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Research Article

### ANALYSIS OF TRICHOBEZOAR WITH GASTRIC PERFORATION IN A FEMALE POPULATION OF PAKISTAN

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**Abstract:**

**Introduction:** The trichobezoar is a rare medical condition composed of a mass of hair in the proximal gastrointestinal tract, which can cause obstruction, and almost exclusively affects young women. Its prevalence ranges from 0.06% to 4% in the general population.

**Objectives of the study:** The main objective of the study is to analyze the Trichobezoar with Gastric Perforation in a female population of Pakistan.

**Material and methods:** This descriptive study was conducted in Allama Iqbal Memorial Teaching Hospital Sialkot during May 2018 till October 2018. The data was comprising of female population. On examination patient look irritable abdomen was tense and tender on palpation, bowel sounds was absent. Ultrasound shows collection of free fluid in the peritoneal cavity and gas filled bowel loops no visceromegaly, and X-rays abdomen erect and supine shows gas under right dome of diaphragm. There was a past history of C-section and the socioeconomic status was average. **Results:** An emergency exploratory laparotomy was performed and around two liters of pyoperitoneum was removed. On exploration, a 2×2 cm perforation was identified in the anterior wall of the prepyloric region of stomach.

**Conclusion:** It is concluded that Gastric perforation is a rare complication of gastric trichobezoar formation. Without a history of trichotillomania or trichophagia, or findings on physical examination consistent with hair pulling behavior, one would not readily include this entity on their differential diagnosis of an acute abdomen.

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**INTRODUCTION:**

The trichobezoar is a rare medical condition composed of a mass of hair in the proximal gastrointestinal tract, which can cause obstruction, and almost exclusively affects young women. Its prevalence ranges from 0.06% to 4% in the general population. It is considered a result of trichotillomania, a psychiatric disorder linked to compulsively removing hair from the head and body in general [1]. When hair is ingested, it resists digestion and peristalsis, which is why it accumulates in the folds of the gastric mucosa. Mostly it remains confined to this level; but on some occasions it passes the pylorus, reaching the jejunum, ileum and even the colon. Trichobezoar is a Greek word trich, which means hair. Bezoars are collections of indigestible material that accumulate in the GI tract and are most often located in the stomach [2]. Trichobezoars are often associated with psychiatric illness like trichotillomania and trichophagia usually occurs in young and adolescent females. Gastric trichobezoar (GT) is the most common variety of bezoar found in the stomach [3]. On the basis of their contents, bezoars are classified into phytobezoars (composed of non-digestible food materials such as seeds and pits), trichobezoars (composed of hair), lactobezoars (composed of lactose), and pharmacobezoars (composed of medications) [4]. The common complications 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 [5]. Usually trichobezoar is confined to the stomach, but it can migrate through the pylorus into the jejunum, ileum or even the colon [6].

**OBJECTIVES OF THE STUDY:**

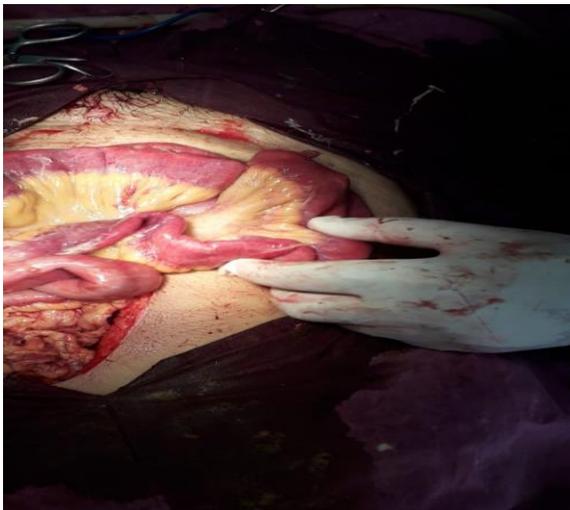
The main objective of the study is to analyze the Trichobezoar with Gastric Perforation in a female population of Pakistan.

**MATERIAL AND METHODS:**

This descriptive study was conducted in Allama Iqbal Memorial Teaching Hospital Sialkot during may 2018 till October 2018. The data was comprises of female population. On examination patient look irritable abdomen was tense and tender on palpation, bowel sounds was absent. Ultrasound shows collection of free fluid in the peritoneal cavity and gas filled bowel loops no visceromegaly, and X-rays abdomen erect and supine shows gas under right dome of diaphragm. There was a past history of C-section and the socioeconomic status was average. On emergency exploratory laparotomy was performed and around two liters of pyoperitoneum was removed.

**RESULTS:**

An emergency exploratory laparotomy was performed and around two liters of pyoperitoneum was removed. On exploration, a 2×2 cm perforation was identified in the anterior wall of the prepyloric region of stomach (figure 1).



A separate gastroenterotomy was made and the mass was removed. The mass was foul smelling and contained densely wound bunch of hair, threads and



bits of plastic. The gastroenterotomy was repaired primarily in single layer with absorbable suture and perforation with Graham's omental patch.

**DISCUSSION:**

The exact pathophysiologic mechanism(s) explaining why patients with trichobezoars perforate their stomach are unknown, but pressure necrosis and irritation of the gastric mucosa have been implicated. As the size of the trichobezoar increases, the blood supply to the mucosa of the stomach and part of the intestine is hampered, leading to ulceration and eventually perforation [7]. Nirasawa et al., were the first to report on laparoscopic removal of a trichobezoar. Laparotomy is considered as the treatment of choice in view of high success rate, relatively low complication rate, and low complexity. In addition, the entire gastrointestinal tract can be evaluated for satellites in a short period of time [8]. The evolution of GT is still not fully understood. Hair strands because of their slippery surface, escape peristaltic propulsion and are retained in the folds of the gastric mucosa. The hairball lies dormant and the trichobezoar continues to grow in size and weight due to the incessant ingestion of hair. Ultimately, the GT attains the shape of the stomach, usually as a single solid mass [9]. The most common symptoms are epigastric pain (70.2%), epigastric mass (70%), nausea and vomiting (64%), hematemesis (61%), weight loss (38%), and diarrhea and constipation (32%). A preoperative diagnosis of trichobezoar may be suggested in a patient presenting with severe halitosis, patchy alopecia, a previous history of trichotillomania and trichophagia [10]. Other associated complications of GT are malabsorption related, which include protein-losing enteropathy, iron deficiency anemia, and megaloblastic anemia [11].

**CONCLUSION:**

It is concluded that Gastric perforation is a rare complication of gastric trichobezoar formation. Without a history of trichotillomania or trichophagia, or findings on physical examination consistent with hair pulling behavior, one would not readily include this entity on their differential diagnosis of an acute abdomen.

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