CASE REPORT

AN INTERESTING CASE OF GASTRIC TRICHOBEZOAR IN A TEENAGE GIRL WITH BEHAVIORAL PROBLEMS

Kerudi Basavraj H¹, Chandankhede Abhijit Ravindra²

HOW TO CITE THIS ARTICLE:

Kerudi Basavraj H, Chandankhede Abhijit Ravindra. "An interesting case of gastric trichobezoar in a teenage girl with behavioral problems". Journal of Evolution of Medical and Dental Sciences 2013; Vol. 2, Issue 42, October 21; Page: 8211-8215.

ABSTRACT: Bezoar is a conglomeration of foreign material in the intestinal tract. Trichobezoar (accumulation of hair in the gastric chamber, secondary to impulsive pulling and intake) and Rapunzel syndrome (accumulation of hair in the small intestine) usually occur in children and adolescents with trichotillomania and trichophagia history. We present the case of a 14-year-old female who arrived for consultation. The patient had a 10-month history of intermittent abdominal pain, gastric fullness, nausea, occasional vomiting and weight loss. In addition, she had a history of trichotillomania, trichophagia. Laboratory tests revealed hypochromic microcytic anemia. Ultrasonographic study demonstrated intense sonic shadowing posterior to the gastric area. After performing gastrotomy, the specimen was extracted and consisted of hair that occupied the entire length of the gastric chamber. Post operative recovery of the patient was uneventful. The patient was referred to psychiatric evaluation post operatively.

INTRODUCTION: An agglomeration of indigestible organic or inorganic foreign material in the gastrointestinal tract, usually accumulated in the stomach, is called bezoar. Types depending on their composition are: phytobezoars (vegetable matter), pharmacobezoars (medication/drugs), trichobezoars (hair or hair-like fibers) and lactobezoars (milk curd). ¹

Trichobezoars are impactions of swallowed hairs in the stomach and occasionally in the intestine. They occur in emotionally disturbed, depressed, or mentally retarded patients who have trichotillomania and trichophagia.

It is almost exclusively seen in girls²

The stomach of normal individuals is able to clear even large foreign bodies in up to 80 to 90% of the cases, which may imply that bezoar formation occurs in the presence of both altered gastric anatomy or physiology and continued ingestion of the offending substance. ^{3,4}

Trichobezoars are usually described in the context of an underlying psychiatric disorder, trichotillomania in particular which is also implicitly taken as cause of it, and usually accompanied by characteristic features such as signs of alopecia. ^{1,5,6}

We report a case of a teenage girl with history of trichotillomania and trichophagia, came to the outpatient with vague complaints of abdominal pain, occasional vomiting and indigestion.

CASE REPORT: A 13 years girl came to our outpatient with vague complaints of bloating and weight loss for two months and recent episodes of epigastric pain, nausea and vomiting of increasing frequency and severity.

She was 85th percentile of weight for her age and 90th percentile for height. On examination she was found to be anaemic, patchy hair loss was present. On per abdomen examination a large epigastric mass of size 15 x 15 cm extending from the epigastric region curvilinearly to the just

CASE REPORT

bellow and right of the umbilicus was found. The mass was tender, indentation was possible on the mass, no visible pulsation or peristalsis was present.

On blood examination she was found to be anemic with haemoglobin of 8.0 gm%, other parameters were found to be within the normal limits.

Ultrasound abdomen revealed a large intragastric mass with coarse echotexture and dense posterior acoustic shadowing. Upper GI endoscopy made the diagnosis of very large gastric trichobezoars without any extension to the duodenum. No associated ulcers or erosions were noted on the upper GI endoscopy.

The patient was admitted and hemoglobin correction was done with 2 units of blood transfusion. The patient was posted for surgery after the correction of the deficit.

A median xipho-umbilical laparotomy was performed. The hair ball filled up the entire length of the stomach and had a conical shape. A 6-cm long longitudinal anterior gastrotomy over the gastric corpus and antrum was performed, and the trichobezoar was removed in toto.

The trichobezoar was dark black in colour, measured 24x10 cm in length and weighed 500 gm. It was foul smelling with impacted food particles and mucus. There was no extension of the trichobezoar in the duodenum or jejunum.

Stomach did not show any signs of erosion and any ulceration. No anatomical deformity was noted in the stomach. The stomach was sutured in two layers. Inspection and palpation of the entire intestinal tract revealed no other bezoars.

Post-operative recovery of the patient was uneventful. IV antibiotics in the form of Inj. Ceftriaxone and antacids were continued for 5 days post operatively. Nasogastric suction was continued for 5 days, after which the patient began to drink and eat. Further psychotherapeutic work-up and treatment were initiated. She left the hospital after 7 days. After the discharge from hospital the follow up was lost as the patient was shifted to some of her relatives and details could not be tracked down.

Her medical history revealed severe psychosocial problems from early childhood on. She was living in a problem family with her alcohol abuser father and other family members. At the age of three, she had been sexually abused by her father and from the age of 6, she had been seriously pestered and isolated at school. She then exhibited symptoms of trichotillomania, which continued for 6 years. The mother was aware of this but did not notice that her daughter also ate her hair. The trichophagia must also have continued for a period of at least 6 years. A psychiatric examination revealed a borderline disorder and clear pathogenesis within the family dynamics.

DISCUSSION: Trichobezoars are impactions of swallowed hairs in the stomach and occasionally in the intestine. They occur in emotionally disturbed, depressed, or mentally retarded patients who have trichotillomania and trichophagia. An underlying functional or mechanical obstruction of the gastrointestinal tract (after gastric surgery, gastric dysmotility, for example) may predispose to bezoar formation in rare instances.^{7,8}

Symptoms of trichobezoars develop gradually and insidiously; they are often intermittent and usually vague and nonspecific in the beginning: anorexia, weight loss, nausea, and abdominal pain or discomfort. As the hair ball gets larger, vomiting, hematemesis, and intolerance of solid foods may complete the clinical picture. In addition to intraluminal obstruction, trichobezoars may produce complications by bleeding, perforation, steatorrhea, and intussusception ^{9, 10, 11}

CASE REPORT

Plain radiograph of the abdomen and barium contrast study may be diagnostic, but endoscopy has been shown to be the technique of choice, because it allows the clinician to distinguish between phytobezoars and trichobezoars.

Different treatment modalities can be applied to treat the trichobezoar ranging from the enzymatic digestion of the hairs, fragmentation of the trichobezoar and endoscopic removal, etc. But the gold standard technique to use for the total removal of the trichobezoar in the laparotomy and surgical removal of the mass. The surgical removal also gives the opportunity to look for complication of the trichobezoar.

The psychiatric evaluation and psychotherapy forms an important part in the treatment of the trichobezoar. Without which the cause of the condition remains untreated and there are chances of recurrence of the trichobezoar.

The early detection of trichophagia and trichobezoar depends on an effective screening for trichotillomania and related behaviors, in order to prevent a possibly life-threatening condition with important medical and surgical morbidity. Such effort must include a better collaboration between medical and surgical specialties, dealing with particular aspects of therapeutic relationship regarding shame and guilt as well as considering that trichophagia may be more often present than the majority of clinicians, psychiatrists in particular, would expect.

REFERENCES:

1. Sehgal VN, Srivastava G. Trichotillomania ± trichobezoar: revisited. *Eur Acad Dermatol Venereol.* 2006; 20:911-5.
2. Andrus CH, Ponsky JL. Bezoars: Classification, pathophysiology, and treatment. *Am J Gastroenterol* 1988; 83:476-8.
3. Coulter R, Antony MT, Bhuta P, Memon MA. Large gastric trichobezoar in a normal healthy woman: Case report and review of pertinent literature. *Southern Med J.* 2005; 98:10.
4. Lee J. Bezoars and foreign bodies of the stomach. *Gastrointest Endosc Clin N Am.* 1996; 6:605-19.
5. Frey AS, McKee M, King RA, Martin A. Hair apparent: Rapunzel syndrome. *Am J Psychiatry.* 2005; 162:2.
6. Salaam K, Carr J, Grewal H, Sholevar E, Baron D. Untreated trichotillomania and trichophagia: Surgical emergency in a teenage girl. *Psychosomatics.* 2005; 46:4.
7. Choi SO, Park WH. Gastric phytobezoar presenting as gastric outlet obstruction in a child after Sugiura operation for bleeding esophageal varices. *Pediatr Surg Int* 1991; 6:359-61.
8. Doski JJ, Priebe CJ, Smith T, Chumas JC. Duodenal trichobezoar caused by compression of the superior mesenteric artery. *J Pediatr Surg* 1995; 30:1598-9.
9. Avissar E, Goldberg M, Lernau O. Bezoar-induced ulceration and perforation of the upper gastrointestinal tract in mentally retarded patients. *Pediatr Surg Int* 1994; 9:279-80.
10. Sharma V, Sharma ID. Intestinal trichobezoar with perforation in a child. *J Pediatr Surg* 1992; 27:518-9.

CASE REPORT

1.clinically palpable abdominal mass

2.Endoscopic view of Trichobezoar

3.surgical removal of trichobezoar

4.trichobezoar

CASE REPORT

AUTHORS:

1. Kerudi Basavraj H.
2. Chandankhede Abhijit Ravindra

PARTICULARS OF CONTRIBUTORS:

1. Professor & HOD, Department of General Surgery, Kerudi Hospital and Research Centre, Bagalkot, Karnataka.
2. PG Resident, Department of General Surgery, Kerudi Hospital and Research Centre, Bagalkot, Karnataka.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Chandankhede Abhijit Ravindra,
Kerudi Hospital and Research Centre,
Extension Area, Bagalkot, Karnataka.
Email – abhicrr@gmail.com

Date of Submission: 03/10/2013.

Date of Peer Review: 04/10/2013.

Date of Acceptance: 17/10/2013.

Date of Publishing: 21/10/2013