

Case report:

Trichobezoar Presenting as Esophageal and Upper GI Obstruction

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Abstract

Trichobezoar is a rare condition that may pose a diagnostic challenge. Patients with this condition often have an underlying psychiatric illness, and history may not be easily forthcoming. Trichobezoar usually occur in patients with history of trichotillomania, characterized by compulsive behavioral disorder of pulling own hairs, combined with trichophagia that consists of ingesting that hairs. The condition should be entertained especially in young females. Delay in diagnosis may lead to futile complications. We report a classic case of trichobezoar in terms of patient profile, presentation, investigative findings.

Introduction

Gastrointestinal (GI) bezoars are aggregates of inedible or undigested material found in the GI tract. The term bezoar derives from the Arabic word Badzehr, which means antidote [1]. Bezoars were used as antidotes against plague, snake-bite, leprosy, and epilepsy by physicians from 12th to 18th century [2]. Trichobezoar is from the Greek word trich which means hair [3]. A trichobezoar is a mass of undigested hair within the gastrointestinal tract. Trichobezoars are often associated with trichotillomania (hair pulling), and trichophagia (hair swallowing). Trichotillomania may be unconsciously or unintentionally done and is part of the DSM IV psychiatric classification of impulse control disorders [4, 5]. In up to 18% of patients with trichotillomania, trichophagia occurs; one third of patients with trichophagia develop trichobezoars [6]. Trichobezoars most commonly occur in adolescent females [7]. The site of hair pulling is most commonly from the scalp, but can occur from the eyelashes, eyebrows, and pubic area [8].

Case presentation

A 15 years old girl presented to surgery outpatient department with chief complaints of upper abdominal discomfort, dysphagia, lump in epigastrium, vomiting with loss of appetite since 6 months with history of pulling and swallowing hair since childhood. On examination patient was pale with thin built. Patient had I.Q. on lower side. Her abdomen was soft, non-tender with firm non tender around 10 x10 cm size minimally mobile lump in epigastric region.

She was evaluated in another hospital with upper gastrointestinal endoscopy and MRI abdomen which were suggestive of trichobezoar. Patient evaluated on OPD basis. Patient was anemic so advised hematinic and after built up posted for surgery. Preoperative Psychiatry opinion taken to rule out ongoing psychiatric disorder in which patient was diagnosed as trichophagia (psychopathy). Exploratory laparotomy was done through supraumbilical midline incision. Gastrotomy was done and trichobezoar extending above gastroesophageal junction proximally and up to first

part duodenum is retrieved (Figure 1). It was occupying almost all of the stomach with esophageal and duodenal extension.



Figure 1: Retrieval of trichobezoar specimen by gastrotomy.

Gastrotomy closure done and abdomen closure done layer by layer.

Post-operative recovery was uneventful and patient became symptomless. Patient's upper GI obstructive symptoms disappeared. Patient discharged on day 8 and follow up taken on successive opd visits.



Figure 2: post-operative healthy suture line

Discussion

Trichobezoars, undigested accumulations of hair in the gastrointestinal tract, are the most common type of bezoars, commonly seen in patients under 30 years of age [9]. An analysis of the published case reports

revealed that out of 40 cases in which endoscopic removal had been tried, only two (5%) were successful [8]. In one of these, a trichobezoar was successfully removed whole from the distal esophagus [8]. In a series of 15 patients with bezoars, a 15-year-old girl underwent fragmentation of a large trichobezoar by means of a modified needle-knife and monopolar coagulation current. In most case reports, however, fragmentation was considered impossible because of the size, density and hardness of the mass, and endoscopy was not considered a viable therapeutic option [7,14]. Moreover, because the removal of all fragments requires repeated introduction of the endoscope, pressure ulceration, esophagitis and even esophageal perforation may occur and some patients do suffer from esophageal and upper GI obstruction [10]. Also, fragments of a large trichobezoar might migrate through the pylorus after fragmentation or repeated manipulation, causing intestinal obstruction. Careful examination of the intestine for satellites cannot be performed by endoscopy, and the removal of those fragments is impossible. Although not a therapeutic option, endoscopy may prove to be extremely valuable as a diagnostic modality in patients in whom the nature of the gastric mass is unclear. It enables the differentiation between trichobezoars and foreign bodies that can be fragmented and removed using endoscopy.

The recurrence of trichobezoar reported in literature occurred 2 or more years following its removal [11]. In our case recurrence not found till 3 years. The effective treatment of trichobezoar lies not only in its surgical removal but also in the cognitive behavior therapy and pharmacotherapy with serotonin reuptake inhibitors [11]. Management options include endoscopic removal, laparoscopic removal, or via

laparotomy. Gorter et al., in a retrospective review of 108 cases of trichobezoar, evaluated the available management options [12]; it was noted that whereas 5% of attempted endoscopic removals were successful, 75% of attempted laparoscopies were successful. However, laparotomy was 100% successful and thus favoured as their management of choice.

Conclusion

Patient may present with palpable lump, history of trichophasia etc. Rarely along with all these

symptoms may patient present like esophageal and upper GI obstruction.



Figure 3: Gastric cast trichobezoar that was removed via gastrotomy.

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