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Case Report

Gastric Trichobezoar: An Iranian Case Report

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Abstract

The most prevalent reason of trichobizoar diseases are hair pulling (trichotillomania) and hair eating (trichophagia). It occurs most often in women under 30, which associated with trichotillomania. Trichobiosis of the stomach is very rare. If diagnosed on time and treated successfully, it does not cause considerable complications. In this study, we report a case of a 10-years-old female with epigastric pains for 2 months. The patient underwent diagnostic endoscopy due to a palpable mass in her epigastrium revealing gastric trichobezoar for which, she underwent surgical intervention. Detailed history taken from her revealed the history of trichotillomania and trichophagia since 3 years of age.

Keywords: Children; Trichotillomania; Trichobizoar;Trichophagia

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Introduction

Trichotillomania, also known as hair-pulling disorder, is a psychological and disabling mental disorder characterized by recurrent pulling out of one's own hair from any region of their body leading to hair loss and associated with significant distress and functional impairment (1, 2). In the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association; DSM-5), trichotillomania is classified as an obsessive-compulsive disorder (OCD) or related disorders including excoriation (skin picking), body dysmorphic, and hoarding disorders (3). Extensive epidemiological studies of prevalence of trichotillomania have not been conducted to date, thus the exact prevalence of trichotillomania is unknown (1). However, the estimated prevalence of trichotillomania primarily based on small studies suggests varying prevalence estimates from 0.6% to 3.4% (4-10), although the real prevalence may be higher as some individuals with trichotillomania feel ashamed of their appearance and behavior (1). Also, females are reported to suffer from this disorder more frequently with a female-to-male ratio of 4:1 (1).

Over 20% of patients with trichotillomania also engage in trichophagia, when they eat hair after pulling it out (11). Repeated ingestion and swallowing of hair that is indigestible could over time result in the creation of trichobezoars, or hairballs in the stomach and lower gastrointestinal tract leading to significant gastrointestinal complications and obstructions requiring surgical intervention or life-threatening medical complications if untreated (1, 12, 13).

There are currently no first-line pharmacological agents for the management of trichotillomania (14). Psychotherapeutic interventions, including cognitive-behavioral therapy (CBT) with habit-reversal training components consisting of (a) awareness training, (b) competing response training, and (c) social support to help with adherence to these interventions are efficacious in reducing hair-pulling symptom severity in randomized-controlled trials (14-17), yet majority of individuals may not respond and relapse is common over months after treatment (18, 19).

Herein we report a case of a 10-years-old female with epigastric pains for 2 months. The patient underwent diagnostic endoscopy due to a palpable mass in her epigastrium revealing gastric trichobezoar for which, she underwent surgical intervention. Detailed history taken from her revealed the history of trichotillomania and trichophagia since 3 years of age for which she received medication but stopped it after relief of her symptoms. She was started on daily treatment with fluoxetine and risperidone as well as psychotherapeutic approach.

Case Presentation

The patient is a 10-years-old female single child who was admitted to our hospital with the chief complaint of epigastric pains, lack of appetite and weight loss of approximately 3 kg from 2 months ago. The patient reported early satiety but no nausea or vomiting. She also complained of smelly burps and farts. She did not report any other gastrointestinal complaints such as melena, rectorrhagia or hematemesis. The patient had been treated with proton pomp inhibitors (PPI) for one month; however, the symptoms were not relieved. Furthermore, she has been followed up by an endocrinologist since several years ago due to short stature and low weight. In physical examination, a mild abdominal distension was observed with a hard mass palpated in epigastric region. She was not icteric. Organomegaly, edema and pallor were not detected. The patient seemed to be nervous. She was single child and lived with her grandmother in a bad situation. **Table 1** presents the most important laboratory findings of the patient at her hospital admission. The patient underwent diagnostic endoscopy and was diagnosed with gastric trichobezoar. It was impossible to remove the bezoar using endoscopy due to its massiveness and risk of gastric and duodenal injuries. Thus, the patient underwent laparotomy and gastrectomy and trichobezoar was completely removed. It was massive and continued up to the third part of duodenum **(Figure 1)**. Psychological consultation was performed revealing the history of frequent hair chewing and eating due to underlying stress since the patient was 3 years old. She had been treated with fluoxetine for a while during when she felt better and ate her hair less than before but the symptoms were recurred after stopping the treatment. Finally, she was diagnosed with trichotillomania and pica based on her underlying anxiety, obsessiveness and mood

Table 1. Immunological data of patient

Variable	Result
WBC (*10³ cells/µl)	10.8
Neutrophil (%)	77
Lymphocyte (%)	17
Hb (g/dl)	14.2
MCV (fL)	79
PLT (*10³ cells/µl)	263
INR (second)	1
PT (second)	13.5
PTT (second)	28
Na	143
K	4.3
BG	O+

WBC, white blood cell; Hb, hemoglobin; dl, deciliter; MCV, mean corpuscular volume; fL, femtoliter; PLT, platelet; INR, international normalized ratio; PT, prothrombin time; PTT, partial thromboplastin time; BG, blood group.

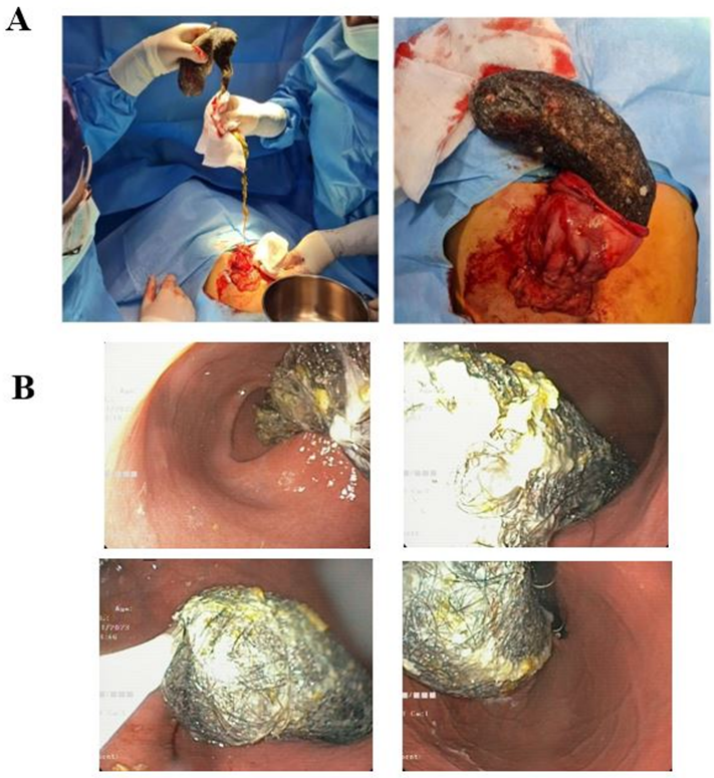

Figure 1. A. Massive trichobezoar removed by laparotomy. *B.* The trichobezoar continued up to the third part of patient's duodenum making the endoscopic removal of it impossible due to the risk of duodenal perforation.

disorder and underwent treatment with daily fluoxetine 10 mg and a quarter of risperidone. Also, she was suggested to undergo psychotherapy for CBT. Finally, after the removal of the trichobe-

zoar and treatment of her psychiatric disorder, she gained significant weight and achieved a favorable psychological state.

Discussion

We describe a case of a 10-years-old girl with epigastric pains for 2 months. The patient underwent diagnostic endoscopy due to a palpable mass in her epigastrium revealing gastric trichobezoar for which, she underwent surgical intervention.

Continuous use of hair over time causes hair to get stuck with mucus and food, resulting in trichozoar. Trchobezoar is a rare disorder that almost exclusively affects young female. Up to 90% between the ages of 13 and 20 suffer from trichotillomania and trichophagia(20). which may be attributed to traditional hair in women(21).

Signes of gastric trichobezoar are often non-specific, such as nausea, abdominal pain, vomiting, early satiety, loss of appetite and weight loss(22). A retrospective study by Erzurumlu et al. demonstrated that abdominal pain or epigastric discomfort was the most prevalent features of a gastrointestinal bezoar in all cases. Therefore, trichozoar should be evaluated as a differential diagnosis(23). In the study of Levy et al, another similar case was an 18-year-old girl who came with a complaint of abdominal pain and mass in the epigastric area, and trichobezoar was discovered in her(24). Our patient reported epigastric pains, lack of appetite and weight loss but no nausea or vomiting. Most Gastric trichobezoar can be removed by endoscopically or surgically. Wang et al. stated that a 14-year-old female with a huge gastric trichobezoar was successfully treated by endoscopic(25). Our case underwent laparotomy and gastrectomy and trichobezoar was completely removed, and partially improved. Timely and early diagnosis of trchobezoar depends on effective and precise screening for trichotillomania and related behaviors to avoid a life-threatening situation with significant medical and surgical complications.

Conclusion

After an early diagnosis of trichozoar, physicians should check for any medical history of clinical findings of trichophagia, trichotillomania, or a psychiatric problem. Therefore, psychiatric consultation and regular follow-up after surgery should be considered in patients to prevent the recurrence of gastric trichobiosis. Moreover, abdominal radiological findings should be considered for the differential diagnosis of trichozoar.

Ethical Consideration

Written informed consent was obtained from the patients and their parents for the publication of the case.

Conflict of Interests

The authors have no conflicts of interest to disclose.

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