

The Trichobezoar another Clinical Manifestation of Depression

Jalila Ters*, Ghita Alami Bassim, Hicham El bouhadouti, El bachir Benjelloun, Abdelmalek Ousadden, Khalid Ait Taleb, Oquadii Moaquit

Faculty of Medicine and Pharmacy of Fez, Sidi Mohammed Ben Abdallah University Morocco

DOI: [10.36347/sasjm.2021.v07i09.011](https://doi.org/10.36347/sasjm.2021.v07i09.011)

| Received: 29.07.2021 | Accepted: 04.09.2021 | Published: 14.09.2021

*Corresponding author: Jalila Ters

Abstract

Case Report

Trichotillomania is a repetitive behavior which consists of pulling out one's own hair. When the person ingests his or her own hair, it is called trichophagia. We illustrate a clinical case of trichotillomania combined with trichophagia, through the case of a young woman aged 23 years with depressive disorder, who is admitted to our department because of a voluminous trichobezoar, caused by a hair conglomeration, linked with repeated and old behaviours of pulling out and ingesting her hairs. The initial decision for treating the disorder is surgical.

Keywords: Trichobezoar, Trichotillomania, Trichophagia, surgery the authors have no conflicts of interest to disclose.

Copyright © 2021 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution **4.0 International License (CC BY-NC 4.0)** which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

The term trichotillomania was first used at the end of the 19th century by a French dermatologist, Hallopeau, in a case study [1].

It is a word with a Greek etymology, from the terms tri'xoz meaning hair, eti'llv meaning to pound and mani'a, habit. It indicates a repetitive behavior that consists in pulling out one's own hair[1].

People with trichotillomania may play with and/or ingest the plucked hairs it' is called trichophagia. It occurs in 5 to 20% of cases.

The term "bezoar" is thought to be derived from the Arabic word for antidote "bazahr" or "badzehr"[2, 3].

The bezoars are rare affections: we identify the lactobezoar in the infant, phytobezoar by accumulation of fibers Pharmacobezoars by conglomerations of medications or medication vehicles in the gastrointestinal tract and Trichobezoar caused by an agglomerated hair or hairy tissue found in 55% of this pathology[1, 4].

Other substances have been reported as a source of bezoars like metals, parasitics, plastics, toilet paper. Theoretically, all indigestible food materials and foreign bodies can cause bezoars[4].

Trichobezoars were first described by Baudomant in 1779, consisting of a compact mass of hair, occupying the gastric cavity to a various extent [3].

Gastric trichobezoar is a rare condition; most often asymptomatic, its diagnosis relies essentially on fibroscopy. Its treatment, poorly codified, is essentially surgical [2].

The aim of this work is to incite from this case of trichobezoar to a good psychological care of the patients presenting this disorder of the behavior which is the trichophagia in order to decrease this kind of pathology which sometimes presents diagnostic and therapeutic difficulties.

CASE REPORT

A 23 years old blind woman presented to our department with epigastric pain, vomiting, weight loss and generalized weakness.

She was in psychiatric care for depressive disorder and trichotillomania with trichophagia for 6 years.

Her physical examination revealed the presence of a large, hard, solid mass from epigastric to periumbilical region, mobile and painless with no other remarkable feature.

The patient's full blood count revealed a severe microcytic anemia (hemoglobin 6, 6 and mean corpuscular volume 67, 4).

Computer tomography revealed a large and heterogeneous mass occupying all gastric cavity containing air bubbles and calcifications measuring 14*6*5.5 cm suggestive a Trichobezoar. The treatment consisted of an anterior gastrotomy with removal of bezoar.

DISCUSSION

Trichobezoar is a rare pathology caused by ingestion and accumulation of hair in stomach [5]. When the trichobezoar extends from the stomach to the small intestine or beyond it's described Rapunzel syndrome [5].

The Rapunzel syndrome is a form of trichobezoar found in patients with a long history of psychiatric disorders, trichotillomania and trichophagia, developing in consequence gastric bezoars [6].

it interest a teenage girl, but can concern all age groups , in children bezoar can be associated with mental retardation and psychiatric disorders [7].

The stomach is the frequent site, but they may also be found in the duodenum and other parts of the intestine like duodenum, jejunum, ileum, colon, appendix and Meckel's diverticulum [3, 5].

The reason why hair collects in the stomach is not fully understood. Debakey and Oschner suggested that hair entrapment in the gastric folds is the initiating event [8].

Trichobezoars can become large and form as a cast of the stomach as occurred in our case. They may enter into the proximal duodenum, to present with symptoms of partial intestinal obstruction[5].

Trichobezoars are usually asymptomatic until they reach a large size; nausea, vomiting, epigastric or abdominal pain, weight loss and anorexia, intestinal occlusion and sub-occlusion acute appendicitis and vitamin B12 deficiency can be identified[9-11].

Complications of trichobezoars include gastrointestinal obstruction (26%), bleeding (10%), perforation, malabsorption, and nutritional deficiencies. gastric perforation is rare and only three cases have been reported in the literature and Pancreatitis with cholangitis due to obstruction of Ampulla of Vater by the bezoar in only four cases [12].

The mortality rate can reach 30% because of the associated complications [13]. On clinical examination, a well-defined abdominal mass that is

smooth, firm and mobile in the epigastric area is found in 85% of patients. Alopecia may also be noted in these patients [14].

Biology finds anemia and hypoalbuminemia have also been described [14]. Abdominal X-ray may show a heterogeneous gastric mass with signs of intestinal obstruction.

Barium studies may show a freely mobile intraluminal mass. Ultrasound echography may show an echogenic arc-like surface with sharp posterior acoustic shadowing and can pick up 88% of trichobezoar in experienced hands, whereas CT scan may reveal an intraluminal mass of concentric rings and can diagnose 97% of bezoars[15].

MRI allows to delineate the mass, specify its extension and eliminate complications[16]. Endoscopic examinations play an important diagnostic and therapeutic role of this disease. A trichobezoar is typically observed in the gastric fundus [5,11,13–15].

Treatment although phytobezoars can dissolve papain and cellulase through coca-cola trichobezoars are resistant to enzymatic degradation and drug therapy [15].

and even endoscopy remains ineffective in treating Trichobezoar, endoscopic fragmentation is generally ineffective due to the high density of the hair conglomerate[15].

The management of a bezoar needs to remove the mass and to prevent recurrence by psychiatric follow up; depending on its consistency, size, and location, bezoar removal may occur by endoscopy or surgery [11].

Endoscopy can be effective for (phytobezoars) and (lactobezoars), but is less effective for trichobezoars, particularly those that are large (>20 cm)[11].

Open surgery or laparotomy has been the treatment of choice for large trichobezoars. Surgical removal is accomplished by gastrotomy or enterotomy. Traditionally, a gastric trichobezoar was removed by the gastrotomy through an upper midline laparotomy [11] but, surgery may have postoperative complications, like perforation, pneumonia, bleeding, infections[17].

Since the advent of minimally invasive surgery, surgeons now use laparoscopic techniques for small to moderate size bezoars [11].

Various other methods like extracorporeal shock wave lithotripsy, intragastric administration of enzymes (pancreatic lipase, cellulose), and medications (metoclopramide, acetylcysteine), bezotomes and

bezotripts (medical devices that pulverize bezoars either mechanically or with acoustic waves) have been used and demonstrate varying success [2,11,17].

Few recurrences are reported after the initial removal of bezoars. To decrease recurrence, longterm psychiatric follow-up is advised. Modalities of treatment include cognitive behavior therapy and pharmacological treatment. The etiology of trichotillomania, includes impulse-control disorders, obsessive-compulsive disorders, behavioral problems, and addiction[2,11,17].

CONCLUSION

This case illustrates a real psychological problem that is trichotillomania and trichophagia our patient had even a suicidal intent.

The management of trichobezoar is not realized without a good management of this major psychiatric disorder.

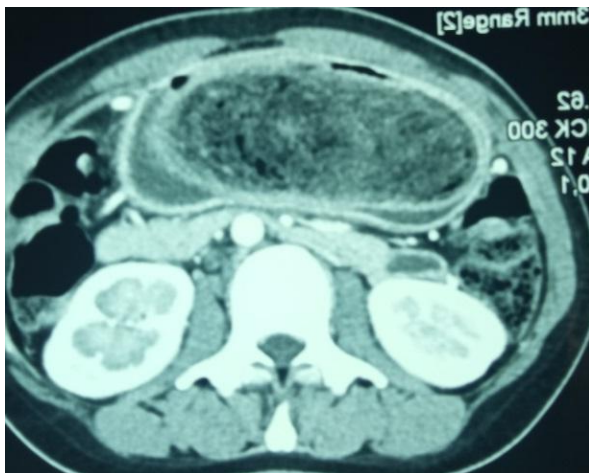


Fig-1: The abdominal computed tomography. The cavity of stomach is filled with a large heterogeneous mass



Fig-2: A gross image of the removed trichobezoar



Fig-3: Gastrotomy

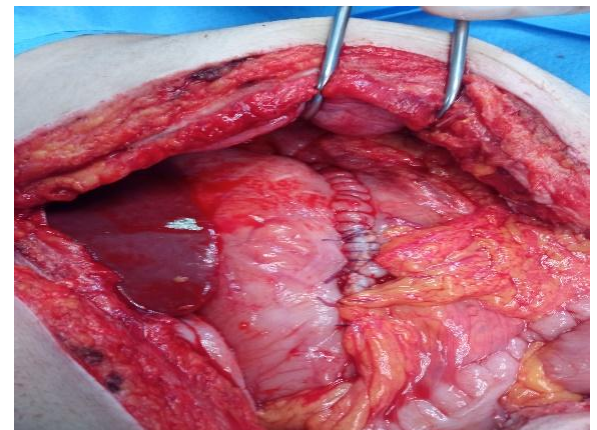


Fig-4: suturing and epiploplasty of gastrotomy

RÉFÉRENCES

1. Daudin, M., & Calteau, M. (2017, November). La trichotillomanie. À propos d'un cas de trichobézoard. In *Annales Médico-psychologiques, revue psychiatrique* (Vol. 175, No. 9, pp. 803-807). Elsevier Masson.
2. Ousadden, A., Mazaz, K., Mellouki, I., & Taleb, K. A. (2004, May). Le trichobézoard gastrique: une observation. In *Annales de chirurgie* (Vol. 129, No. 4, pp. 237-240). Elsevier Masson.
3. Tiago, S., Nuno, M., João, A., Carla, V., Gonçalo, M., & Joana, N. (2012). Trichophagia and trichobezoar: case report. *Clinical practice and epidemiology in mental health: CP & EMH*, 8, 43.
4. Revue du diagnostic et de la prise en charge des bézoards gastro-intestinaux [Internet]. (2021). [cité 13 juill 2021]. Disponible sur: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4400622/>
5. Caiazzo, P., Di Lascio, P., Crocoli, A., & Del Prete, I. (2016). The Rapunzel syndrome. Report of a case. *Il Giornale di chirurgia*, 37(2), 90.
6. Lopes, L. R., Oliveira, P. S. P., Pracucho, E. M., Camargo, M. A., Coelho Neto, J. D. S., & Andreollo, N. A. (2010). The Rapunzel syndrome: an unusual trichobezoar presentation. *Case reports in medicine*, 2010.

7. O'sullivan, M. J., McGreal, G., Walsh, J. G., & Redmond, H. P. (2001). Trichobezoar. *Journal of the Royal Society of Medicine*, 94(2), 68-70.
8. Rabie, M. E., Arishi, A. R., Khan, A., Ageely, H., El-Nasr, G. A. S., & Fagihi, M. (2008). Rapunzel syndrome: the unsuspected culprit. *World journal of gastroenterology: WJG*, 14(7), 1141.
9. Finale, E., Franceschini, P., Danesino, C., Barbaglia, M., & Guala, A. (2018). Rapunzel syndrome: how to orient the diagnosis. *Pediatric reports*, 10(2), 37-38.
10. Dogra, S., Yadav, Y. K., Sharma, U., & Gupta, K. (2012). Rapunzel syndrome causing appendicitis in an 8-year-old girl. *International journal of trichology*, 4(4), 278.
11. Altonbary, A. Y., & Bahgat, M. H. (2015). Rapunzel syndrome. *Journal of translational internal medicine*, 3(2), 79.
12. Vellaisamy, R., Iyer, S., Chandramohan, S. M., & Harikrishnan, S. (2020). Rapunzel syndrome with cholangitis and pancreatitis—A rare case report. *Open Medicine*, 15(1), 1137-1142.
13. Tayyem, R., Ilyas, I., Smith, I., & Pickford, I. (2010). Rapunzel syndrome and gastric perforation. *The Annals of The Royal College of Surgeons of England*, 92(1), e27-e28.
14. Hamid, M., Chaoui, Y., Mountasser, M., Sabbah, F., Raiss, M., Hrora, A., ... & Ouazzani, H. (2017). Giant gastric trichobezoar in a young female with Rapunzel syndrome: case report. *The Pan African Medical Journal*, 27.
15. Iwamuro, M., Okada, H., Matsueda, K., Inaba, T., Kusumoto, C., Imagawa, A., & Yamamoto, K. (2015). Review of the diagnosis and management of gastrointestinal bezoars. *World journal of gastrointestinal endoscopy*, 7(4), 336.
16. Cheikh, A. B., Gorincour, G., Dugougeat-Pilleul, F., Dupuis, S., Basset, T., & Pracros, J. P. (2004). Trichobézoard gastrique révélé par une anémie chez une adolescente: association échographie-imagerie par résonance magnétique (IRM). *Journal de Radiologie*, 85(4), 411-413.
17. Kim, S.C., Kim, S.H., Kim, S.J. (2016). A Case Report. *Medicine (Baltimore)*. 3 juin 95(22):e3745.