

# TRICHOBEZOAR: A Retrospective Analysis in Hadoti Region

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## Abstract:

**Objective** - The surgical removal of a trichobezoar is the rare end complication of the psychiatric disorders trichotillomania and trichophagia. The more severe form of the disease is termed Rapunzel syndrome, where the bezoar extends from the gastric body beyond the pylorus into the duodenum. Most of patients presenting to hospital with symptom of trichobezoar require surgical intervention.

**Methods** - A retrospective review of all cases of trichobezoar at MBS and NMCH hospital, Kota from 2014 to 2016 was performed. Aim of this study is to analyze demographic data, presenting complaints, imaging, surgical treatment, subsequent management, recurrence and role of psychiatry treatment.

**Results** - All 10 patients were female, ages 12 to 26 years (mean, 18.7 years). Most patients were accurately diagnosed with clinical history, USG abdomen and CECT abdomen. All patients undergone exploratory laparotomy for definitive treatment. At laparotomy, 6 patients were found to have post pyloric extension of the trichobezoar (60%). One case has extension up to terminal part of ileum. There were no other surgical complications or recurrences requiring further exploration.

**Conclusions** - Our series of trichobezoar patients appear to have a high rate of Rapunzel syndrome, and perhaps post pyloric extension should be considered the rule rather than the exception. Our series demonstrates that diagnosis can be established with a thorough history combined with radiography, and treatment should be a combination of laparoscopy and/or laparotomy with psychiatric consultation.

**Keyword** - Trichobezoar, Rapunzel syndrome.

## Introduction

A bezoar is an indigestible accumulation of foreign materials in the gastrointestinal tract. Because of the stomach's large capacity, gastric bezoars do not become symptomatic until they are very large. The masses are classified according to their contents. Phytobezoars include fruit fibers or plants, lactobezoars are composed of milk, trichobezoars are concretions of hair, plastobezoar, mixed bezoar.

Trichobezoars are rare conditions that consist of hair bundles in the stomach or small bowel. In young women,

trichobezoars are associated with psychiatric disorders such as trichotillomania (hairpulling) and trichophagia (hair swallowing).

The Rapunzel syndrome is a rare type of trichobezoar that extends into the small intestine. Some types of bezoars, including small trichobezoars, can be removed after endoscopic fragmentation. However, very large trichobezoars, such as those in a patient with Rapunzel syndrome, are resistant to endoscopic fragmentation due to the dense hair mass. Therefore, these masses must be surgically removed, despite the large scars that result

**Material & Method**

A retrospective analysis of 10 patients was performed who were operated with diagnosis of trichobezoar at MBS and NMCH hospital, Kota

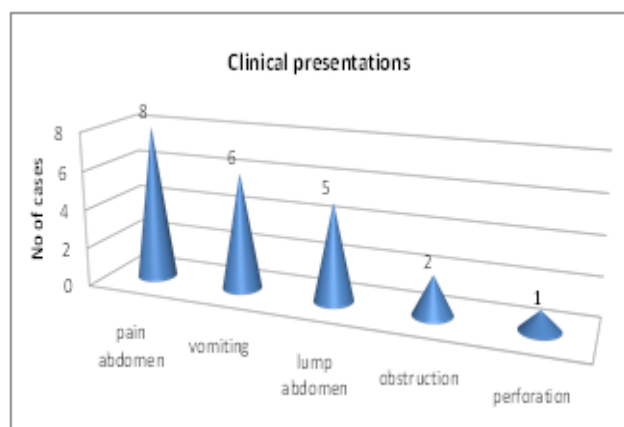
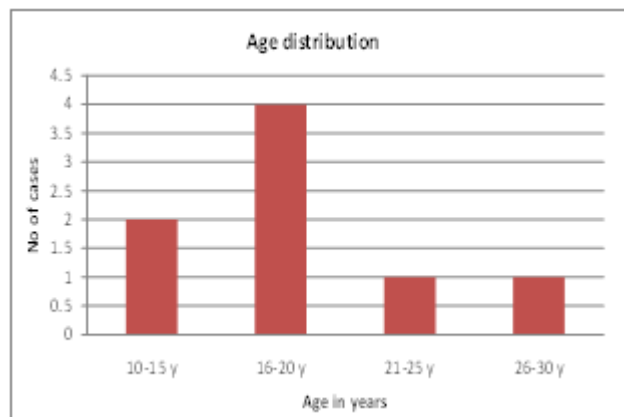
Age, sex, clinical features, diagnostic work up, surgical treatment and post operative complications were studied

History of psychiatric illness or treatment studied in patients.

**Results**

All 10 patients were female, Aged between 12 to 26 years (mean, 18.7 years) 2 patients had history of antecedant treatment for psychiatric treatment. Most patients were accurately diagnosed with clinical history , USG abdomen and CECT abdomen and UGI endoscopy. All patients undergone exploratory laparotomy for definitive treatment. Wound infection was obseverd as the most common complication Post operatively.

No recurrence was seen in our series.



**Discussion**

Trichobezoar is a rare condition and is more common in young women’s associated with trichophagia .Associated with psychiatric disturbances; however no age group is exempted. The insidious development with no symptoms accounts for its late presentation and large size at the time of diagnosis.The most common features is abdominal pain, lump and intestinal obstruction, the patient may present with progressive weight loss, loss of appetite, Nausea and vomiting may also be present. Trichobezoar have a low prevalence but with a high mortality due to ulcers leading to gastrointestinal bleeding, perforations, intussusceptions and obstruction.

An extreme rare variety of trichobezoar known as Rapunzel syndrome with a long tail of hair strands extends from the main mass in the stomach along the small intestine have been also reported.

The majority of cases preoperatively have been diagnosed by USG, CT scan A preliminary Endoscopy will confirm the diagnosis Surgical removal by gastrotomy was the treatment of choice in the past, However presently endoscopic and laparoscopic approaches are the most commonly used techniques. Majority of cases of trichobezoar or Rapunzel syndrome present late. A high index of suspicion is essential. We should always evaluate for trichophagia, psychiatric disorder, and social factors as previously discussed and also examine for alopecia, which may reveal a characteristic pattern of bald patches on scalp.

Long-term psychiatric follow-up is important for prevention of recurrence. Although recurrence is rare as the trauma of surgery becomes an antidote to provocation of another episode, prevention of recurrence with psychiatric therapy must start in the perioperative period. Cognitive behavioral therapy, particularly habit-reversal training and parental counseling are part of the treatment.<sup>[2,8]</sup> The parents are advised to remain vigilant and give emotional support to the child to prevent recurrence.<sup>[4,7]</sup> Selective serotonin reuptake inhibitors have the highest efficacy in the treatment of trichotillomania.<sup>[2,8]</sup>

## Conclusion

In conclusion, trichobezoar should be considered in young females presenting with non-specific abdominal complaints. It can be diagnosed with USG, CECTabdomen. Recent literature shows Endoscopy can be used as a diagnostic modality and therapeutic in small ones. However conventional laparotomy is considered to be the treatment of choice in most trichobezoar and with Rapunzel syndrome. In addition to the acute surgical treatment, psychiatric consultation is necessary in order to prevent relapses.

## Bibliography

- [1] Diefenbach GJ, Reitman D, Williamson DA (2000) Trichotillomania: a challenge to research and practice. *Clin Psychol Rev* 20:289–309
- [2] Carr JR, Sholevar EH, Baron DA (2006) Trichotillomania and trichobezoar: a clinical practice insight with report of illustrative case. *J Am Osteopath Assoc* 106:647–652
- [3] Bouwer C, Stein DJ (1998) Trichobezoars in trichotillomania: case report and literature review. *Psychosom Med* 73:653–656.
- [4] Sehgal VN, Srivastava G (2006) Trichotillomania ± trichobezoar: revisited. *J Eur Acad Dermatol Venereol* 20:911–915

- [5] Debakey M, Oschner A (1939) Bezoars and concretions, comprehensive review of literature with analysis of 303 collected cases and presentation of 8 additional cases. *Surgery* 5:132–160
- [6] Vaughan ED Jr, Sawyers JL, Scott HW Jr (1968) The Rapunzel syndrome. An unusual complication of intestinal bezoar. *Surgery* 63:339-343.
- [7] Naik S, Gupta V, Rangole A, Chaudhary AK, Jain P, Sharma AK (2007) Rapunzel syndrome reviewed and redefined. *Dig Surg* 24:157-161
- [8] Palanivelu C, Rangarajan M, Senthilkumar R, Madankumar MV (2007) Trichobezoars in the stomach and ileum and their laparoscopy- assisted removal: a bizarre case. *Singapore Med J* 48:37-39
- [9] Khattak S, Kamal A (2004) Trichobezoar. *Gomal J Med Sci* 2:25-26
- [10] Hoover K, Piotrowski J, Pierre K, Katz A, Goldstein AM (2006) Simultaneous gastric and small intestinal trichobezoars-a hairy problem. *J Pediatr Surg* 41