ORIGINAL RESEARCH PAPER

General Surgery

A RARE CASE OF MULTIPLE INTESTINAL TRICHOBEZOAR CAUSING INTESTINAL OBSTRUCTION IN A YOUNG FEMALE PATIENT

KEY WORDS:
hair,trichobezoar, trichotillomania

Dr Himesh kumar Dubey	Third year general surgery resident
Dr. Maulik.B Mehta	Assistant professor of surgery
Dr. Pankaj.R Modi	Associate professor of surgery
Dr. Abhigyan Das*	second year general surgery resident*Corresponding Author

ABSTRACT

A trichobezoar is an accumulation of hair inside the gastrointestinal tract. It's usually seen in patients of trichotillomania. **Case Report:** A-17 year old girl with features of subacute intestinal obstruction was operated in civil hospital ahmedabad and was found to have multiple hairballs inside of her small bowel. Enterotomy done and hairballs were extracted, ileoileal exteriorisation was done. **Conclusion:**Trichobezoar is a rare disorder which can often present as a surgical emergency.

INTRODUCTION

Trichotillomania is a rare type of impulse control disorder where a person (usually a young female) has a psychiatric tendency to pluck and swallow his/her own hair.

Trichobezoar is an aggregation of udigested hair inside the gastrointestinal tract of the affected patient which can be patient's own hair or rarely hair from head of dolls or animals. Bezoar in general is a solid concretion of udigested materials that can be hair as in trichobezoar, fruits and vegetables as in phytobezoar, or undigested medicines(pharmacobezoar). In ancient times, bezoars developing in animals were used as antidotes to snake bite and other poisoning.

Usually trichobezoars(or bezoars in general) are asymptomatic until their size becomes large enough to cause symptoms in gastrointestinal tract.

A rare form of trichobezoar is known as Rapunzel syndrome where a large mass of hair accumulates in stomach and extends beyond the duodenum into the small bowel of the patient,sometimes even reaching upto colon producing a long tail-like extension of hair. It always requires surgical extraction.

Patients of trichotillomania often have large chunks of hair missing from their scalp thus aiding in clinical diagnosis.

We present here a case of a 17-year old female patient with features of subacute intestinal obstruction due to trichobezoar.

CASE REPORT:

A 17-year old girl presented in emergency at Civil hospital ahmedabad with severe colicky abdominal pain with multiple episodes of bilious vomiting since 3 days. Patient had history of dull aching abdominal pain with constipation since last 2 months. No past medical or surgical history. On general examination, she was a thinly built girl with tachycardia and agitation. Abdominal examination revealed generalised abdominal guarding with hyper peristalsis. Blood examination revealed raised leucocytes level of 18000/mm^3 with Hemoglobin level of 10 mg/dl. Erect abdominal xray showed multiple air fluid levels suggesting intestinal obstruction. Computed Tomograph scan showed markedly dilated small bowel loops with 3 oval hypodense foreign body with air pockets in proximal small bowel with metallic clips inside them. Decision taken to do emergency laparotomy. On exploring through a mid-midline incision, 150cm of small bowel distal to duodeno-jejunal flexure was dilated with 3 solid palpable mass within the lumen of proximal ileum. Enterotomy done and 3 hairballs of size 6cm×3cm, 7cm×3cm and 6cm×10cm extracted from small bowel. Stomach also palpated for any lump but found normal. As their were also multiple dusky patches in the bowel, decision was taken to do ileostomy with plan for revision laparotomy if required. Post op period was uneventful. Patient Started on oral diet on Post op Day 2 and drain removed on Post op Day 4. On retrograde questioning from patient and relatives,the history of ingestion of her own hair by the patient was revealed,but no psychiatric consultation was ever done. Psychiatric evaluationwas done for the patient before discharge and advised regular followup.

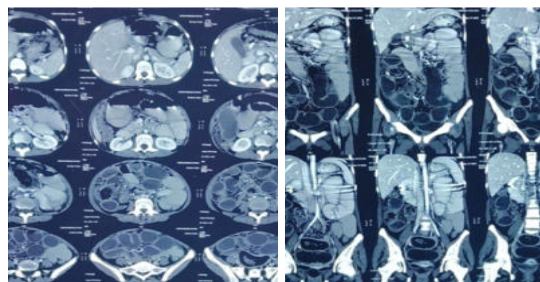
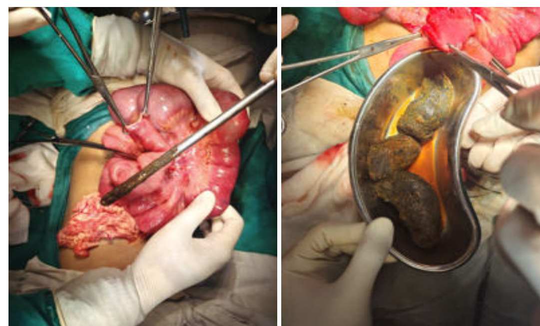


Figure1. Pre op CT scan of the patient.



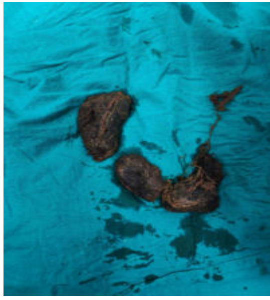


Figure2. Intra-Op showing hair coming out from bowel on suction and extracted trichobezoars.

DISCUSSION

The word bezoar derived from Arabic wordd"bedzehr" or Persian word "padzhar", meaning "protecting against a poison". In ancient world, bezoars derived from animal guts were used as antidotes to poisons and even today are part of traditional Chinese medicine.

Most cases of trichobezoar are associated with depression and anxiety leading to trichotillomania and seen commonly in females because of the long hair.

In our patient, there was no alopecia. Neither the initial history was suggestive of any psychiatric illness. Initially we were suspecting malrotation of gut or abdominal Koch's as the cause of Acute abdomen. CT scan was done keeping these two differentials in mind.

It is Estimated that only 1% patients of trichphagia develop trichobezoar. Trichobezoar form when hair because of their slippery surface escape peristalsis.

Patchy alopecia and history of trichophagia help reach the diagnosis if presented in emergency as in our case.

Management and Treatment of trichobezoar should involve not only the surgical extraction of the mass but also addressing the underlying mental or emotional state of the affected individual. Depending on it's size and location, removal of trichobezoar can be achieved by endoscopy (small and in stomach) or surgery. To decrease or prevent recurrence, long term psychiatric evaluation and behavioural therapy is advised. Factors like mental retardation, depression and chronic anxiety needs to be addressed through psychotherapy as well as pharmacotherapy if required.

CONCLUSIONS

Trichobezoar although being a rare entity may lead to a surgical emergency and requires a thorough history taking and high index of suspicion. Laparotomy or laparoscopic removal should be performed if presenting in emergency as acute abdomen. Psychiatric consultation is a must for such patient to prevent recurrences.

REFERENCES:

[1]. Mohammed AA, Arif SH, Qadir RH, Salih AM, Kakamad FH. Surgical extraction of a giant trichobezoar: A rare presentation. Int J Case Rep Images 2018;9:100929Z01AM2018.

[2]. Diefenbach GJ, Reitman D, Williamson DA. Trichotillomania: A challenge to research and practice. Clin Psychol Rev 2000 Apr;20(3):289–309. [CrossRef] [PubMed]

[3]. Vaughan ED Jr, Sawyers JL, Scott HW Jr. The Rapunzel syndrome. An unusual complication of intestinal bezoar. Surgery 1968 Feb;63(2):339–43

[4]. Tiago S, Nuno M, João A, Carla V, Gonçalo M, Joana N. Trichophagia and trichobezoar: Case report. Clin Pract Epidemiol Ment Health 2012;8:43-5