Case Report

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Trichobezoar due to psychiatric comorbidity: A rare case report

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ABSTRACT

Trichobezoar (hair ball) is characterized by the accumulation of hair in the gastrointestinal tract. It is formed by trichophagia (ingestion of hair) and often associated with trichotillomania (compulsive hair pulling) and other psychiatric disorder or neurological problems. We report a case of 19-year-old female who had a trichobezoar. Trichotillomania and depression are the common psychiatric disorders associated with trichobezoar; hence, it should be always looked for and treated along with its surgical management. The patient underwent laparotomy during which a large trichobezoar was removed. This case report highlights the importance of psychiatric and comprehensive approaches.

KEY WORDS: Liaison psychiatry, Rapunzel syndrome, trichobezoar, trichophagia, trichotillomania

INTRODUCTION

Trichobezoar is a rare pathology which swallowed hairs accumulate in the stomach. The formation of trichobezoar starts with trichotillomania (hair-pulling disorder) usually in response to increased stress followed by a compulsive behavior of eating of hair. In most cases, the trichobezoar is confined within the stomach. In some cases, however, the trichobezoar extends its tail in the small and large intestine. This condition called Rapunzel syndrome. It is named after the fairy tale girl Rapunzel who had long hair. The Rapunzel syndrome was first described by Vaughan in 1968 [1]. In the early stages, most trichobezoars remain asymptomatic for a long time with the most common presentation being a non-tender lump in the epigastric region, later development of nausea, pallor, malnutrition, weight loss, gastrointestinal obstruction, hematemesis, and perforation [2]. Trichobezoar is associated with iron deficiency anemia, which often results in pica (the compulsion to ingest non-nutritious substances). It manifests, by itself, as trichotillomania and trichobezoar. Another important predisposition to bezoar formation in medical disease conditions is post-partial gastrectomy, post-vagotomy, diabetes mellitus with gastroparesis, Guillain-Barre syndrome, myotonic dystrophy, hypothyroidism, and cretinism [3]. Psychiatric comorbidities associated are depression, obsessive-compulsive disorder, body dysmorphic disorder, eating disorder, anxiety disorder, alcohol, and substance abuse [4-6]. Complications and fatalities have been reported if not diagnosed in proper time and in untreated cases [7].

Interestingly, the term "bezoar" is derived from Arabic bedzehr and in Persian Panzehr, both are meaning counter poison or antidote [8]. Trichobezoar is formed by ingesting hairs, 80% of patients were under 30 years of age, and 90% of the cases were female [9].

CASE REPORT

A 19-year-old female presented to the surgery outpatient department with complaints of abdominal pain and distention for 10 days. Her symptoms started 2 months before and became aggravated 4 days before her visit. She had any medical history and was on any medication, but she had symptoms of depression and anxiety features for 2 years without any treatment. She belongs to a lower middle cast family with low socioeconomic status. She is eldest of other siblings. Her birth milestone and social development were unremarkable. She was treated discriminatingly by her parents comparing to her other siblings. There is no family history of psychiatric illness.

On general examination, she looked ill and pale along with tender palpable mass in the abdomen. Ultrasonography and abdominal computed tomography scan were done which reported gastric trichobezoar with early feature of

Rapunzel syndrome. A transnasal esophagogastroduodenal endoscopy also done which identified a long and large gastric trichobezoar. The routine laboratory findings, including a complete blood cell count, serum electrolyte, and liver and renal function test, were all within normal range. The diagnosis of trichobezoar was made. She underwent an elective surgery, and trichobezoar removed by laparotomy. Figure 1 depicted an extracted trichobezoar after laparotomy was done; Figure 2 showed trichobezoar inside the stomach during laparotomy; Figure 3, transnasal esophagogastroduodenal endoscopy identified a long gastric trichobezoar. After the surgery, the patient reported improvement of her abdominal symptoms. The Liaison Psychiatry Department of Mental Health Hospital, Taif, was informed and was referred for our opinion on the 4th post-operative day. On the first psychiatric evaluation, rapport (concerned understand each other's feelings or ideas and communicate well) was established, and detailed history was taken. After closely examined, the patient admitted her habit of plucking hair and swallowing it when no one is around. The parents also reported that they have witnessed in which she was found to plucking her hair. On inquiry, the patient said that she had mounting tension before the plucking habit and relief once hair was plucked, and she also complained that her parents were expressing more love toward her younger brother than her, and she was feeling sad.

Figure 1: Extracted hair mass (trichobezoar) after laparotomy

Figure 2: Hair mass inside the stomach (trichobezoar) during laparotomy

We have referred her to clinical psychologist for her behavioral therapy such as habit reversal training and cognitive behavior therapy along with a prescribed medication of citalopram (20 mg) once daily, and after discharge from the surgery department, she used to follow at psychiatric outpatient department at our hospital, and an improvement of her psychiatric symptoms observed.

DISCUSSION

The patient in this case developed depressive symptoms and anxiety features for long around 2 years in the form of sadness of mood and remaining aloof and detached from the peers which went unnoticed. The patient was gradually started pulling her hair and swallowing it, whenever she was feeling tensed and got relief once hair was plucked. This incidence was undetected in both home and school settings. The patient frequently started complaining pain in the abdomen for which she was referred to her family physician, and she received symptomatic treatment. Later, she formed a lump in the epigastric region.

On the basis of clinical findings pain in the abdomen and lump in the epigastric region and computed tomography was done which reported gastric trichobezoar with early features of Rapunzel syndrome. The patient referred to the surgery department and diagnosed trichobezoar. This case magnifies the importance of psychiatric evaluation early in the course of trichobezoar management, particularly in the childhood. Trichobezoar is usually associated to underlying psychiatric disorder, such as depression, obsessive-compulsive disorder, body dysmorphic disorder, and particularly trichotillomania [10]. However, prevalence and comorbidity are unclear, 5-30% of patients with trichotillomania engage in trichophagia [11], while 1-37.5% will develop trichobezoar [12]. After trichobezoar removal, prognosis is good if psychiatric therapy is successful, for that psychiatric follow-up is needed for treatment of the underlying behavioral disorder. Best modality of the treatment is combined treatment using serotonin-specific reuptake inhibitors such as citalopram and behavioral therapy such as habit reversal training and cognitive behavior therapy [13,14]. Treatment usually involves surgical removal of hair ball [15]. Management of underlying psychiatric conditions is necessary to prevent recurrence of trichobezoar [16].

CONCLUSION

Trichotillomania is common among females and if it is undiagnosed and untreated, it can lead to trichobezoar which can be fatal. It is also important to rule out comorbid psychiatric conditions and follow-up at psychiatric outpatient department before and after surgical therapy. The multimodal approaches

Figure 3: Endoscopy shows large trichobezoar figure

using surgeons, pediatricians, and psychiatrists are emphasized for an effective management with trichobezoar.

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