# Trichobezoar in an 11-Year-Old Girl

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Bezoar is described as collection of organic or nonbiological material in the gastrointestinal tract. We report here a case of trichobezoar in an adolescent female with abdominal pain, fatigue and lack of appetite. She had an epigastric painless rigid mass. She was evaluated for abdominal mass, and because of the history of tricotillomania a bezoar was suspected. After the endoscopic examination, the bezoar mass was surgically removed. She is now doing well after the surgery and she had received psychiatric aid. **Key words:** trichobezoar, endoscopy

### 🖌 🛛 11 Yaşında Bir Kız Çocuğunda Trikobezoar

Bezoar, organik veya biyolojik olmayan maddelerin gastrointestinal sistem içinde birikmesi olarak tanımlanır. Burada; istahsızlık, yorgunluk, karın ağrısı olan adolesan bir kızda tanımlanmış trikobezoar olgusu sunuldu. Fizik incelemede epigastrik bölgede sert, ağrısız kitle saptandı. Hastada trikotillomani öyküsü olduğundan, karındaki kitlenin sebebi olarak bezoardan şüphelenildi. Endoskopik inceleme sonrası bezoar cerrahi olarak çıkarıldı. Cerrahi tedavi sonrasında düzelen hasta psikiyatrik yardım aldı. **Anahtar kelimeler:** trikobezoar, endoskopi

Bezoars consist of the accumulation of organic or nonbiological material in the gastrointestinal tract. Three types of bezoars have been described: Trichobezoar, phytobezoar and lactobezoar<sup>(1)</sup>. The most common type of is trichobezoar, which is caused by eating hair or rarely nondigestive materials<sup>(2)</sup>. In children and especially in adolescents, emotional disturbances may be associated with tricophagia and they may present with trichobezoars. The main symptoms of trichobezoars are abdominal pain, fatigue, nausea and vomiting.

#### CASE REPORT

Eleven-year-old girl with abdominal pain, fatigue and lack of appetite was admitted to our department. The abdominal pain was severe and it present for fifteen days. She was followed up for a night in an other hospital due to severe abdominal pain. An abdominal mass was found on examination during the follow up and she was referred for further investigation to our department.

On physical examination she was thin and weak. A painless, rigid mass was palpated at the epigastric region. It was in a shape like stomach. Initially the mass was thought to be an enlargement of an intraabdominal organ.

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The laboratory examinations were as follows; the hemoglobin was 10.2 g/dl, white blood  $15.200/\text{mm}^3$  and platelet cell count 459.000/mm<sup>3</sup>. The routine biochemical analysis of blood was within normal limits. Because of the history of tricotillomania a bezoar was suspected. The ultrasonographic examination and computerized tomography supported our diagnosis (fig. 1). Endoscopic examination, revealed a trichobezoar completely filling the stomach and extending into the duodenum (fig. 2). The large bezoar could not be removed endoscopically. The large trichobezoar mass in the stomach was completely removed by open surgery (fig. 3). Postoperative course was uneventful. After her discharge, she was followed up by a physchiatrist for her tricophagia.

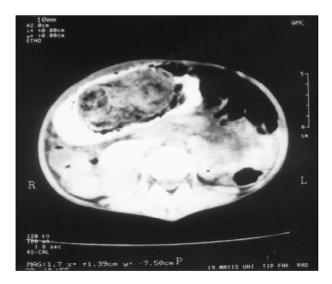


Figure 1. CT showing a mass in the stomach.

## DISCUSSION

Nondigestive materials such as hair, nylon, wool and bristle form trichobezoars whereas in phytobezoars, nondigestive vegetable fibres are present. In premature babies, undiluted milk may cause a lactobezoar<sup>(1)</sup>.

Adolescent females with emotional problems, have a tendency to develop a trichobezoar when they have trichophagia<sup>(2,3)</sup>.

In rare cases the bezoar may extend into



Figure 2. Endoscopic view of the bezoar mass.



Figure 3. Bezoar mass after surgical exploration

the small intestine, which is known as Rapunzel Syndrome<sup>(4,5)</sup>. Endoscopic examination, the mass of our patient was thought to be extending into duodenum; during surgery however, it was seen that the bezoar was located only within the stomach.

The most commonly occurring initial symptoms of trichobezoars are vomiting and weight loss, which are also seen in our patient. As the mass grows, the symptoms become more prominent. Other common symptoms are abdominal pain and lack of  $appetite^{(1.4)}$ .

Endoscopy and abdominal radiography are effective tools for detecting bezoar masses<sup>(3)</sup>. Upper gastrointestinal endoscopic examination may also show an ulcer formation, which may accompany the bezoar mass. Treatment of bezoars differ according to the type and size<sup>(6)</sup>. In the majority of trichobezoars open surgery is the only reliable therapy, whereas some of the phytobezoars may be removed by endoscopy or fragmented successfully by chemicals such as saline, papain, acetylcystein, or cellulose<sup>(2)</sup>. Our patient was successfully treated by surgery without any complication.

In conclusion, in adolescent females, in whom emotional disturbances are present, trichobezoars should be borne inmind, when an abdominal, especially epigastric mass is found. Endoscopic evaluation after radiologic examination should be performed immediately for the diagnosis. In selective cases, endoscopic surgery may be useful for the removal. Otherwise surgical excision has an excellent outcome.

### REFERENCES

- Dillon PW, Cilley RE. Bezoars, In Ashcraft KW (ed): Pediatric Surgery (3rd ed). Philadelphia. W.B. Saunders Co, 2000; 397-398.
- 2. Santiago Sanchez CA. Trichobezoar in a 11 year old girl. Bol Asoc Med P R 1996; 88: 8-11.
- Rowe MI. Bezoars, In Rowe MI (ed). Essentials of Pediatric Surgery (2nd ed). St. Louis. Mosby Year-Book Inc, 1995; 506.
- Balık E. The Rapunzel syndrome: a case report and review of the literature. Eur J Pediatr Surg 1993; 3: 171-173.
- Hirugade ST. Rapunzel Syndrome with a long tail. Indian J Pediatr 2001; 68: 895-896.
- Correa Antunez MI. Gastric bezoar. Cir Pediatr 2001; 14: 82-84.