Journal Homepage: -www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/19112
DOI URL: http://dx.doi.org/10.21474/IJAR01/19112

RESEARCH ARTICLE

TRICHOBEZOAR-A RARE CAUSE OF ABDOMINAL MASS AND GASTRIC OUTLET OBSTRUCTION

Dr. Anand Gupta, Dr. Akhilesh Patel, Dr. Dheerendra Mishra and Dr. Zubdatul Hasan
Department of General Surgery -National Hospital Rewa, M.P India 1.

Manuscript Info

Manuscript History
Received: 25 May 2024
Final Accepted: 28 June 2024
Published: July 2024

Abstract

The authors present the clinical case of a 18 -year old girl with weight loss,anorexia,epigastric abdominal pain and post prandial vomiting with 4 months duration.There was a background of trichophagia for 5-6 years without evidence of alopecia and psychiatric history.The physical examination revealed an epigastric mass motionless,stony,with poorly defined limits, painful on palpation and about 35cm in diameter.Abdominal ultrasonography showed thickening of gastric wall and antrum with distension.The abdominal endoscopic examination revealed the presence of bulky trichobezoar occupying almost the entire gastric lumen.It was decided to undergo gastrotomy and extraction of the trichobezoar.In postoperative period cardiac support was given and patient passed motion after 3 days and discharged after 10 days. 1.

Copy Right, IJAR, 2024,. All rights reserved.

Introduction:-

Trichobezoar is a medical condition where hair accumulate in the stomach forming a mass that can cause gastrointestinal issues like nausea ,vomiting ,and abdominal pain.Its often associated with psychiatric illness,suicidal tendencies and mental retardation.They begin as retained hairs between gastric folds ;the hair is then denatured by gastric acid ,becomes black due to oxidation and combines with food to form an enimeshedmass.Trichobezoars subsequently become colonized by bacteria resulting hialotosis. They are rare with an estimated incidence of 0.3 percent on upper endoscopy .Trichobezoars are typically seen in women in their 20s. They cause non -specific symptoms and are usually found incidentally in patients undergoing upper gastrointestinal endoscopy or imagining.They represent an uncommon cause of abdominal mass. The bezoars although rare,when undiagnosed can lead to complications such as ulcers,bleeding perforation and obstruction. Many bezoars become quite large,gastric outlet obstruction is an uncommon presentation. 2.

Clinical case A 18-year old girl was admitted to the Department of General Surgery with weight loss (5 kg), anorexia, epigastric abdominal pain and postprandial vomiting with 4 months duration. She denied the presence of fever, altered bowel habits or visible blood loss. She had no distortion of body image or eating pattern changes. Her history revealed significant trichophagia for 4-5 years without evidence of alopecia or psychiatric illness On clinical examination she was skinny and edematous .Her vital signs were within normal limits and the higher intellectual functions were normal. There was no dehydration, halitosis or lymphadenopathy. There was an epigastric mass of stony consistency, bulky, with poorly defined limits, painful on palpation and about 35cm in diameter. Laboratory investigation revealed normal levels of haemoglobin (11.3gm/dl),with hypoproteinemia. Abdomen radiograph showed marked gastric distension with gastric camera barely visible . On the abdominal ultrasonography there was thickening of the gastric wall and antrum with gastric distension.Echogenic content with post acoustic shadowing seen in stomach.Furthermore a 2D Echo showed MVP with severe Mitral Regurgitation and gross B/L Pleural

Corresponding Author:- Dr. Akhilesh Patel
Address:- Department of General Surgery-National Hospital Rewa,M.P India 1.

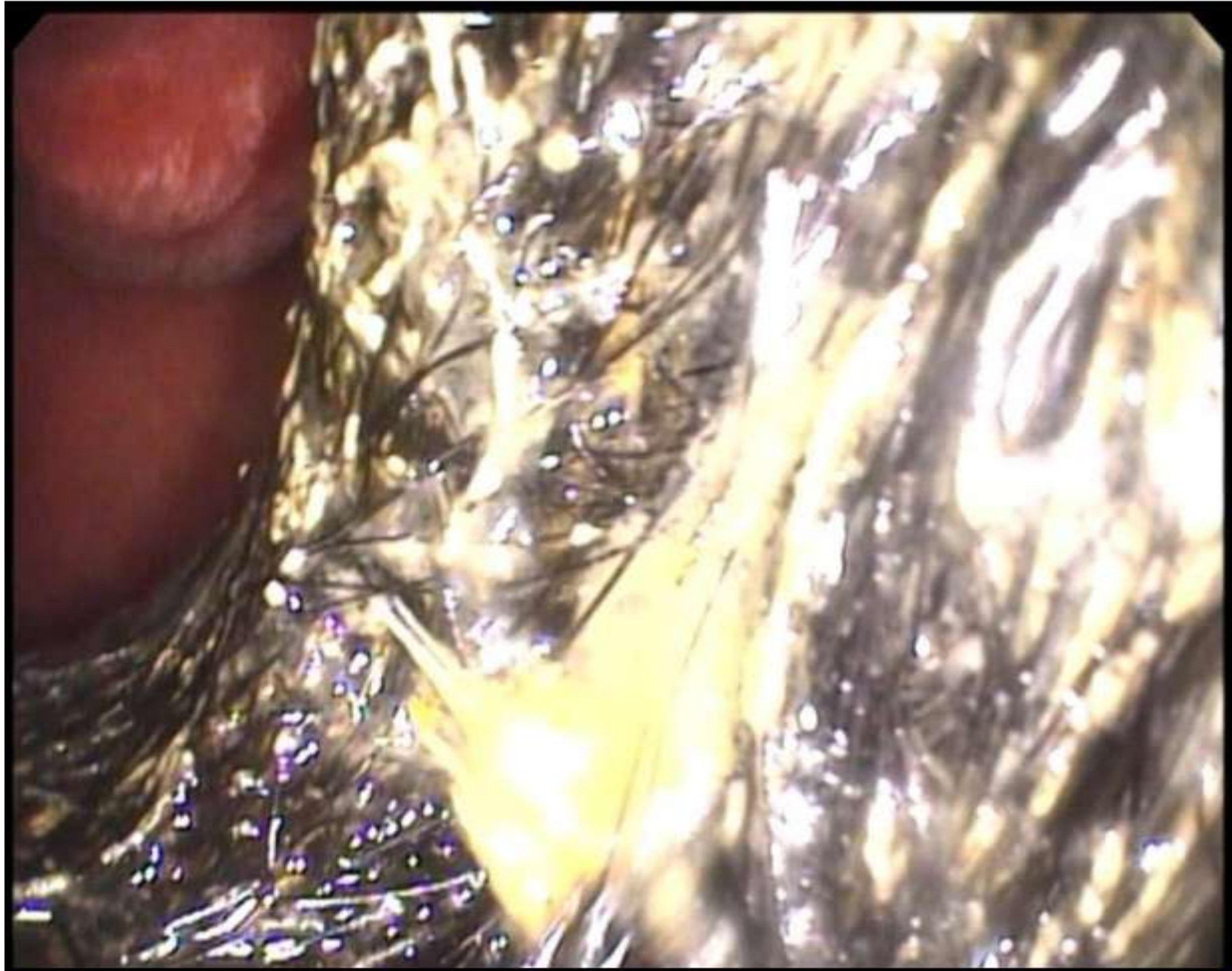
Effusion. It was then performed an abdominal endoscopy scan to exclude other bezoars in the small intestine that revealed the presence of a bulky bezoar difficult to characterize, occupying almost the entire gastric lumen and causing compression of neighboring structures (Fig- 1) The endoscopy confirmed the diagnosis large trichobezoar seen in entire stomach extending beyond pylorus of 35 cm not amenable for chemical dissolution or endoscopic fragmentation. Given the large mass causing gastric outlet obstruction and compression of neighboring structures along with the restrictions of feeds it was decided to undergo laparotomy.Perioperatively pleural tap was done .And through the gastrotomy, a gastric trichobezoar 35cm long was removed(Fig -2) .The post operative course was characterised by resolution of gastrointestinal symptoms,and replacement for prolapsed valve was planned in future.She was started on an iron therapy along with protein supplements and encouraged to seek psychiatric evaluation if needed .

Discussion:-

Trichobezoars are usually discovered as an incidental finding on imaging performed for evaluation of non specific symptoms .Abdominal radiograph with or without barium,abdominal ultrasound ,or computed tomography scan may show the trichobezoar as a mass or a filling defect.Upper gastrointestinal endoscopy is required to estabilish the diagnosis and to obtain samples to determine the composition of bezoars therapy for bezoars should be tailored to the composition of the concretions and to the underlying pathophysiologic process.The optimal strategy is controversial in the absence of studies comparing different modalities.For patients with bezoars that fail to dissolve after two attempts at chemical dissolution or are resistant to chemical dissolution (trichobezoars)or moderate to severe symptoms due to large bezoars,it is suggested endoscopic therapy.Surgery should be reserved for selected patients with gastric bezoars if chemical dissolution and endoscopic fragmentation cannot be performed or fail and for patients with complications such as significant bleeding or obstruction as was the case in our patient.The standard surgery is a laparotomy with gastrotomy .If this is performed to remove bezoars the remainder of the stomach and small intestine should be examined to exclude other retained bezoars.Other therapies include ESWL,NDYaG lasers amdLaproscopicremoval.After trichobezoar removal prognosis is good if there is prevention of recurrence.Up to 20% of patient have recurrent bezoars .In order to prevent recurrence of bezoars patient should be encouraged to increase water intake ,modify their diet ,chew their food carefully and seek psychiatric evaluation if needed.Patient should also be evaluated for an underlying motility disorder. 52 Figures 2 After extraction of 35cm trichobezoar mass. Fig.3Extracted Specimen of Trichobezoar. Conflicts of interest The authors have no conflicts of interest to declare.

References:-

1. Singh SK, Marupaka SK. Duodenal date seed bezoar: a very unusual cause of partial gastric outlet obstruction. AustralasRadiol. 2007;51:B126---9.
2. Kaneko H, Tomomasa T, Kubota Y, Todokoro M, Kato M, Miyazawa R, et al. Pharmacobezoar complicating treatment with sodium alginate. J Gastroenterol. 2004;39:69.
3. Coulter R, Antony MT, Bhuta P, Memon MA. Large gastric trichobezoar in a normal healthy woman: case report and review of pertinent literature, 98. Southern Medical Association; 2005. p. 1042---4.
4. Kadian RS, Rose JF, Mann NS. Gastric bezoars --- spontaneous resolution. Am J Gastroenterol. 1978;70:79.
5. DeBakey M, Oshner A. Bezoars and concretions. Surgery. 1938;4:934.
6. Newman B, Girdany BR. Gastric trichobezoars --- sonographic and computed tomographic appearance. PediatrRadiol. 1990;20:526.
7. Silva FG, Gon¸calves C, Vasconcelos H, Cotrim I. Endoscopic and enzymatic treatment of gastric bezoar with acetylcysteine. Endoscopy. 2002;34:845.
8. Schlang HA. Acetylcysteine in removal of bezoar. JAMA. 1970;214:1329.
9. Sechopoulos P, Robotis JF, Rokkas T. Gastric bezoar treated endoscopically with a carbonated beverage: case report. GastrointestEndosc. 2004;60:662.
10. Robles R, Parrilla P, Escamilla C, Lujan JA, Torralba JA, Liron R, et al. Gastrointestinal bezoars. Br J Surg. 1994;81:1000.



ENDOSCOPIC VIEW - TRICHOBEZOAR

POST OPERATIVE SPECIMEN