SAS Journal of Surgery ISSN 2454-5104
SAS J. Surg., Volume-3; Issue-8 (Aug, 2017); p-218-220
Available online at http://sassociety.com/sasjs/

Case Report

Giant Gastric Trichobezoar- A Rare Case Report and Review of Literature

Vikram Singh Sodha[1], Bhanu Kaushik[2], Suresh Kumar[3], Dinesh Kumar Bharti[4], Shalu Gupta[5]
[1,2,3]Resident, Dept of General Surgery, Sawai Man Singh Medical College Jaipur, Rajasthan, India
[4]Assistant Professor, Dept of General Surgery, Sawai Man Singh Medical College Jaipur, Rajasthan, India
[5]Professor and Unit Head, Dept of General Surgery, Sawai Man Singh Medical College Jaipur, Rajasthan, India

***Corresponding author**
Dr Vikram Singh Sodha
Email: Vikramsinghsodha2014@gmail.com

Abstract: Trichobezoars (hair ball) most commonly located in stomach may extend through the pylorus into duodenum and small intestine. Trichobezoars always almost associated with trichotillomania and trichophagia and other psychiatric disorder. We describe the case of 18 years old female with trichophagia who present to our OPD with chief complaints of abdominal pain and lump abdomen since 10 days associated with occasional episodes of vomiting. Patient had history of trichophagia. On palpation of her abdomen revealed approx. 10x7.5 cm firm, non-tender, mobile mass present in epigastric and umbilical region. Pallor and patchy alopecia present on general physical examination. Definative diagnosis established by upper GI Endoscopy. Conventional laparotomy is still treatment of choice with psychiatric consultation to prevent relapse.
Keywords: Trichobezoars, Trichotillomania ,Rapunzel syndrome.

INTRODUCTION

Bezoar means accumulation of undigestible foreign substances along digestive tract. Bezoar derived from arabic word "BadZehr" which means antidote. Baudomant first described trichobezoars in 1779 [1]. Most commonly found in stomach and proximal part of small intestine [2]. Prevalence rate varies from 0.06% to4%. Clinical presentation of bezoars varies from non specific symptoms like abdominal pain, nausea and vomiting, anorexia, weight loss, early satiety, abdominal mass etc to death leading complication like obstruction and rarely gastric perforation.

Rapunzel syndrome described as large trichobezoar extending from stomach to various length of intestine [3]. Various diagnostic modalities are available like abdominal USG, CECT whole abdomen, upper GI Endoscopy. USG used as initial investigation and CECT whole abdomen is more accurate then USG. Definitive diagnosis established by upper GI Endoscopy. Treatment for trichobezoar is conventional laparotomy and other modalities are endoscopic removal, laparoscopic removal.

CASE REPORT

A 16 years old female was referred to surgery OPD with chief complaint of upper abdominal pain and abdominal lump since 10 days associated with occasional episodes of vomiting. Patient was apparently asymptomatic 10 days back then she develops non specific pain not associated with dyspeptic symptoms, early satiety, and weight loss. Pt had history of trichophagia. On palpation of her abdomen revealed approx. 10x7.5 cm firm, non-tender, and mobile mass present in epigastric region also involving umbilical region.

Pallor and patchy alopecia present on general physical examination. USG and CECT whole abdomen finding confirm the presence of large gastric mass with interspersed air locculi involving whole stomach. Upper GI Endoscopy established definitive diagnosis and reveals bunch of hairs. Exploratory laparotomy with anterior gastrotomy and removal of trichobezoar was done. Per operative findings were approx 10x8 cm sized tuft of hairs present reaching upto pylorus.Patient was satisfactorily discharged on post operative day 7.

DISCUSSION

Bezoars are undigested clumps of matter that accumulate inside digestive system. In trichobezoar most commonly affected patients are adolescent females associated with psychiatric disorder. Swain in 1854, described trichobezoar in human during postmortem [5]. Most common type of bezoar is phytobezoar. Bezoars are classified into following phytobezoars (accumulation of vegetable fibers), trichobezoars (accumulation of hairs), lactobezoars (undigested milk/curd), miscellaneous (fungus /sand /paper).

Predisposing factors for bezoar formation are altered gastric physiology (hypokinetic / hyposecretory gastric condition), altered gastric anatomy (gastric resection), Ingestion of offending agent, Psychiatric disorder (m/c). Trichobezoars are usually associated with psychiatric disorder such as trichotillomania (m/c), trichophagia, depression, OCD, body dysmorphic disorder. Symptoms depend on site and size of bezoar.

Clinical presentation of bezoars varies from non specific symptoms like abdominal pain, nausea and vomiting, anorexia, weight loss, early satiety, anaemia, malnutrition, abdominal mass etc. to death leading complication like obstruction and rarely gastric perforation.

Fig–1: Removed Specimen

Fig–2: Per-op Picture

Pathogenesis of trichobezoar formation includes non digestible substance (hairs) with smooth surface cannot be propelled by peristalsis with persistent ingestion of offending agent (hairs) lead to formation of trichobezoars in between mucosal folds of stomach. Bezoars most commonly found in stomach may extend through pylorus into duodenum and more distally into small intestine (Rapunzel syndrome). Rapunzel syndrome first described by vaughan *et al.* in 1968 [6]. Rapunzel syndrome described as when bezoar extending from stomach into jejunum or further distally. Continued ingestion of offending agent (hairs) increases size of bezoar. It will increases risk of severe complications like gastric mucosal erosion , ulceration, gastric outlet obstruction, gastric perforation, intussuception, obstructive jaundice , protein losing enteropathy, pancreatitis.

Lamerton sign is described as large mobile indentable epigastric mass during per abdominal

examination [7].various diagnostic modalities are available but definative diagnosis established by upper GI Endoscopy. Upper GI Endoscopy reveals tuft of hairs which are black in colour due to denaturation of protein. Upper GI Endoscopy can be differantiate trichobezoar from foreign body. CECT whole abdomen shows well defined heterogenous intraluminal mass with interspersed gas. Management options include Endoscopic removal, laparoscopic removal, laparotomy. Conventional laparotomy is treatment of choice.

CONCLUSION

If a young female with psychiatric disorder and social problem come to us with mobile epigatric mass. We should always keep trichobezoar as differantial diagnosis. Trichobezoar is easily diagnosed by CECT whole abdomen and upper GI Endoscopy. Management part includes conventional laparotomy and psychiatric consultation to prevent relapse.

REFRENCES

1. Malpani A, Ramani SK, Wolverson MK. role of sonography in trichobezoars ,J ultrasound medicine 1988;7;661-3.
2. Correa antanez MI ,serrano calbeA ,piemental leo JJ ,et al bezoar gastrico cir , paediatr.2001;14;82-4.
3. Perez E ,Santana JR, Garcia G ,et al perforation gastria en adulto por trichobezoar (sindrome de rapunzel) cir Esp.2005;78(4);268-70.
4. Sehgal VN, Srivastava G. Fixed drug eruption (FDE): changing scenario of incriminating drugs. International journal of dermatology. 2006 Aug 1;45(8):897-908.
5. Chisholm EM, Leong HT, Chung SC, Li AK. Phytobezoar: an uncommon cause of small bowel obstruction. Annals of the Royal College of Surgeons of England. 1992 Sep;74(5):342.
6. Vaughan Jr ED, Sawyers JL, Scott Jr HW. The Rapunzel syndrome. An unusual complication of intestinal bezoar. Surgery. 1968 Feb;63(2):339-43.
7. Lamerton AJ. Trichobezoar: two case reports--a new physical sign. American Journal of Gastroenterology. 1984 May 1;79(5).