

Tricobezoar - a rare cause for chronic epigastric pain

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Keywords: trichobezoars; trichotillomania; trichophagia; epigastric pain

Introduction

Persisting swallowed foreign materials within the gastrointestinal tract are known as bezoar and they are most commonly found in the stomach [1]. Tricobezoar is a mass formed with ingested hair, food and mucus which is almost invariably associated with trichotillomania and trichophagia.

Case report

A 13 year old girl was admitted to surgical casualty with one week duration of aching type epigastric pain. It was non radiating constant pain associated with nausea, occasional vomiting and loss of appetite.

She had intermittent partial relief of pain in between meals, but worsening of pain within few minutes of eating which has compelled her to ingest progressively smaller meals. She didn't have dysphagia, odynophagia or reflux of food. Her bowel habits remained normal. She also had increase sleepiness and exertional dyspnoea.

She had similar episodic abdominal pain for past eight months, treated by general practitioners as for gastritis with symptomatic improvement.

Six months back she cut her hair short by herself and had started eating the remaining hair. Her behaviour has been otherwise normal and she hasn't neglected daily routine other than reduced interest in academic work.

She was treated by a psychiatrist for this unusual habit and associated abdominal pain. Her academic performances at school were satisfactory until around the beginning of her episodic abdominal pain, where she had gradually started to neglect her school work. She is the elderly child in a family of two children.

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Received: 05-02-2017 Accepted: 20-03-2017
DOI: <http://doi.org/10.4038/sljs.v35i1.8353>



On examination she was pale and mildly dehydrated. She had very shortly cut hair. Apart from epigastric tenderness abdominal examination was unremarkable.

Her haemoglobin was 5.6g/dl and other biochemical investigations were normal. Upper GI endoscopy was performed and tricobezoar was found in her stomach. The duodenum was free of hair [Figure 1].



Figure 1. Tricobezoar during endoscopy.

Patient underwent mini laparotomy after optimizing haemoglobin. Tricobezoar was removed and she made an uneventful post-operative recovery [Figure 2, 3].



Figure 2. Intra operative view.



Figure 3. Removed Trichobezoar

Discussion

The bezoars are classified depending on the ingested material. Phytobezoars are formed with undigested food from vegetables and fruits, trichobezoars are derived from ingested hair, lactobezoars are from undigested milk protein and pharmacobezoars are derived from concretions of various medications [1].

Trichotillomania which means pulling out one's own hair and swallowing of hair known as trichophagia [2] lead to trichobezoars formation. These are psychiatric conditions of unknown etiology, usually seen in young girls and associated with other conditions like depression, anxiety and eating disorders [2]. It is estimated 20% of patients with trichotillomania also have trichophagia and 30% of them will develop trichobezoar [2].

As observed in this patient the initial presentation is with nonspecific symptoms like nausea, vomiting, epigastric pain and early satiety [1, 2 and 3]. In female patients, history of trichotillomania /trichophagia, alopecia patches are important clues [1] in diagnosis of trichobezoar. Some patients may have mobile epigastric mass and halitosis [1].

Complicated cases can present with gastric outlet obstruction, obstructive jaundice or/and pancreatitis due to passage of bezoar to duodenum, malabsorption, ulceration, perforation or intussusception [1, 2]. Severe anaemia found in this patient is another known complication of trichobezoar [1].

• Key Points:

- Trichobezoars are almost exclusively seen in females and should be suspected in young females with unusual abdominal pain and behavioural changes.
- It is a rare cause for variety of gastrointestinal complications and chronic pain.
- Endoscopic approach has high failure rates and open surgery is the most feasible option.

In some cases the mass extends beyond the stomach in to duodenum known as the Rapunzel Syndrome [3, 4]. Upper GI endoscopy is the diagnostic investigation [1]. Abdominal X ray and ultrasound scan have variable sensitivity and may suggest the presence of an abdominal mass, if they were being done as investigations for nonspecific symptoms [2].

Open surgery and extraction is the usual mode of removing the trichobezoar as it is technically easy, have low rates of complications, 100% success rate and enables complete assessment of small bowel for other areas of bezoar [3, 5]. Laparoscopic approach has long duration of surgery due to complexity of procedure, risk of contamination and less success rates [5]. Small bezoars may be endoscopically extracted but overall success is around 5% [5].

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