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General Surgery

A CASE OF LARGE GASTRIC TRICHOBEZOAR: CASE REPORT AND REVIEW OF LITERATURE

Dr. Surya Prakash	Associate Professor and Head, Department of Surgery, M.L.B. Medical College, Jhansi
Dr. Adeel Ahmad*	Junior Resident, Department of Surgery, M.L.B. Medical College, Jhansi *Corresponding Author
Dr. Rakesh Faujdar	Senior Resident, Department of Surgery, M.L.B. Medical College, Jhansi
Dr. Shiv Anpkip	Junior Resident, Department of Surgery, M.L.B. Medical College, Jhansi

ABSTRACT Trichobezoars are concretions of swallowed hair retained within the digestive tract, most commonly the stomach. They predominate in young females during childhood and adolescence and are usually associated with psychiatric illness. They usually develop insidiously and hence at presentation are large in size. In this report we present a case of 21 years old young female with a large trichobezoar of size 20x9x8cm that had been surgically removed.

KEYWORDS : Bezoar; Trichobezoar; Rapunzel syndrome.

INTRODUCTION

Utilization of industrial waste products in Trichobezoars are concretions of swallowed hair retained within the digestive tract. Psychiatric illness and mental retardation are commonly associated with trichobezoars. The consumed hair is retained between the gastric folds and resists peristaltic movement due to its slippery surface. The hair is then denatured by gastric acid, becomes black due to oxidation and compacted with food to form an enmeshed mass . The insidious development of trichobezoar accounts for the delayed presentation and large size at the time of diagnosis. Some types of bezoars, including small trichobezoars, can be removed endoscopically. Larger trichobezoars are typically resistant to endoscopic fragmentation due to the dense hair mass and require surgical removal. Here we present case of a young patient with large trichobezoar that had to be surgically removed.

CASE STUDY

21 years old female come to surgery OPD in 13/11/2019 with complain of fullness in upper abdomen and pain in upper abdomen for past 2 month and with decrease appetite for past 2 month.

On further questioning- her mother told that she is having a habit in breaking her hair but both of them devoid of trichobezoars.

Her bladder and bowel habit are normal and she complain of vomiting soon after taking food especially solid food.

She reported significant weight loss of 10 kg since past 6 month.

On general examination patient is lean and thin with no alopecia and on abdominal examination- a large painless firm epigastrium mass was palpable which is mobile and no pulsatile with mild tenderness over lump.

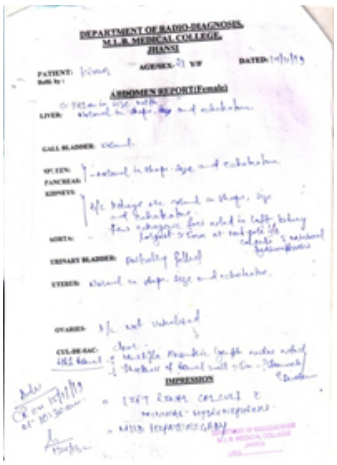
Blood test was within normal limit and her ultrasound shows multiple mesenteric lymph nodes with increase thickness of bowel and CECT abdomen was shows distended stomach with a large size 193x89x85mm lesion and duodenum bulb from all the wall s/o bezoars with mildly prominent IHBR and CBD.

The patient went for laparotomy and gastrotomy in which a 5cm longitudinal incision given along greater curvature and and a bunch of hair of 3kg weight was removed having size 20x9x8cm after that stomach was sutured by continuous seromascular locking suturing technique.

Two Ryles tubes were placed Ist in stomach which is used to remove gastric content and 2nd ryles tube placed in duodenum 3rd part which was later used as feeding tube.

Two intra peritoneal drain place in Morrison and pelvic region.
In postoperative period-

- Morison drain and Ist gastric ryles tube were removed on 4th postoperative day and semi solid fluid started via feeding ryles tube which was placed in IIIrd part of duodenum.
- On 8th postoperative day gastric contain comes in pelvic drain that was suspicious of anastomotic leak for which we managed the patient conservatively via regular ryles tube (gastric) suctioning/fluid and electrolyte balanced/sepsis control with continue ryles tube feeding (duodenal).
- On 20th postoperative day pelvic drain and both ryles tube were removed and oral liquids sips allowed.
- Patient was discharge with no clinical complain.
- Patient was in follow up having no further complain.

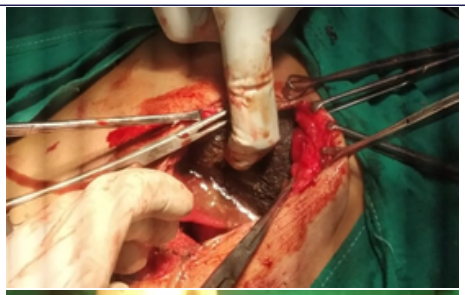

DEPARTMENT OF RADIO-DIAGNOSIS
M.L.B. MEDICAL COLLEGE,
JHANSI

ABDOMEN REPORT(Female)

IMPRESSION


Vardhman Diagnostics

IMPRESSION:
DILATED STOMACH WITH LARGE BEZOAR INSIDE.
MILDLY PROMINENT IHBR AND CBD.....NO OBVIOUS CAUSE FOUND.



DISCUSSION

A bezoar is an indigestible mass of foreign material found within the digestive tract, most commonly in the stomach. Bezoars are named based on their components [5]. Phytobezoars ? the most common type of bezoar ? are comprised of vegetable matter high in cellulose, hemicelluloses and other proteins. Trichobezoars (hair), pharmacobezoars (medications) and lactobezoars (milk products) are more uncommon types of bezoars. The first trichobezoar was described by Baudamant. Rapunzel syndrome, first described by Vaughn et al., is used to describe a trichobezoar which extends into the small intestine due to its long tail.

Trichobezoars predominate in young female during childhood and adolescence and are strongly associated with psychiatric illnesses, in particular trichotillomania and trichophagia. Consumed hair remains in the digestive tract as its slippery surface allows it to escape peristaltic movement. Gastrointestinal mucous makes the trichobezoar shiny while hair turns black as it is oxidised and denatured. As hair consumption continues, peristalsis enmeshes the hair with food with the foreign body gradually taking the shape of the lumen. By occupying space within gastric lumen, food consumption is restricted and patients often experience weight loss. Trichobezoars may also case halitosis as they become colonised with bacteria.

Abdominal imaging is useful for determining if multiple bezoars are present. Computed tomography is often the imaging modality of choice and typically shows a well-defined heterogeneous mass interspersed with air within the lumen, with bowel distension if there is an element of obstruction. There are few cases in the literature describing the MRI findings of trichobezoars .

Treatment of bezoars differs depending on their composition. Chemical dissolution works well for phytobezoars and is first line treatment; however it is not useful in managing trichobezoars. For phytobezoars resistant to chemical dissolution and trichobezoars, endoscopic fragmentation using a variety of instruments or lithotripsy can be used. For bezoars that are resistant to endoscopic management or for patients that present with complications, surgical removal is indicated. Laparotomy and gastrotomy has produced the best results; however less invasive laparoscopic techniques have also been published.

Our patient underwent laparotomy and gastrotomy to remove the trichobezoar due to its size. She was followed up in the clinic four weeks post-operatively and was recovering very well.

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