The large Gastric Trichobezoar associated with Ulcers and antral Polyposis: Case report

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Trichobezoar of gastrointestinal tract is an uncommon clinical condition and can present diagnostic and therapeutic challenge in practice. Clinical manifestations vary from no symptoms to serious complications. Delay in diagnosis may lead to an acute abdominal syndrome with lethal consequences, because of perforation, bleeding and obstruction of gastrointestinal tract. The most useful diagnostic procedure is gastroscopy. Large trichobezoars are difficult to remove endoscopically, so majority of cases require surgery.

Case report: We report a unique case of large gastric trichobezoar in young female with nonspecific symptomatology but with palpable huge epigastric mass and rare complications: multiply gastric ulcers and antral polyposis.

Conclusion: After operative removal of the bezoars ulcers healed completely, but antral polyposis persists. Key words: trichobezoar, gastroscopy, laparatomy, multiply gastric ulcers, antral polyposis.

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1. INTRODUCTION

Bezoar is collection of swallowing indigestible materials which form a mass in the gastrointestinal tract. There are two major group of bezoar: trichobezoar and phytobezoar (1, 2). Trichobezoar is complex dark mass of undisgested hair and impacted food found in gastrointestinal tract. The term derived for the Greek word „trich” which means hear and Arabic word „badzehr” which means antidote (1, 2, 3). Hair swallowing (trichophagia) usually occurs in young females with some kind of psychosocial disorders (4, 5). When hair stays in gaster space, escaping peristaltic activity, it starts to form uncommon hard foreign body with particles of food. Trichobezoar can grow as a ball assuming the gaster shape and sometimes can pass pyloric channel to the small bowel until ileocecal junction. Gastric trichobezoar with a tail passing pyloric channel in the small intestine presents Rapunzel syndrome (1, 3). Phytobezoar is less common and presents a mass of fibers from fruits and vegetables. Phytobezoar occurs in patients with abnormalities of the gastrointestinal tract (5).

Clinical presentations vary from nonspecific abdominal pain to severe complication as gastrointestinal obstruction and perforation, bleeding, iron deficiency anemia, protein losing gastroenteropathy, mucosal erosions, ulcers and acute pancreatitis (6, 7). Physical examination can reveal the large mobile epigastric mass. The gastroscopy is the most useful diagnostic tool. Abdominal CT shows a mobile intragastric heterogenic mass with concentric rings of entrapped air inside of mass (1, 2, 3, 4).

Therapeutic intervention depends on location, size and present of complications. Endoscopic and laparoscopic removal can be done only in case of small size trichobezoar (1, 2, 6).

Laparotomy with gastrotomy and removal complete mass of trichobezoar is method of choice for treatment (6, 7). We report a case of the large trichobezoar with rare complications of multiple ulcers in gaster body and polyposis in antral region.

2. CASE PRESENTATION

Patient 20 years old female was admitted to Medicus A for gastroscopy procedure. In medical history the patient reported nonspecific abdominal pain, early satiety and loss of weight during last 6 months. The past history is without significant data. General aspect reveals the pale, well developed, good looking young women and physical examination distended abdomen with the large, palpable, mobile, epigastric mass.

Gastroscopy reveals strong distended gaster entirely fills up with a large foreign body, extending from gastroesophageal junction to the duodenum which has all characteristics of trichobezoar. The mucosa of the gaster body had numerous deep ulcers and antral region multiple small polyps ranging in size from 2 mm to 12 mm. Because of this gastroscopic finding (the size of trichobezoar, ulcers and polyps) and potential for complication the patient immediately sent to the hospital for additional clinical examination and
surgical treatment. Anemia was proved. The red blood cells count was 4.54 and hemoglobin 82 g/L, hematocrit 0.30. The other laboratory investigations were within the normal limit. Computer tomography (CT) confirmed the large intragastric heterogenic mass in size 15x10 x 6 cm.

Next day laparatomy and gastrotomy was performed to prevent complications. Operative removal of trichobezoar undertaken successfully in three pieces which took the shape of the gaster (Figure 1, 2 and 3).

Operative finding approved the presence of multiple ulcers of the gaster body and polyposis of antral region.

Postoperative recovery was in a few days with treatment of Proton pump inhibitors (pantoprasol) because of multiple gastric ulcers.

The patient was discharged in well general condition without abdominal pain and any dyspeptic symptoms.

Four and six months later control gastroscopy performed. Gastric ulcers and erosions healed completely, but antral polyposis still persists (Figure 4).

3. DISCUSSION

Trichobezoar is usually disease of young females with background of psychosocial disorders the first case of trichobezoar described 1779 during an autopsy of a patient who died due to gastric perforation (8). The incidence of trichotillomania, trichophagia and trichobezoar is unclear. Every third person with trichotillomania will start to swallow their hair and only 1% will develop a trichobezoar with clinical symptoms which require endoscopic or surgical intervention. Formation a mass of swallowing hear depends of gastrointestinal peristaltic activity and kind of indigesting food. Denaturation of protein from food by gastric acid gives black color of trichobezoar, and denaturation of fat is reason for halitosis.

Our patient had dyspeptic syndrome and palpable mobile epigastric mass. The initial signs and symptoms of trichobezoar can lead to consider abdominal tumor, because patients usually do not give history of swallowing hear. We performed gastroscopy as early diagnostic procedure because of a suspicion on bleeding gastric tumor. Upper Endoscopy presents a gold standard for diagnosis of trichobezoar. Patients with trichobezoar can stay without any symptoms for long time and complications like perforation, intestinal obstruction and gastrointestinal bleeding can present first sign of disease (6, 7).

Our patient had iron deficient anemia, multiple bleeding ulcers and antral polyposis. Anaemia is very common in patients with trichobezoar. Explanation for anemia can be first chronic bleeding from damaged and inflamed mucosa and second impaired gastrointestinal digestion and absorption. According to literature anemia is not correlated with the presence of gastric ulcers and polyposis. In the literature there are only a few reported cases of trichobezoar associated with gastric polyps. An association between bezoars and gastric polyposis was recognized first time 1921 by Davies (9). There is no clear explanation for connection between gastric bezoar and polyposis. Gastric polyp was found only in patients with trichobezoar, but not with phytobezoar. The size of the trichobezoar is not associated with the development of polyposis. The cause of the development of polyposis can be chronic abrasion and secondary inflammation of the gastric mucosa. Those mucosal damages we can see during gastroscopic examination in our patient. It is possible that gastric polyposis preceded the beginning of formation of trichobezoar and can facilitate its development (5, 10, 11). After removal of trichobezoar there is gradual decrease in the size and number of polyps, but it is necessary to follow up patients by gastroscopy for long time. There is the report of case with gastric trichobezoar complicated by multiple polyps with malignant degeneration (10, 11). Further treatment should be in preventive measures for mental disorders and gastric mucosa protection related to Helicobacter pylori infection and peptic ulcers.

4. CONCLUSION

In differential diagnosis of epigastric mobile and palpable mass in every young female patient should be considered the presence of gastric trichobe-
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Gastroscopy is first diagnostic choice. Early diagnosis and surgical removal can prevent complications and mortality. We present the case of gastric trichobezoar complicated by multiple ulcers and polyps. Ulcers can be easily treated after surgical removal with PPIs (proton pump inhibitors). Multiple polyps need endoscopic follow up program.

REFERENCES