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General Surgery

RECURRENT RAPUNZEL SYNDROME IN A 23-YEAR-OLD FEMALE WITH A HISTORY OF INGESTED HAIR SINCE CHILDHOOD: A CASE REPORT

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Rapunzel syndrome is characterized by the injection of hair leading to the formation of trichobezoar extending from the stomach into the small intestine, which is a rare condition observed in the young females with psychiatric illness. We present a case of a 23-year-old female with a long-standing history of hair ingestion since childhood who previously underwent surgical intervention for trichobezoar 11 years ago. The patient was admitted for emergency laparotomy due to worsening of generalized abdominal pain,nausea and multiple episodes of vomiting. Imaging studies revealed an intragastric homogeneous mass extending into the small intestine causing intestinal obstruction. The postoperative period was uneventful along with psychological support and counseling to address the underlying trichophagia and psychiatric aspects contributing to the recurrent condition. This case report highlights the need for early recognition, appropriate surgical intervention and multidisciplinary management including psychiatric evaluation to address the psychological factors associated with recurrent Rapunzel syndrome.

KEYWORDS: Rapunzel syndrome, trichobezoar, psychiatric illness, emergency laprotomy

INTRODUCTION

Rapunzel syndrome is a real condition characterized by the injection of hair leading to the formation of a trichobezoar extending from the stomach into the small intestine [1]. Recurrent Rapunzel syndrome is even rare which is characterized by the recurrence of trichobezoar after surgical removal[2]. We report a case of recurrent Rapunzel syndrome in a young woman who had a history of ingestion of hair since childhood and underwent surgery $11\,$ years back .

CASE REPORT

A 23-year-old female presented with complaints of generalized pain abdomen, associated with multiple episodes of vomiting post-prandial, anorexia and history of ingestion of hair since childhood. She had undergone surgery for the same 11 years back and also had a history of lower segment cesarean section 4 months back. On examination, she was average built and pale. Her vitals were stable and a vertical scar mark in midline was seen on upper abdomen measuring approx 4 cm in length. On palpation, a lump of size measuring approximately 5×4 cm in the epigastric region with oval shape, and ill-defined margins was noted, which moves with respiration and having dullness on percussion. Ultrasound scan of the abdomen showed echogenic mass with intense acoustic shadow seen within the stomach and pylorus region. A computed tomography scan of the abdomen showed an intragastric well-circumscribed inhomogeneous mass consisting of mottled gas pattern due to the presence of air and food debris. The patient was taken for an emergency explorative Laprotomy with anterior gastrostomy and jejunostomy under general Anesthesia and removal of the trichobezoar which extended from the stomach to the jejunum. The mass weighed around 800gm and measured 20×10 cm. This gastrostomy and jejunostomy was closed in two layers and the abdomen was closed with a drainage tube. The operative findings revealed a bundle of undigested hair in the stomach, extending up to Jejunum. The patient had an uneventful postoperative course and was discharged after five days after accepting orally and passing flatus and stools.



Fig no 1; mass of hair recovered from stomach.



Fig no 2; jejunostomy done for removal of trichobezor tail.



Fig no 3; specimen of rapunzel syndrome with large hair ball taking shape of stomach and duodenum and tail recovered from duodenum and jejunum.

DISCUSSION

Rapunzel syndrome is a rare condition that is usually seen in young females with underlying psychiatric disorders, such as trichotillomania, trichophagia, and Picca[1,4]. It is a potentially life-threatening condition and require prompt surgical intervention which presented as gastric outlet obstruction[3]. The recurrence of trichobezoars after surgical removal is even rare after taking psychiatric treatment and counseling. Several theories have been proposed for the recurrence of trichobezoars after surgical removal, including residual here left behind during surgeries, regurgitation and reingestion of hair, and underlying psychiatric disorders that lead to compulsive hair ingestion[2]. Computed Tomography is the preferred image modality for the evaluation of suspected trichobezoars in order to characterize their size at locations, the presence and level of obstructions such as Ischemia and perforation[5]. It is essential to identify the underlying psychiatric disorder and provide appropriate psychiatric management to prevent the recurrence of trichobezoar. Management options include endoscopic removal, laparoscopic removal or via laparotomy[4,6]. In Rapunzel syndrome, we see no other valid option then conventional laparotomy which was incidentally successful in trichobezoars extending into Duodenum or Rapunzel tail has at least to reach into jejunum[5,6].

CONCLUSION

In conclusion, recurrent Rapunzel syndrome is a rare condition that can lead to potentially multiple life-threatening complications, such as ischaemia, or perforation. A high index of suspicion is required in patients with a history of prolonged hair ingestion with underlying psychiatric disorders. Early diagnosis and prompt surgical intervention are essential to prevent complications and recurrence of Rapunzel syndrome. Psychiatric evaluation, management and counseling or necessary to prevent the recurrence of trichobezoar.

Statement of Ethics: The authors have no ethical conflicts to disclose.

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