal obstruction was suspected and to find out the cause, further investigations were advised.

Blood investigations indicated anaemia with Hb level of 9.8 mg/dl, Haematocrit 33.5%, total protein 3.8 gm/dl, albumin 2.5 gm/dl, creatinine 1.01 mg/dl, natrium 136 mEq/L. Elevated WBC count of 11590/ul and a neutrophil ratio of 80% were noted.

Plain Xray abdomen standing revealed few air fluid levels; chest X-ray was normal.

Abdominal ultrasound demonstrated over distended stomach and duodenum filled with fluid and organic matter; approx.8.5 cm sized hyperechoic curvilinear strip with extensive post-acoustic shadow noted in stomach and another similar lesion measuring 6 cm noted in small bowel loops in RIF; Fluid and faecal loaded small bowel loops noted with avg. diameter measuring 3 to 3.2 cm with evidence of sluggish peristalsis and to & fro movement of its content-S/o small bowel obstruction.

On Contrast CT abdomen, approx.11.5x6.4x9.5 (ML x AP x SI) sized ovoid intraluminal large well defined non enhancing mixed density lesion, with hyper to hypodense areas, seen in the stomach causing its distension. Another similar (4.3 x 3.3 x 4.5) (AP x ML x SI) sized lesion noted in distal jejunal loop in right paraumbilical region. Multiple mottled air densities and lamellated density seen within the lumen. Findings s/o Trichobezoars

Consequential to the above-mentioned lesion there is upstream dilatation of proximal bowel loops with max diameter upto 4.5 cm. No contrast passage distal to it seen. Rest of distal bowel loops appear collapsed.

Minimal ascites seen.

Overall possibility was given was Acute small bowel obstruction due to trichobezoars.

The mass was large enough to cause jejunal obstruction therefore exploratory laparotomy was performed under general anaesthesia; Gastrostomy and enterostomy were

done and two trichobezoars were extracted; one from stomach and one from jejunum. Incisions were sutured.

Patient was discharged 11 days after surgery in a good clinical condition and was referred for psychiatric evaluation. Our patient visited follow up OPD after 6 months and was in a good clinical condition.

3. Discussion

Trichobezoars are uncommon cause of small bowel obstruction and presenting with non-specific symptoms like nausea, vomiting, abdominal pain and distension. It can be suspected in patients with psychiatric diseases but difficult in normal healthy person. In this patient, the surgeon found two trichobezoars in different location in patient small bowel. The first one was in stomach while the second one was in jejunum causing its obstruction. Blood investigations were non-specific and were of no help in the diagnosis.

Trichobezoars can be diagnosed by abdominal radiography which can show multiple air fluid levels associated with mechanical obstruction.

Some say that bezoar create hyperechoic with post acoustic shadow but its use in diagnosis is controversial because it is operator and patient

CT with contrast enhancement, recognizes bezoars and is gold standard in diagnosis of small bowel obstruction and bezoars. It helps in choosing of appropriate mode of treatment. Treatment may be medical or surgical.

Here trichobezoar was causing small bowel obstruction, that's why medial exploratory laparotomy was done which allowed to determine the real cause of SBO.

Treatment of bezoars can be conservative-specially in phytobezoars. Mechanical disintegration can be done by using mechanical lithotripsy, a dormie basket or an electrosurgical knife. Chemical disintegration is other option. Other surgical treatment depends on site, size, consistency of the bezoar. Small bezoar can be removed endoscopically. But larger bezoars causing obstruction or bleeding, surgery is necessary-laparoscopy or laparotomy.

4. Conclusion

In cases of Small Bowel obstruction, bezoars must be taken into consideration if there is any significant history even though they are rare. Their presentation is non-specific. In this case report, bezoars were not suspected as patient didn't give any history of trichotillomania or trichophagia. But choice of treatment would be surgery only as patient was having small bowel obstruction. Surgery may not always be the best treatment plan so accurate diagnosis is needed to decide correct course of management.

5. Case Images

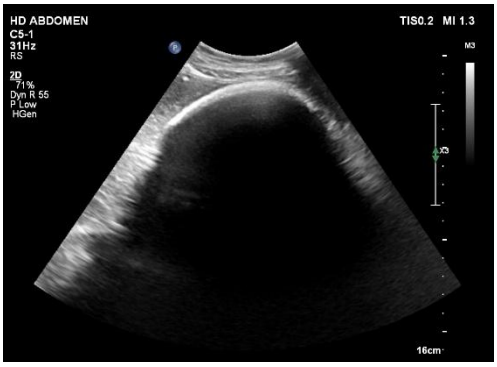

Figure 1: USG Image showing hyperechoic curvilinear strip with extensive post-acoustic shadow

Figure 2 (a): Plain CT Axial section showing large ovoid mixed density lesion in stomach

Figure 2 (b): Plain CT Axial section showing similar lesion in distal jejunum

Figure 3 (a): Venous phase Axial section showing non enhancing gastric trichobezoar

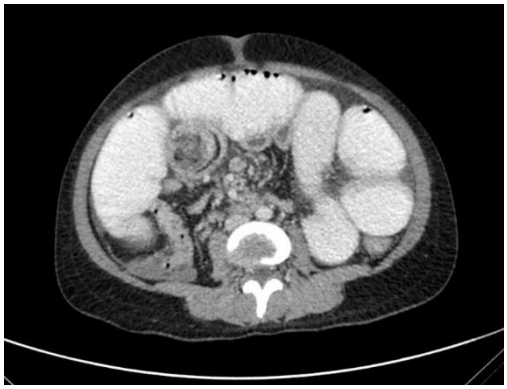

Figure 3 (b): Venous phase Axial section showing non enhancing jejunal trichobezoar

Figure 4: Venous phase Coronal section

Figure 5: Venous phase coronal section showing trichobezoar causing small bowel obstruction

Figure 6 (a): Surgical Specimen of Gastric Trichobezoar

Figure 6 (b): Surgical Specimen of Jejunal Trichobezoar

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