Laparotomic removal of large gastric trichobezoar in a 14-year-old patient

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ABSTRACT

A 14-year-old female presented with abdominal pain and intermittent vomiting. An upper gastrointestinal (GI) study showed a large trichobezoar extending to the duodenum, causing duodenal obstruction. Upper endoscopy was initially attempted, but the bezoar could not be removed without potential disruption of the esophagus. Surgical removal was conducted via exploratory laparotomy with gastrostomy, and the patient was discharged five days post-op for outpatient follow-up. Gastric trichobezoar occurs commonly in adolescent patients and, in cases of large and far-extending masses, often need removal with laparotomy. Outpatient psychiatric follow-up is encouraged to prevent relapse.

Keywords: Laparotomy, Rapunzel syndrome, Trichobezoar, Trichotillomania

INTRODUCTION

A trichobezoar is mass trapped in the gastrointestinal (GI) system formed from the ingestion of hair. It is a rare condition typically found in young females with concurrent psychiatric disorders [1]. Initially, the mass is asymptomatic; however, human hair cannot be digested due to its smooth surface and will eventually accumulate between the stomach’s mucosal folds [2]. Most trichobezoars are contained within the stomach. In some cases, known as Rapunzel syndrome, the trichobezoar can extend past the duodenum and cause intestinal obstruction. Small trichobezoars can be removed with fragmentation via endoscopy. Larger trichobezoars are more difficult to completely remove endoscopically and are more often removed surgically. Here, we report the case of a 14-year-old female diagnosed with a large trichobezoar.

CASE REPORT

In this article, we present the case of a 14-year-old female with past medical history of oppositional defiant disorder who presented with a 6-week-history of abdominal pain, decreased appetite, and intermittent vomiting. Upper GI study with small bowel follow through was performed and showed large gastric filling defect consistent with bezoar that extended into duodenum, causing duodenal obstruction. Pediatric surgery was consulted to remove bezoar. Upper endoscopy was attempted initially, which showed the bezoar. Several attempts were made to remove it piece by piece; however, with traction on the midpoint, it became evident that it would not pass the gastroesophageal (GE) junction without potentially disrupting the esophagus. The procedure was converted to exploratory laparotomy with gastrostomy. The bezoar and the long duodenal component were removed through the gastrostomy. Gross pathology of specimen (Figure 1) appeared as a well-circumscribed portion of...
CONCLUSION

Gastric trichobezoars are rare and most often occur in young females. They are typically contained in the stomach but can extend into the small intestine. Ideally, small trichobezoars are diagnosed and removed endoscopically. With larger trichobezoars, the risk of incomplete removal and possible esophageal disruption makes surgical removal a more feasible option. Psychiatric consultation should be initiated following removal to prevent relapse.

REFERENCES


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Author Contributions
Katelin Eing – Design of the work, Analysis of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved
Sanjoy Banerjee – Interpretation of data, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved
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Data Availability
All relevant data are within the paper and its Supporting Information files.

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