Trichobezoar: A Rare Case Report in Coimbatore medical college Hospital, Coimbatore

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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. The condition more common in young females. Delay in diagnosis may lead to severe complications. We present a case of 14 years female with complaints of abdominal pain for 1 days with history of early satiety for 1 weeks and nausea and vomiting for 1 weeks.

Key Word: trichobezoar, paediatric psychiatry disorder, epigastric mass, trichotillomania.

I. Introduction

A bezoar is a mass of undigested material within the gastrointestinal tract. The term bezoar derives from the Arabic word Badzehr, which means antidote. Bezoars were used as antidotes against plague, snake-bite, leprosy, and epilepsy by physicians from 12th to 18th century. Trichobezoar is from the Greek word trich which means hair. 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. In up to 18% of patients with trichotillomania, trichophagia occurs; one third of patients with trichophagia develop trichobezoars. Trichobezoars most commonly occur in adolescent females. The site of hair pulling is most commonly from the scalp, but can occur from the eyelashes, eyebrows, and pubic area.

II. Material And Methods

Case Report:
A 14 years old female presented epigastric pain for 1 day with early satiety, loss of appetite, nausea and vomiting for 1 week prior to the onset of pain abdomen and loss of weight for last one month. On questioning, patient reported nonspecific pain of approximately 3 months duration. No history of Tuberculosis, Diabetes, Asthma, weight loss, no history of previous abdominal surgery.

Examination:
Per Abdominal: on examination revealed a well looking girl, with a milldistended abdomen.
Palpation of her abdomen revealed a large, firm mobile epigastric mass that was minimally tender
No guarding and rigidity
Bowel sounds present

Investigations:
TLC- 11,000
X-Ray Abdomen Erect which shows the presence of mass in the epigastric region.
Rest of the investigations within normal limits.
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Fig 1: X-ray Abdomen Erect showing epigastric mass.

Treatment:
Exploratory laparotomy and gastrostomy done. Hair particles removed

Fig 2: Intraoperative trichobezoar.

Specimen

Fig:3 hair particles
III. Discussion

Trichobezoars in humans were first described from a post mortem by Swain in 1854. Trichobezoar is a rare medico-surgical condition consisting of a hair ball in the proximal gastrointestinal tract, which may cause obstruction, that almost exclusively affects young women. It results from trichotillomania, a psychiatric disorder characterized by the compulsory and persistent pulling out of one’s hair, involving the hair of the scalp, eyebrows, eyelashes or elsewhere in the body, which leads to noticeable hair loss. The majority of people with this disorder have emotional problems (depression, anxiety) and poor self-image; the patient usually suffers from tension prior to pulling, or when trying to resist the action, and subsequently feels pleasure and gratification.

When ingested, because of its smooth surface, human hair resists digestion and peristalsis, and accumulates between the mucosal folds of the stomach. Continuous ingestion of hair over a period of time leads to the impaction of hair together with mucus and food, causing the formation of a trichobezoar. In most cases, the trichobezoar is confined within the stomach. In some cases, however, the trichobezoar extends through the pylorus into the jejunum, ileum or even colon. This condition is called Rapunzel syndrome and was first described by Vaughan et al. in 1968. Rapunzel was a long-haired girl in a German fairy tale by Grimm brothers.

In addition, parts of the tail can break off and migrate to the small intestine, causing intestinal obstruction. Trichobezoars may not be recognized in their early stages because of their nonspecific presentation, or even lack of symptoms. Following the introduction of minimally invasive surgery and endoscopy with mechanical and laser fragmentation techniques, some authors have questioned the necessity of a laparotomy to treat trichobezoars, and consider these new techniques more convenient for trichobezoar removal.

Establishing a pedigree with family and social history can ultimately help in the differential diagnosis. We describe a case of trichotillomania in a young woman that led to the formation of a trichobezoar that needed emergent surgical intervention and follow-up psychiatric treatment. We highlight the fundamental concept of treating the whole person rather than just symptoms by considering factors such as genetic influences in understanding the disease.

The most common of these complications that have been reported over the years include gastric mucosal erosion, ulceration, and perforation of the stomach or the small intestine, gastric outlet obstruction, intussusception, obstructive jaundice, protein-losing enteropathy, pancreatitis, and death. Presentation ranges from nonspecific abdominal or epigastric pain, to a range of complications as mentioned. Clinical examination often reveals a large mobile epigastric mass that may be indelible, the so-called Lamerton’s sign. Endoscopy is usually diagnostic. The hair appears black (despite the normal hair color) due to denaturing of the hair protein by the acid. The most common diagnostic tool used in the literature is a CT scan, with a typical image showing a well-defined intraluminal ovoid heterogeneous mass with interspersed gas.

Management options include endoscopic removal, laparoscopic removal, or via laparotomy. Gorrier et al., in a retrospective review of 108 cases of trichobezoar, evaluated the available management options; 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 favored as their management of choice.

IV. Conclusion

Trichobezoars should be considered as a differential diagnosis in a young female patient with a mobile epigastric mass. Diagnosis can be easily made with the use of CT scan and endoscopy. Management almost always requires surgical removal. It is emphasized that the majority of these patients have an underlying psychiatric or social disorder. A multidisciplinary approach is essential to prevent recurrence of the problem.

References


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