

# Perforated gastric trichobezoar: A Case Report

V Agarwal, K Moorthy, A Jaiprasad, M Al-Gailani

## Citation

V Agarwal, K Moorthy, A Jaiprasad, M Al-Gailani. *Perforated gastric trichobezoar: A Case Report*. The Internet Journal of Surgery. 2006 Volume 13 Number 2.

## Abstract

Case of a 16-year-old female who presented with an acute abdomen secondary to perforated viscous. At laparotomy, a perforated gastric ulcer secondary to a big gastric trichobezoar was found. Gastrotomy, extraction of the trichobezoar and oversewing the perforation with an omental patch was carried out. The patient admitted postoperatively to trichotillomania and trichophagia up to 6 years previously. She had an uneventful post-operative recovery and was discharged well.

## INTRODUCTION

A bezoar is a ball of swallowed foreign material (usually hair or fiber) that collects in the stomach and fails to pass through the intestines.

The term “bezoar” is derived from Arabic badzehr or from Persian panzehr, both meaning counter poison or antidote (1,2). Although the prevalence of bezoars in humans is low, if treatment is not administered, associated mortality rates may be as high as 30% primarily because of gastrointestinal bleeding, destruction, or perforation (1). Bezoars often develop after gastric operations that alter the motility or emptying of the stomach. However, they are most common in children and adolescents with normal gastrointestinal function and usually result from an underlying behavioral disorder. In the classic review by DeBakey and Ochsner (3), 80% of trichobezoars were found in patients younger than 30 years of age.

## CASE REPORT

A 16-year-old female presented to casualty with a complaint of epigastric pain for the past 3 days. The pain woke her up from her sleep. She also vomited about 10 times since that morning.

Past medical history included a previous admission for similar kind of pain that was treated as possible peptic ulcer disease. A gastroscopy was planned but was not done. She also had past history of “irritable bowel syndrome” (IBS) and a left groin hernia repair 10 years previously.

On examination, the patient was found to have a pulse rate of 98/min, blood pressure of 80/40 mm Hg, respiratory rate

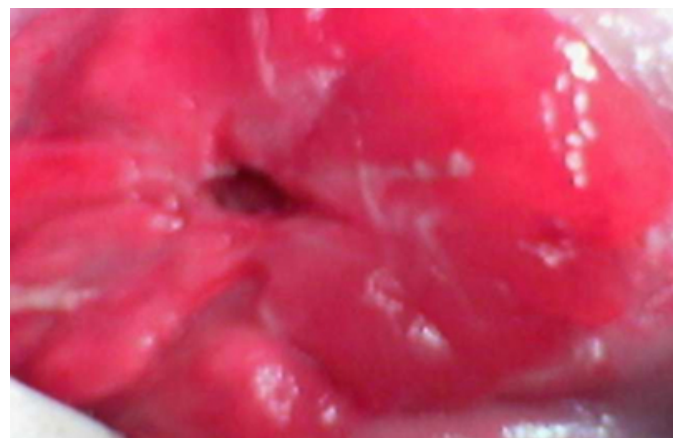
of 16/min and a temperature of 37.3 degrees Centigrade. Abdominal examination confirmed an acute abdomen. The rest of the examination was unremarkable.

Investigations showed haemoglobin 13.3 g/dl, white cell count  $17.1 \times 10^9/l$ , urea & electrolytes and liver function tests were normal. CRP was 103 mg/l. An erect chest x-ray showed pneumoperitoneum. Abdominal x-ray was unremarkable.

The patient was prepared for urgent surgery. At laparotomy, she was found to have a perforation in the anterior wall of the gastric antrum close to the lesser curve (figure 1).

### Figure 1

Figure 1: Antral perforated gastric ulcer



A large mass could be felt in the stomach. Therefore gastrotomy was done (figure 2) which revealed a large trichobezoar occupying nearly the whole lumen of the stomach (figure 3).

### Figure 2

Figure 2: Trichobezoar being extracted through a gastrotomy



### Figure 3

Figure 3: The Trichobezoar. Note: it is cast in the shape of the stomach



This was extracted, the perforation was oversewn with an omental patch and the gastrotomy was then closed in two layers. Finally, the peritoneal cavity was washed with normal saline.

The patient had an uneventful post-operative recovery. She confessed to both trichotillomania and trichophagia in the past but insisted that it stopped 6 years prior to admission. Her father who was made aware of the condition acknowledged this. She was discharged well and followed-up 6 weeks later in the outpatients' department with no complaint.

## DISCUSSION

Our patient suffered from trichotillomania, a type of pica that was first described in 1889 as an irresistible urge to pull one's hair (4), and subsequent trichophagia, the oral ingestion of hair. Among those who suffer from trichotillomania, only 30% will engage in trichophagia, or eating their hair, and of these, only some 1% will go on to eat their hair to the extent requiring surgical removal (5).

Trichobezoars may result in a range of gastrointestinal symptoms or may be asymptomatic (3,6).

Clinical features may include anorexia, bloating, early satiety, epigastric pain, nausea, vomiting, weight loss, anemia, diarrhea or constipation. This may explain her previous symptoms that were attributed to IBS.

The continuous growth of trichobezoars can cause pressure necrosis with resultant mucosal erosions and ulcerations, found most commonly along the lesser curvature and reported in 10% of the patients (6). The diagnosis of a gastric trichobezoar can be confirmed by radiography or endoscopy.

Treatment depends on the presentation. Endoscopic retrieval may be attempted for small bezoars. Laparotomy is reserved for bezoars that have perforated (7%), have caused hemorrhage (10%), or are too large or obstructive to be managed non-operatively (2).

## CORRESPONDENCE TO

Mr M. Al-Gailani FRCS Consultant Surgeon Rotherham General Hospital, Moorgate Road, Oakwood, Rotherham, S60 2UD, UK. T: 01709 820000 F: 01709 304180 E: mohamad.al-gailani@rothgen.nhs.uk

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**Author Information**

**V. Agarwal, MBChB**

Pre Registration House Officer, Department of Surgery, University Hospital of North Staffordshire

**K. Moorthy, FRCS**

Senior House Officer, Department of Surgery, University Hospital of North Staffordshire

**A. Jaiprasad, FRCS**

Specialist Registrar, Department of Surgery, University Hospital of North Staffordshire

**M. Al-Gailani, FRCS**

Consultant Surgeon, Department of Surgery, University Hospital of North Staffordshire