

A YOUNG FEMALE WITH TRICHOBEZOAR: A CASE REPORT

Rajesh Poudel,¹ Anwiti Parajuli,² Humnath Bhattarai,² Ravi Bashyal,² Shushil Dhakal²

ABSTRACT

Trichobezoars are rare mass of hair usually located in the stomach, but may extend into the small intestine and sometimes up to large bowel. It is usually associated with a history of psychiatric disorders such as trichophagia and trichotillomania. We present a case of trichobezoar in a 14-year-old female with decreasing density of hair, abdominal pain, vomiting and history of trichophagia. The diagnosis was confirmed by CT scan. The patient was managed by exploratory laparotomy with gastrotomy.

KEYWORDS

Gastrotomy, Trichobezoar; Trichophagia, Trichotillomania

1. Department of Surgery, Universal College of Medical Sciences, Bhairahawa, Nepal.
2. MBBS Intern, Universal College of Medical Sciences, Bhairahawa, Nepal

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For Correspondence

Dr. Rajesh Poudel
Department of General Surgery
Universal College of Medical Sciences,
Bhairahawa, Nepal.
Email: rajeshpoudel@yahoo.com

INTRODUCTION

A bezoar is an aggregation of ingested material that is insoluble or indigestible in the gastrointestinal tract.¹ Trichobezoars (bezoars composed of hair) are rare but most commonly found in young women with a history of psychiatric disorders such as trichophagia and trichotillomania.^{2,3} Trichobezoar can extend from the stomach to small intestine and large bowel and increase in size and weight if the ingestion of hair is continued thus increasing the risk of complications.

We report a rare case of trichobezoar in a 14-year-old female with the history of abdominal complaints managed by laparotomy with gastrotomy with uneventful recovery.

CASE REPORT

A 14-year-old female patient presented with chief complaints of decreasing density of hair for 5 months, on and off abdominal pain for 5 months and vomiting for 15 days. She also complained of decreased appetite for 5 months with the history of loss of weight. She also complained of incomplete evacuation of stool. Her history also revealed significant trichophagia for a year. On general physical examination, she appeared conscious, cooperative, well looking with no signs of lymphadenopathy or dehydration and vitals within normal range. On abdominal examination, there was mild tenderness at left hypochondrium, epigastrium and right hypochondrium with mobile, palpable mass measuring about 15 X 10 cm having smooth surface. Its upper border could not be elicited.

Abdominal ultrasonography was performed followed by Non-contrast Computed Tomography (NCCT) and Contrast Enhanced Computed Tomography (CECT) whole abdomen with intravenous contrast. Well circumscribed intragastric, inhomogeneous mass containing compressed concentric ring pattern due to the presence of entrapped air and food debris completely separable from gastric wall extending from fundus of the stomach till the second part of duodenum was seen (Fig 1). Diagnosis of trichobezoar was made.

The patient was planned for surgery. Other preoperative investigations were within normal ranges except haemoglobin level which was significantly low for which preoperative blood transfusion was done. Then exploratory laparotomy with gastrotomy was performed to remove the hair mass (Fig 2). The postoperative phase was uneventful and the patient was discharged after 15 days. She was recovering well and had no fresh complaints on follow-up visit.



Figure 1. CT abdomen showing hair mass in stomach and duodenum



Figure 2. Extracted hair mass

DISCUSSION

Bezoars are collections of non-digestible matter that usually accumulates in stomach and can extend to small bowel. Different types of bezoars are phytobezoar, trichobezoar, lactobezoar, pharmacobezoar and food bolus bezoars.³

Trichobezoars are concretions of hair in the stomach. This condition is usually found in young psychiatric females in association with trichophagia.³ Trichophagia can be seen in various diseased conditions such as pica, obsessive compulsive disorder (OCD), depression, anorexia, schizophrenia, mental retardation, child abuse, cocaine abuse but it is most commonly associated with trichotillomania which is an anxiety disorder characterized by compulsive pulling of hair.⁴

In some condition trichobezoar extends from the stomach into duodenum, jejunum or even into the colon termed as "Rapunzel syndrome".¹ The hair mass that is recovered is always black irrespective of the hair color of the patient due to the denaturation of the hair protein in stomach acid.⁵ The clinical manifestations of trichobezoar are anorexia, abdominal pain, nausea, vomiting, constipation, patchy loss of hair and loss of weight. Other psychiatric disorders, however, such as mental disorders, abuse, pica, obsessive compulsive disorder, depression and anorexia nervosa may also be associated with trichobezoar.⁶

The diagnosis is based on medical imaging mainly USG, CT scan and upper gastrointestinal endoscopy.³ CT scan has a high accuracy rate in revealing a characteristic bezoar image.^{3,7} Our case was also diagnosed and confirmed by CT abdomen. The definite diagnosis of trichobezoar is established by endoscopy.⁷ Failure to diagnose and manage on time will lead to severe complications like protein losing enteropathy, obstructive jaundice, gastric polyposis, steatorrhea and Gastric Perforation.^{6,8,9}

Endoscopic removal, laparoscopic removal and laparotomy are some of the modalities for the management of trichobezoar.³ Laparotomy followed by gastrotomy was found to be 99% successful and thus favoured as the management of choice.³ Our case was also managed by explorative laparotomy with gastrotomy. Likewise, there are other similar cases reports who had successfully undergone explorative laparotomy with gastrotomy for Trichobezoar.^{1,3,6,10}

Early diagnosis followed by proper management reduces the risk of complication of trichobezoar. If trichobezoar is not diagnosed early, it continues to grow in size and weight due to the continued ingestion of hair leading to the risk of

complications such as gastric mucosal erosion, ulceration, even perforation of the stomach or the small intestine, intussusception, obstructive jaundice, protein-losing enteropathy, pancreatitis and even death in severely complicated cases.⁶

CONCLUSION

Therefore, trichobezoar should be considered in young females presenting with abdominal complaints in association with patchy hair loss. It can be diagnosed by medical imaging and safely managed by laparotomy with gastrotomy. Early diagnosis followed by proper management reduces the risk of complication of trichobezoar.

CONFLICT OF INTEREST

None

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