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CASE REPORT

Trichobezoar associated with trichotillomania: pediatric case report

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Abstract

Case report of a 7-year-old female patient diagnosed with gastric trichobezoar requiring surgical intervention for removal. Psychic aspects related to obsessive-compulsive hair-pulling disorder were addressed, as well as diagnostic and treatment options. The relevance of this work is justified, since the condition is predominant in the pediatric age group and in most cases the first professional to contact this patient will be the pediatrician.

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INTRODUCTION

Trichotillomania is an obsessive-compulsive disorder where people pull out hair from the body, resulting in hair loss and bald patches.[1] The most commonly affected areas are the scalp, neck, eyebrows, eyelashes, and pubis.[1] Gastric bezoars are tightly packed collections of foreign material in the stomach. Depending on the type of material, a descriptive name may apply, as in the case of individuals with trichotillomania with trichobezoars.[2]

The prevalence in the general population is estimated at 0.5% to 2%. Studies suggest a predominance of females in the pediatric age group.[2]

Clinical signs and symptoms do not manifest immediately and, in most cases, arise as a result of obstruction to gastric emptying with abdominal pain, distension, nausea, and vomiting.[3] Abdominal X-rays include findings such as a large intraluminal filling defect with mottled translucency. On ultrasound examination, shadowed intraluminal masses are observed.[3] Treatment consists of surgical removal via the laparoscopic approach in most cases.[3]

The primary differential diagnoses for hair loss in childhood are alopecia areata, tinea capitis, and telogen effluvium.[2]

This article describes the case of a schoolgirl diagnosed with a trichobezoar and the clinical signs and symptoms used as references in diagnosis, early initiation of treatment, and patient management, which combined help achieve a favorable outcome.[4] Given the predominance of trichotillomania in the pediatric age group, pediatricians are often the first to see patients with the condition.[4]

CASE REPORT

The subject of this case report is a 7-year-old schoolgirl with a history of cow's milk protein allergy (CMPA) treated by the age of two. She had episodes of vomiting and diarrhea that started in March 2022 and lasted three days, which progressed to severe abdominal pain and refusal to eat. The patient was taken to the Pediatric Emergency Department, where a computed tomography (CT) of the abdomen was ordered. No alterations were seen, and she was discharged with a prescription for symptom management medication and a follow-up visit scheduled at the Pediatric Gastroenterology outpatient clinic. The patient's condition remained without improvement for a month, when she presented persistent post-feeding vomiting and upper abdomen, retrosternal and occasional infraumbilical pain, associated with loss of appetite, emotional lability, and weight loss of 4 kg, for which she was taken to the emergency department. On physical examination, the patient was numb, pale, and emaciated, with dry skin, mobile and uncharacteristic cervical lymph nodes, and occipital capillary rarefaction. Laboratory tests, chest and abdominal X-ray images, and abdominal ultrasound were performed without alterations. An upper gastrointestinal (UGI) endoscopy was then performed, in which a sizeable gastric trichobezoar was viewed (Figure 1). It compromised the entire lumen of the antrum, making endoscopic removal impossible due to its large size. The patient was referred for surgical removal of the foreign body by exploratory laparotomy, and a trichobezoar with a diameter of 6 cm was removed. The patient recovered without complications and was discharged after eight days of hospitalization. She was referred for outpatient follow-up with the pediatric surgery team and the child psychiatry and psychology services.

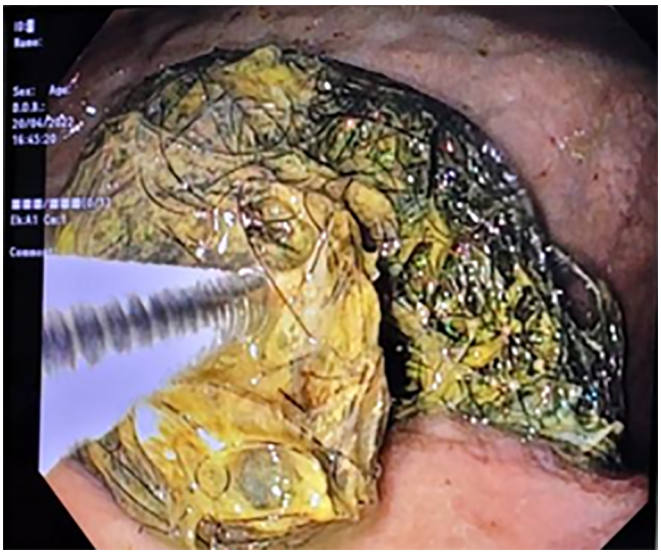


Figure 1. Endoscopic view of a trichobezoar in the gastric antrum.

DISCUSSION

Trichotillomania is described in the Diagnostic and Statistical Manual of Mental Disorders – DSM 5th Edition as an obsessive-compulsive disorder. The diagnostic criteria (Table 1) include an irresistible urge to pull one's hair, attempts to reduce or stop the hair-pulling, suffering or functional impairment due to hair-pulling, and the absence of another medical condition or mental disorder that might better explain the signs and symptoms.[5] Trichophagia, the act of swallowing hair, may contribute to forming bezoars.[5]

Bezoars are clusters of undigested materials retained in the gastrointestinal tract. The most common type is the phytobezoar, made of fibers, plants, vegetables, and fruit.[3] In 1779, M. Baudamant, a French physician, was the first to describe a trichobezoar in a human being found during an autopsy performed on a woman.[6,7]

Trichobezoars account for less than 6% of all bezoars and are more commonly seen in children and adolescents.[8] They are usually found in the stomach, although they can reach the small intestine and colon, in what is referred to as Rapunzel Syndrome, described in 1968 by Vaughan et al.[3,9] The youngest case described in the literature occurred in Uberaba, Brazil, in a child aged two years and 11 months with Rapunzel Syndrome.[6]

Table 1. Reproduction of the book: Diagnostic and Statistical Manual of Mental Disorders 5th Edition – DSM-5. Porto Alegre, Artmed – 2014. Pg. 251.

Diagnostic Criteria DSM-5	**312.39** (F63.3)
A. The individual pulls out their hair regularly, which results in hair loss.	
B. The individual makes a consistent effort to stop hair-pulling.	
C. The individual's hair-pulling causes them clinically significant distress or impairment in their everyday life.	
D. The individual's hair loss is not due to another medical condition.	
E. The individual's hair-pulling is not attributable to symptoms of another mental disorder.	

As in most cases, our 7-year-old patient had obstructive symptoms after prolonged suffering from abdominal distension, pain, loss of appetite, nausea, and vomiting, leading to weight loss.[8] In the beginning, nonspecific symptoms such as sporadic pain, malaise, halitosis, and anemia may also appear and be misinterpreted.[7]

In addition to physical examination, diagnostic investigation included imaging with computed tomography instead of radiography and ultrasound examination due to its greater accuracy and the possibility of establishing a differential diagnosis.[3] An abdominal CT showing no alterations had been performed in our patient a month before diagnosis. Then, a UGI endoscopy was performed, an imaging method that allows direct visualization of the area of interest and assists in treatment.[10] Our patient was diagnosed based on the UGI endoscopy, but removal was not an option due to the size of the trichobezoar.

Most cases require conservative treatment, with few treated via endoscopic removal or chemical dissolution.[6,7] Depending on the size of the bezoar, surgery is the treatment of choice, as in our case. The laparoscopic or laparotomic approach can be used, with a success rate of 99%.[6,7,11]

Not only diagnosis and treatment are essential in cases of trichotillomania and trichophagia, but also the multidisciplinary follow-up required to manage the clinical complications and psychosocial impairment associated with the disorder.[4,6]

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