ORIGINAL ARTICLE

A rare cause of intestinal obstruction in children trichobezoar: How to diagnose?

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ABSTRACT

BACKGROUND: Trichobezoar is a rare clinical condition in children, which is caused by the accumulation of swallowed hair mass in the digestive tract. This condition is most common in young women with psychiatric histories who suffer from trichotillomania (TTM), where they have an irresistible urge to pull out their hair. Diagnosis and treatment of this pathology, which is already extremely rare, and its variable clinical presentations are challenging. The aim of this study was to increase awareness of trichobezoar in the differential diagnosis of signs of intestinal obstruction in children and to evaluate the diagnosis and management of this rare pathology.

METHODS: The clinical data of six patients who were treated for trichobezoars in the pediatric surgery department of our hospital between 2009 and 2022 were retrospectively analyzed.

RESULTS: Six female patients were treated with the diagnosis of trichobezoar during this period. Patients were diagnosed with the help of anamnesis, physical examination, abdominal ultrasonography (USG), and finally, endoscopy. USG can predict the intestinal wall infiltration and the tail extended to the duodenum through pylorus in the series. All patients were evaluated with contrast-enhanced abdominal radiography. Five surgical interventions were performed in four of the cases. In a case who underwent surgery twice, the distal intestinal satellite bezoar was not noticed in the first operation. Two patients were diagnosed to have trichobezoar, but surgery was not required. These patients were younger and had early-onset TTM (before 10 years old). The patients were followed for an average of 10.8 years and no recurrence was detected.

CONCLUSION: Trichobezoar is a rare cause of intestinal obstruction in children with fatal complications when diagnosed late. Failure to follow an algorithm for the management of the disease causes difficulties in the diagnosis and treatment. Especially in patients with a known psychiatric history, whole abdominal USG and laparoscopy performed with awareness can prevent unnecessary examinations.

Keywords: Laparoscopy; pediatric surgery; trichobezoar; ultrasonography.

INTRODUCTION

In 1854, Richard Quain, an Irish anatomist, and surgeon reported a mass in the stomach that he called a "bezoar."[1] These intraluminal masses, called Bezoars, are formed by the accumulation of indigestible foreign substances in the gastrointestinal tract, which may consist of hairs, fruit fibers, dairy products, or other substances. Trichobezoar occurs as a result of ingested hair accumulating in the folds of the gastric mucosa without being digested.[2] As a result of the combination of hairs with food particles and mucus secretion, gastric trichobezoar occurs.[3] Since the patient is completely asymptomatic except for mild abdominal pain for a long time, early admission is rarely seen. Therefore, they continue to eat the hairs until they develop severe abdominal pain with obstructive symptoms. This period is now when the mass turns into a

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large trichobezoar. In young women, it is often associated with psychiatric illness, as it is the result of an urge to pluck one's hair and swallow it, trichophagia (TPH).[4]

Trichobezoar is a relatively rare clinical condition in the pediatric age group and <1% of all cases are seen in this period. In severe cases, the clinical manifestation ranges from chronic abdominal pain, anorexia, weight loss, and upper gastrointestinal symptoms to the acute gastric outlet or intestinal obstruction. Late diagnosis causes various complications.[5,6]

Since the history of concomitant psychiatric illness is usually hidden by the patient and their parents, the diagnosis is made incidentally during the investigation of emerging symptoms. Trichobezoar can show very variable clinics with the size of the ingested hair mass, its location in the digestive system, and other unknown factors. Patients sometimes are admitted to the emergency department with minimal symptoms and sometimes with severe fatal situations such as bowel perforation. If trichotillomania (TTM) is not specifically mentioned in the anamnesis, the patient may be pre-diagnosed with tuberculosis due to a hard mass filling his/her stomach, malignancy, or peritonitis with mass effect. Hence, the difficulty and uncertainty of diagnosis and treatment continue. Although physical examination and anamnesis are very valuable for diagnosis, definitive diagnosis is made by radiological and endoscopic methods. Treatment can be done by removal of the mass by endoscopic, laparoscopic, or open surgery, and the accompanying psychiatric illness should also be treated.

In this study, we aimed to present our experience in the management of trichobezoar cases, which are rare in children and present in different clinics.

MATERIALS AND METHODS

Approval was obtained from the ethics committee of our hospital for the study. Medical records of six patients who were treated in our clinic between 2009 and 2022 were collected retrospectively from the hospital database and patient files. Demographic characteristics, comorbidities, clinical symptoms, examinations, diagnosis stages, treatment methods, and recovery and follow-up results of the patients were examined.

RESULTS

All 6 patients in our series were female, the youngest was 5 years old, the oldest was 15 years old, and the mean age was 11.5 years. All patients had abdominal pain and vomiting, three patients had weight loss, and two patients had rectal bleeding and melena. All of our patients had a history of TPH for at least a period of their lifetime. Four of our patients were diagnosed with a psychiatric illness. Obsessive-compulsive disorder was diagnosed in two patients, while one patient had major depression, and one patient had generalized anxiety disorder diagnosis.

Two of our patients received psychotherapy, and four of our patients received psychiatric medication. One patient had previously been given N-acetylcysteine and another cola treatment by a gastroenterology physician. Three of our patients had a history of feces with hair. A firm immobile abdominal mass was palpable in 4 of our patients. In two of our patients, a hard foreign body was palpable on rectal examination and there was a smear with bloody mucus. Routine blood tests, standing direct abdominal X-rays, whole abdominal ultrasonography (USG), contrast-enhanced upper system X-rays, and upper gastrointestinal system endoscopy were performed on all our patients. (Table 1) USG diagnosed gastric bezoars for all patients in the series. Gastric bezoars were seen in all 4 patients in gastroscopy, and endoscopic removal was attempted but failed to succeed.

A total of 5 surgical treatments were applied to 4 patients. Gastric bezoars of 3 patients, 2 of whom had Rapunzel syndrome, were removed by laparotomy and gastrotomy. The gastric bezoar of the other patient was removed by laparoscopy-assisted minimal incision laparotomy (Fig. 1). This patient was re-operated 2 weeks later because the signs of obstruction persisted and the ileal satellite bezoar was removed. The mean hospital stay of our patients was 4.3 days. The mean post-operative hospital stay was 3 days. The mean follow-up period in our series was 10.8 years. Our bezoar patients who recovered with medical treatments did not receive a psychological diagnosis during the follow-up period. Our 4 patients who were treated surgically are still under psychiatric follow-up. There was no bezoar recurrence in our series.

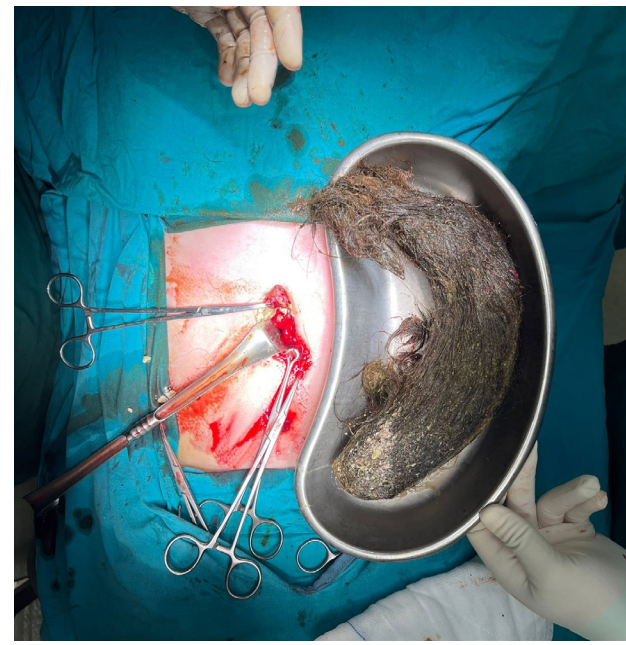

Figure 1. The gastric bezoar was removed by laparoscopy-assisted minimal incision laparotomy.

Table 1. Demographic characteristics, clinical presentation, physical examination, comorbidities, diagnosis stages, operative findings of patients

Age	Sex	Clinical presentation	Physical examination	Other	The age	Treatment Of TTM	Imaging	Endoscopy	Operative Findings
5	F	Abdominal pain, vomiting, hair in feces, bleeding rectum	Palpable mass in rectal examination and bloody mucus	TTM, TPH	3 6 12	Psychotherapy NAC	Non-specific dilated loop in X-ray	Hairy mucus	-
10	F	Abdominal pain, vomiting Hair in feces, Bleeding rectum	Palpable mass in rectal examination and bloody mucus	TTM, TPH	12 13 12	Psychotherapy Cola	Invagination in USG	Hairy small bezoar	-
		Abdominal pain, Epigastric mass, vomiting, Bleeding stomach	Epigastric immobile mass	Nocturnal TTM, TPH, OCD		SSRI antipsychotic	Gastric distension in X-ray, movable heterogeneous lesion in USG, contrast filling defect in contrast-enhanced study	Gastric bezoar	rapunzel
15	F	Abdominal pain, Epigastric mass, vomiting	Epigastric immobile mass	TTM, TPH, Depression		SSRI	Gastric distension in X-ray, movable heterogeneous lesion in USG extended to duodenum, contrast filling defect in contrast-enhanced study	Gastric bezoar	rapunzel
15	F	Abdominal pain, Epigastric mass, vomiting	Epigastric immobile mass	TTM, TPH, anxiety		SSRI	Gastric distension in X-ray, movable heterogeneous lesion in USG extended to duodenum, contrast filling defect in contrast-enhanced study	Gastric bezoar	Gastric bezoar
15	F	Abdominal pain, Epigastric mass, vomiting, melena	Epigastric immobile mass	TTM, TPH, OCD		SSRI	Gastric distension in x-ray*, heterogeneous lesion, contrast filling defect**	Gastric bezoar	Gastric bezoar and ***jejunal satellite bezoar

F: Female, *Revealed obstruction with intestinal air-fluid levels before the second surgery. **Revealed a large gastric and jejunal obstruction in a contrast-enhanced study after the second surgery. ***Jejunal satellite bezoar was observed in the second operation. TTM: Trichotillomania, OCD: Obsessive-compulsive disorder.

DISCUSSION

Trichobezoar is a rare condition with an increasing prevalence in young women aged 10–19 years with a history of psychiatric illness and accounts for approximately 6% of all bezoars.[7] Although TTM and TPH are frequently encountered in trichobezoar patients with clinical symptoms,[8] the incidence of gastric trichobezoars is around 0.5% in TTM and TPH patient groups.[9] Although the ingestion of indigestible foreign objects such as hair, nails, and plastic is relatively common in society, low-frequency states of the disease do not constitute a clinical manifestation, and continued ingestion behavior in some patients may present with fatal complications.[9] There is no information on how much time and how much hair it takes for TPH to transform into a symptomatic trichobezoar. In our series, rapunzel syndrome was encountered in one of our patients who was the same age and had hair ingestion habit for 3 years, while gastric bezoar and satellite ileal bezoar were encountered in the other. Interestingly, all the patients in our series declared that they had not eaten hair for a long time in their anamnesis. However, it was observed that two of our patients had hairy stools during hospitalization. Although the possibility of giving an incorrect anamnesis is accepted, it is possible that there are other reasons that we do not know yet that affect the location and size of the bezoar.

In our series, 2 patients recovered without any surgical treatment. These patients are the youngest of the series, aged 5 and 10 years. Both patients were admitted with a moderately mild clinical course and responded to distal rectal enema treatment. We think that the milder clinical course of these two patients is due to their early-onset TTM. Early-onset TTM is a form of TTM with the age of onset between 2 and 10 years of age and tends to resolve spontaneously with age.[10] Patients with early-onset TTM cannot hide these habits due to their young age and are quickly noticed by their families and treated. Since patients do not generally develop an additional psychiatric disease at this age, their compliance with treatment is easy.[10] Two patients in our series, aged 5 and 10, and whose TTM habits began at 2 and 6 years of age, respectively, were observed to behave in accordance with the early-onset TTM clinic.

The mean age of the other four patients in our series was 15 years. All of these patients started to eat hair after the age of ten. They had psychiatric diagnoses at the time of their admission, and all four of them showed non-compliance with psychiatric treatment. One patient was ingesting hair involuntarily at night to be able to eat hair without being disturbed. This condition, called nocturnal TTM, has been reported in the literature as a pathology that rarely causes bezoars.[11]

The admission clinics of the four patients in our series who underwent surgery were similar. In other series in the literature, the presentation of the patients depended on the size and location of the trichobezoar and the length of stay in the intestinal tract.[12] Two of the trichobezoars in our series were gastric localized, one with additional satellite bezoars, two with rapunzel syndrome, and the other two in the distal intestinal tract. Although the operation findings of the patients were different, all of them presented with symptoms of epigastric pain, vomiting including what they ate, and swelling in the abdomen. Two younger patients with early-onset TTM complained of transient abdominal pain after meals for a long time. These two patients presented to the emergency department with complaints of rectal bleeding and melena. In the trichobezoar patient group, palpation of an epigastric hard mass emphasized the need for surgical treatment, but other complaints and fm findings remained non-specific in shapİng the patient's treatment. The families of all children stated that they suspected a relationship between hair ingestion habits and clinical complaints during the history taking, but they concealed the psychiatric diagnoses. The diagnoses were made by searching the patient's history from the hospital database. It is obvious that anamnesis can be misleading in this patient group.

On physical examination, four patients had significant distention in the epigastric region and a firm immobile mass on palpation. Abdominal examinations were normal in two patients with rectal bleeding. A hard mass was palpable in rectal digital examinations. There were no signs of obstruction. There was no regional alopecia or pathological hair thinning in the physical examination of the patients. We should not be surprised when a patient with an epigastric hard mass and trichopagy history do not have alopecia. The preliminary diagnosis was made with the presence of a history of TPH and TTM and a palpable mass in the epigastrium. To confirm the diagnosis, direct abdominal X-ray, abdominal ultrasound, contrast-enhanced upper abdominal imaging, and upper gastrointestinal endoscopy were performed. A movable heterogeneous lesion, not infiltrated the wall and which may be a bezoar, was reported on USG of four patients with epigastric masses. USG detected that heterogenous lesion passed through the pylorus. Invagination occurred in a 5-year-old patient with rectal bleeding and melena. After enema application to this patient, trichobezoar was removed and the control ultrasound was reported as normal. In this patient, it was thought that the bezoar mimicked the invagination target image or actually caused a temporary invagination.[13]

On contrast-enhanced upper abdominal radiographs, heterogeneous epigastric content with mild contrast filling was interpreted as a stomach mass or bezoar in three of six patients. 2 of these patients were ours with rapunzel syndrome and the other with gastric bezoars. The first contrast X-ray of the patient with gastric bezoar and accompanying satellite ileal bezoar was reported as food residues in the stomach and prolonged gastric emptying. When the patient was admitted again with the complaint of bilious vomiting 2 weeks after the first laparoscopy-assisted operation, a second contrast study was performed (Fig. 2) and intestinal obstruction was demonstrated. However, in terms of diagnosis, it did not provide

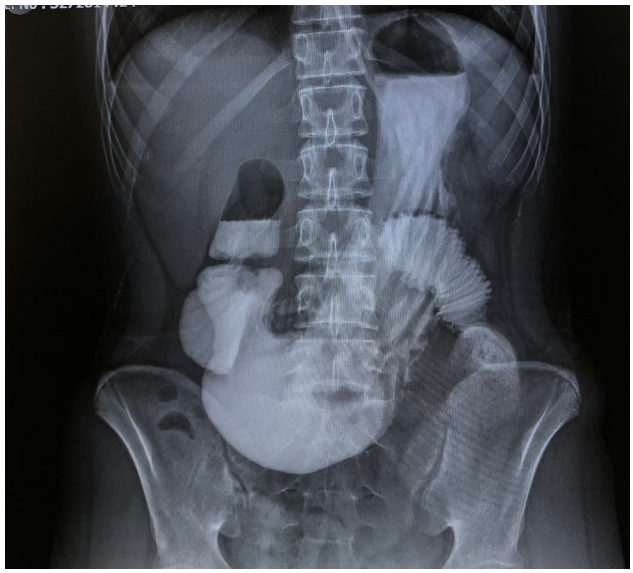

Figure 2. Intestinal obstruction was seen.

any data different from the direct abdominal X-ray of the patient and did not provide information about the cause of the obstruction.

Computed tomography (CT) was not performed on any patient in our series. It was reported in the literature that CT imaging is superior in recognizing Rapunzel's tail.[14] Since a patient was operated for the 2nd time because of a satellite bezoar detached from the tail, we think that CT can be useful in this patient group when both bezoar location and malignancy discrimination are required. However, as we will explain below if patients can be explored laparoscopically since they will already be diagnosed during USG and laparascopy regarding rapunzel syndrome and satellite additional mass, we suggest that trichobezoar patients can be diagnosed confidently without CT examinations and be protected from radiation unless there are contrast-enhanced passage radiographs and additional suspicion of malignity.

Only three published pediatric trichobezoar series were found in the literature review.[15-17] We reviewed also three literature discussing the radiological diagnosis of pediatric trichobezoars.[18-20] The results are given in Table 2.

No systematic radiological diagnosis was made in these three clinical series, as in our results. For Haggui et al., CT was the main diagnostic modality. Mirza et al. did not choose CT as diagnostic tool. They performed all other radiological examinations and made the diagnosis by endoscopy. HanBin et al. highlighted USG for the diagnosis. They also reported that they show the tail with USG. Marilina et al. diagnosed a non-occlusive bezoar of caecum with USG and reported typical bezoar appearance movable to the pressure exerted by the ultrasound probe that does not infiltrate the intestinal Wall. Some, in conclusion, the fact that many patients in the series had a history of TTM and triphagia did not seem to play a role in the selection of the examination. In the series discussing radiology, it has been stated that USG can give the expected data from CT. USG can predict the intestinal wall infiltration and tail extended to the duodenum through pylorus. In children with a history of TTM, if there is no complicated abdomen and if endoscopy will already be planned for diagnosis/treatment, endoscopy should be started after plain X-ray and USG.

Especially in the past 5 years, the endoscopic method has become a preferred treatment in the treatment of trichobezoars. Although it was reported that the success rate has increased, it is still emphasized that the method is challenging.[21] However, hopeful publications on endoscopic removal of pediatric giant gastric trichobezoars are also increasing.[22] Endoscopic removal was attempted for 4 gastric bezoar masses in the series. However, all bezoar masses were very large and hard to dissect. In the attempts made using only endoscopic greasers, almost no breaking or fragmentation could be done. There is currently no consensus in the literature on which method to use for the removal of trichobezoars. However, it is seen that electric or varicose ligators are used in series in which bezoars are successfully removed.[22] Hair pulling with endoscopic instruments alone was not sufficient for success in our patients.

A 10-year-old girl with early-onset TTM was told that Cola melted her hair in a center she admitted for due to increasing abdominal pain. Therefore, the patient had consumed half a liter of Coke every day for the past 2 months. There is evidence in the literature that endoscopic dissection and removal with the aid of Cola lavages in minimally symptomatic cases are successful.[23]

Although there was no gastric bezoar in this patient who consumed cola, esophagitis, and gastritis were detected in the upper gastrointestinal system endoscopy, which was performed due to vomiting. In our patient who was admitted with abdominal pain, rectal bleeding, and melena complaints, we thought that the abdominal pain and melena complaints might be due to gastritis rather than the intestinal mucosal erosion of the bezoar.

Our 5-year-old early-onset TTM patient has been ingesting hair and nails for the past 2 years. The patient was using N acetylcysteine (NAC) treatment, which was started with the diagnosis of TTM, at the external center, the patient was admitted because the weight gain was low. Successful results in TTM treatment with NAC have been reported in the literature.[24]

Elimination of TTM and TPH and removal of the obstructing bezoar mass are essential in the treatment of trichobezoars. Surgical removal of the trichobezoar mass can be performed using laparotomy and laparoscopy procedures.[25]

Laparotomy remains the most used technique today for its ease of removal and for the investigation of possible small intestinal tails or satellite trichobezoars. The laparoscopy-as-

Table 2. Pediatric trichobezoar series in literature and radiological findings about diagnosis

Haggui et al.	six girls aged 4–12 years epigastric pain associated with food vomiting, weight loss. Two girls had trichophagia and one trichotillomania a hard epigastric mass in all patients partial alopecia in three cases	Computed tomography was the main diagnostic modality underlined a gastric trichobezoar in five cases and an extension to the jejunum in two cases. The upper gastrointestinal opacification performed in two patients showed an aspect in favor of a gastric trichobezoar the upper digestive fibroscopy performed in two cases highlighted an intraluminal gastric mass made of hair.
Mirza et al.	17 patients, 3 were males, and 14 females. Median age was 7 years. Six patients had associated trichotillomania. In 7 patients, a history of trichophagia	Abdominal radiographs suggested an intragastric mass/bezoar in 7 cases, air fluid levels in 5 cases, and pneumoperitoneum in 1. Abdominal ultrasound showed a suspected gastric mass/bezoar in 5 cases and an intussusception in 1. In 4 patients, an upper GI contrast study or barium meal was performed to confirm suspected gastric bezoar. In 5 cases, upper GIT endoscopy confirmed a trichobezoar. In 4 patients, CT scan/MRI showed a gastric trichobezoar (from other centers)
HanBin et al.	11 cases were female, 4 cases were divorced single parent family, and 2 cases were left behind child.	The results of color Doppler ultrasonography in 8 children indicated a strong echo mass in the stomach, and 3 of them showed that the hyperechoic group extended to the duodenum through pylorus.
De Melio et al.	An 11-year-old girl burping, abdominal pain, and difficulties with eating a mass in the left hypochondrium.	abdominal ultrasound mass-like structure in the left hypochondrium with acoustic shadowing computed tomography (CT) revealed a multi-layered heterogenous mass, mixing hyperdensities, and gas bubbles, molded by a dilated stomach cavity The CT diagnosis was unequivocally trichobezoar confirmed on gastroscopy
Wijaya and Atmadja	Trichotillomania and Trichophagia since the age of 2 years	Abdominal US on the mass revealed an arc-like hyperechoic curvilinear with posterior acoustic shadow On CT, there was a heterogenous intragastric mass that extended to the superior part of duodenum with air bubbles within and there was no enhancement in the mass with intravenous contrast administration
Marilina et al.	A non-occlusive bezoar of caecum in a 7-year-old child	The typical mottled gas pattern of bezoar is visible in plain radiography of the abdomen. The plain radiography can show also the signs of intestinal obstructions barium studies showing the characteristic intraluminal filling defect, mobile in the lumen. Ultrasonography showed the typical pattern of bezoar as an intraluminal oval-shaped hypoechoic mass, surrounded by hyperechoic linear surface and marked acoustic shadow. The ultrasound images showed non-tumoral features demonstrating an intraluminal mass of the colon with well-defined margins, which was movable to the pressure exerted by the ultrasound probe and with no sign of possible intestinal wall infiltration

sisted, small-incision laparotomy technique has also been described for the removal of a bezoar mass.[26] In our clinic, laparotomy and gastrotomy or enterotomy treatment were used in the surgical treatment of bezoars. In our last patient, laparoscopy-assisted minimal incision laparotomy was preferred and the gastric bezoar was successfully removed. However, the patient was admitted with signs of intestinal obstruction 2 weeks after the first operation, and in the second operation, it was found that there was an immobile satellite bezoar that filled the entire lumen in the ileum. The enteric trichobezoar was removed as a single piece by enterotomy. In the first operation, after the gastrotomy incision was closed, the

incision line was supported with omentopexy. In the second operation, it was observed that omentopexy showed severe adhesion to the anterior abdominal wall and colon, making gastric exploration very difficult. Although it is known that pedicled omental flaps reduce anastomotic leakage with rich blood and lymph network, especially in tight and circulatory doubt anastomoses, it is believed that they are generally used to reduce the surgeon's anxiety in long enterotomy.[27] We do not recommend supporting the incision with the omentum unless circulatory impairment is suspected in the enterotomy performed during the removal of trichobezoar masses.

Occasionally, the tail of the trichobezoar may break off, forming a satellite trichobezoar.[28]

These satellite trichobezoars can cause small bowel obstruction. It was found that approximately 25% of the patients with these satellite bezoars were admitted with intestinal obstruction and 18% with peritonitis due to perforation.[29] Therefore, we strongly recommend that an additional bezoar be searched more distally in all gastric trichobezoar cases. Although we have been a clinic where the treatment of many diseases is done with laparoscopic methods for a long time, this complication, which we think is due to the rarity of bezoar cases and the fact that accompanying satellite bezoars are much rarer, gave us the message that laparoscopy should be used more carefully in the treatment of gastric bezoars. Distal intestinal exploration is very easy with laparoscopy. The important thing is to keep in mind that it is necessary to look for it. In the future, we plan to continue using the laparoscopy-assisted small incision laparotomy technique in our patients with a pre-diagnosis of bezoar.

No wound complications were observed in our patients in the post-operative period. Interestingly, there is no wound infection in the literature after these dirty surgeries.[30] In our literature review, we did not encounter recurrent trichobezoar surgery. Despite the underlying psychiatric basis, no recurrence was detected in our patients during their follow-up period of more than 10 years. Since recurrence is very rare in patients, there is no need for a long surgical follow-up. Patients whose TTM and TPH habits start after the age of 10 years of age must remain under psychiatric follow-up.

CONCLUSION

Gastrointestinal bezoars are still controversial pathologies in terms of their pathophysiology, diagnosis, and treatment methods. There is a need to create an algorithm in the management of this disease, in which series with a limited number of patients are generally presented as case reports.

Since the complaints and physical examinations of the patients can be very non-specific, there should be epigastric hard mass palpation and an age older than 10 of starting TTM, which signal that a surgical treatment will be needed.

In our series, unlike the literature, knowing the TTM and TPH stories of all patients was helpful in accelerating the diagnosis. However, we think that unnecessary radiological examinations are performed due to the lack of an algorithm in this patient group. Especially contrast-enhanced upper system radiographs do not contribute to the diagnosis. Pre-operative CT is unnecessary when rapunzel's tail and additional satellite bezoar can be seeked with USG and or careful laparascopic exploration during trichobezoar surgery. In the patient with a history of TTM and an epigastric mass, endoscopy should be planned for diagnosis and or treatment after a careful whole abdominal USG. USG can detect that a bezoar mass is mobile and not infiltrating the wall and can distinguish it from a tumoral mass.

The limitation of the present study is the low number of patients due to the rarity of the disease. However, to the best of our knowledge, this is one of the most extensive series of trichobezoar in pediatric patients.

Ethics Committee Approval: This study was approved by the Şişli Hamidiye Etfal Training and Research Hospita Ethics Committee (Date: 16.05.2023, Decision No: 3931).

Peer-review: Externally peer-reviewed.

Authorship Contributions: Concept: M.K.; Design: M.K., Ç.A.K.; Supervision: M.K., N.S.; Resource: M.K., İ.S.; Materials: M.K., M.D.; Data collection and/or processing: M.K., A.M.U., A.Y.; Analysis and/or interpretation: M.K., A.Y.; Literature search: M.K., Ç.A.K., N.S.; Writing: M.K., Ç.A.K., M.D.; Critical review: M.K., Ç.A.K., A.M.U.

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ORİJİNAL ÇALIŞMA - *ÖZ*

Çocuklarda nadir bir intestinal tıkanıklık nedeni Trikobezoar: nasıl tanı koyalım?

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AMAÇ: Trikobezoar, yutulan kıl kütlesinin sindirim sisteminde birikmesiyle oluşan, çocuklarda nadir görülen bir klinik durumdur. Bu durum, saçlarını yolmak için karşı konulamaz bir dürtüye sahip olan Trichotillomania'dan (TTM) muzdarip, psikiyatrik geçmişleri olan genç kadınlarda görülür. Oldukça nadir görülen ve değişken klinik tabloları olan bu patolojinin tanı ve tedavisi zordur. Bu çalışmanın amacı, çocuklarda intestinal obstrüksiyon bulgularının ayırıcı tanısında trikobezoar farkındalığını artırmak ve bu nadir patolojinin tanı ve tedavisini değerlendirmektir.

GEREÇ VE YÖNTEM: 2009-2022 yılları arasında hastanemiz çocuk cerrahisi kliniğinde trikobezoar nedeniyle tedavi edilen hastaların verileri retrospektif olarak incelendi.

BULGULAR: Kliniğimizde bu süreçte 6 kız hasta Trikobezoar tanısı ile tedavi edildi. Hastalar,anamnez, fizik muayene, batın ultrasonografisi (USG) ve son olarak endoskopi yardımı ile tanı aldı. USG, mide duvarı infiltrasyonu olmadığını ve heterojen lezyonun pilor yolu ile duodenuma devamlılığını gösterebildi. Tüm hastalar kontrastlı batın grafisi ile değerlendirildi. Olguların dördüne beş cerrahi girişim uygulandı. İki kez ameliyat edilen bir olguda ilk ameliyatta distal intestinal satellit bezoar fark edilemedi. İki hastada trikobezoar saptandı ancak cerrahi gerekmedi. Bu hastalar daha gençti ve erken başlangıçlı TTM'ye sahipti (10 yaşından önce). Hastalar ortalama 10,8 yıl takip edildi ve nüks saptanmadı.

SONUÇ: Trikobezoar çocuklarda intestinal tıkanıklığın nadir fakat geç tanı aldığında ölümcül komplikasyonlar yaratabilen bir sebebidir. Hastalığın yönetimi için bir algoritma izlenmemesi tanı ve tedavi aşamasında zorluklara neden olmaktadır. Özellikle psikiyatrik hikayesi bilinen hastalarda farkındalıkla yapılmış tüm batın USG ve laparaskopi gereksiz tetkiklerin önüne geçebilir.

Anahtar sözcükler: Çocuk cerrahisi; laparaskopi; trikobezoar; ultrasonografi.

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