ABSTRACT

Bezoar is basically a collection of indigestible in the gastrointestinal tract. Psychiatric disorders, Trichotillomania i.e. habit of pulling ones hair and trichophagia i.e. habit of chewing/engulfing the common causes of therefore developing gastric trichobezoar. Trichobezoar has been described very well in the surgical/diagnostic literature, as compared in psychiatry. The diagnosis of Trichobezoar is completely based on imagiologic evidence. Literature revealed a number of treatment modalities including endoscopy, laparoscopy, and laparotomy. We report the case of a large trichobezoar that occurs in a 23-year-old female who had trichotillomania presented with colicky epigastric pain, nausea, postprandial vomiting, and weight loss. The trichobezoar was removed surgically. It is crucial to treat comorbid accompanied this disorder with a psychiatric consultation along with surgical treatment.

KEY WORDS: Trichobezoar, Trichotillomania, Trichophagia, Lamerton’s Sign, Rapunzel Syndrome, Laparotomy, Gastractomy.

INTRODUCTION

Trichobezoar were first described by Baudomant in 1779, consisting of a compact (semisolid) mass of hair, occupying the gastric cavity. The term “bezoar” is thought to be derived from the Arabic word for antidote – “badzehr” or “bazahr”, because stones found from the gastrointestinal tract having medicinal properties. Bezoars are categorized into five major groups: Trichobezoar (hair), phytozoar (vegetable), lactobezoar (milk/curd), pharmacobezoars and miscellaneous or foreign body bezoar (fungus, sand, paper, etc) often found in children and teenage girls. Tricho bezoar is a rare medico-surgical condition which exclusively affect the young women, and a late complication of trichotillomania; a psychiatric disorder characterized by the uncontrollable urge to pull out one's hair. Trichobezoar is confined to stomach however if it extends from stomach to the small or large intestine (colon), called Rapunzel syndrome which was first reported in literature by Vaughan. Trichobezoar may also be associated with other psychiatric disorders such as mental and obsessive compulsive disorder, abuse, pica, anorexia nervosa, and depression. The prevalence rate varies from 0.06% to 4%. We are reporting the very rare and unusual case of gastric trichobezoar without small bowel extension that nonetheless presented with clinical and radiographic signs of intermittent small bowel obstruction that was successfully removed via gastrostomy following laparotomy. A written informed consent was obtained from the patient’s husband for publication of this case report.

CASE REPORT

A 23-year-old married woman presented to our institutional hospital with two months of episodic, colicky, sharp epigastric pain, bloating, weight loss, nausea and vomiting of increasing frequency and severity. While examining, it was revealed that there is an intermittently palpable epigastric large, solid mass (epigastric tenderness) felt with absence of bowel sounds. On physical assessment, her hairs were cut in an odd way even with shorter hair in front without any evidence for alopecia. Upon admission, a complete blood count was notable for microcytic anemia, with Hb of 8gm/dl, a (MCV) mean corpuscular volume of 60.4um, mean corpuscular hemoglobin (MCH) 17.3pgm, a mean corpuscular hemoglobin concentration (MCHC) of 29.5%. A differential show 80% neutrophils and 11% lymphocytes but no left shift. Other test such as; serum lipase, LFTs (liver function test) found to be in normal range. Ketones were notable in urine analysis. An abdominal ultrasound revealed a reflective structure that was not allowing in-depth evaluation of the underlying cause/problem. CT scan was recommended for the further clarification. The scan showed a distended stomach which revealed a gastric outlet obstruction, possible small bowel obstruction too in the region of the previously reported mass in ultrasound. All these findings are compatible to trichobezoar. The decision was made for laparotomy by the surgical team. A surgical procedure i.e. laparotomy was performed under general anesthesia with E.T.T (endotracheal intubation).
An incision to the stomach (gastrostomy) was given that identified a thick rounded mass in her stomach. After removing it, the gastrectomy was closed by the surgeon with the help of stapling device. The time required for this procedure was 4 hours approximately and it was done within required time without any complications. The patient was kept NPO and parenteral nutrition was provided. Postoperatively the patient was on nasogastric tube feeding till further orders. The patient was discharged on the fifth postoperative day, showing none of any complication.

FIGURE-1: AXIAL COMPUTED TOMOGRAPHY SHOWED THE OBSTRUCTION OF ENTIRE LUMEN OF THE STOMACH WITH TRICHOBEZOAR

FIG-2: REMOVAL OF TRICHOBEZOAR DURING SURGERY

FIG-3: TRICHOBEZOAR WITH TAIL

DISCUSSION

Trichobezoar is basically associated with trichotillomania a psychiatric psychiatric disorder; in which patient repeatedly heave out their hairs by themselves. Trichotillomania affects about 1% of the population. Trichobezoar is most frequently occurring in females of about 13-20 years of age with a psychiatric history. Our patient was eventually diagnosed with trichobezoar. She denied for ingesting hairs as most patients do. Trichobezoar is basically an ingested material found in gastrointestinal tract most likely in stomach. The slippery strands of hairs withhold in the mucosal folds of the stomach forming an intertwined/tangled hair ball that takes the shape of the stomach, which is ineffectively moved by peristalsis. Clinically trichobezoar is presented with gastric outlet and bowel obstruction as it is found in stomach. This may produces symptoms related to obstruction i.e. nonbilious vomiting, chronic failure to thrive, dehydration, and colicky abdominal pain in about 33-37% of the patients. Lamerton’s sign may also present i.e. a palpable mass in epigastric region. Literature review revealed that endoscopic removal is possible but little complicated or complex so surgical removal by laparotomy is preferred. Our patient presented with gastric outlet obstruction. Laparotomy was proved successful in our case; trichobezoar was removed without any serious complication. There is no evidence behind the dominancy of endoscopy over laparotomy in literature, Trichotillomania and trichophagia are considered to be a type of pica which is the persistent craving of eating non-food items i.e. hairs, soap etc. It is crucial to treat comorbid accompanying this disorder with a psychiatric consultation along with surgical treatment. However, psychiatric disorders (i.e. depression, anorexia nervosa) in which genetic factor might engage in recreation of trichobezoar, That’s why psychiatric referral is considered to be the crucial for successful treatment and deterrence of recurrence. Psychotherapy appear to be the prime measures as most of the psychiatrists don’t agreed with, not even temporarily to treat accompanying disorders. Unfortunately,
such treatment is not consistently beneficial, but combined therapy appears to be effective.

CONCLUSION

It is although a rare case but should not be underestimated for the early diagnosis and treatment of trichotillomania. Laparotomy is considered to be the best surgical approach. Treatment should be based on pharmacotherapy and psychotherapy.

Author’s Contributions:
Maira Maqsood Alam: Identified the patient and wrote the manuscript.
Prince Naeem: Supposed the idea for publication and wrote the manuscript and formulate the final approval.
Rizwan Ahmed Khan: Carried out diagnosis, surgical procedure and final approval to the manuscript.

REFERENCES