A BIZARRE CASE OF JEJUNAL TRICHOBEZOAR IN A 3-YEAR-OLD BOY: CASE REPORT

Trichotillomania and trichophagia are disorders that frequently present together and are also associated with obsessive-compulsive disorder and eating disorders, especially bulimia nervosa. The usual demographic for presentation of these disorders is preadolescent to adolescent girls who have other psychiatric comorbidities.

Human hair is smooth and often resistant to digestion, resulting in a propensity to accumulate in the mucosal folds of the stomach. Given sufficient time and hair consumption, a trichobezoar can eventually develop, which usually is confined to the stomach but in rare cases may extend to the small intestine. Increasing size raises the risk for severe complications, most commonly erosion of gastric mucosa, ulcerations, and stomach or intestine perforation. Complications reported in the literature have included intussusception, volvulus, obstructive jaundice, protein-losing enteropathy, pancreatitis and even death. The risk of these complications increases with delayed diagnosis, which is not uncommon as trichobezoar is often low on a differential diagnosis for abdominal pain. However, most cases of trichobezoar do present with epigastric to diffuse abdominal pain, epigastric mass, and decreased oral intake. Radiographs are a common first step in workup, but trichobezoars are difficult to assess and mistaken for feces. Ultrasound might be a better diagnostic tool. One study suggested that bezoar was suspected in 88 percent of cases based on the appearance of an intraluminal mass with hyperechoic arc before surgery confirmed the diagnosis. An upper gastrointestinal (UGI) series or computed tomography (CT) scan can have the best prognostic value though and based on recommendations should be the imaging modalities if a trichobezoar is suspected. Strong clinical suspicion hinges on a history of hair consumption that must be specifically elicited, as patients will often not offer this information and alopecia is not often clinically evident in patients subsequently diagnosed with trichobezoar.

We are presenting a unique case of trichotillomania and trichophagia in a 3-year-old male. To our knowledge, this is the youngest case of trichotillomania and trichophagia resulting in bowel obstruction reported in the literature. As this interesting presentation of trichobezoar exemplifies, the usual demographic of young females with psychiatric comorbidities and/or children with developmental delay is not a prerequisite for the development of a trichobezoar.

Trichophagia should be assessed in a child presenting with abdominal pain especially with no obvious source. Undiagnosed trichobezoar has a high complication rate, but if correctly diagnosed and treated with appropriate psychiatric follow up, recovery is nearly 100 percent with very low recurrence rate and ultimately an excellent prognosis. Treatment may consist of enzymatic destruction or lithotripsy with subsequent endoscopic removal; however large bezoars or those causing obstruction often require gastrotomy, whether laparoscopic or open. Of course, given the underlying etiology of this condition, good follow-up should include psychiatric treatment and assessment of other psychosocial parameters, both of which have been effective in treating trichotillomania.

CASE HISTORY

A three-year-old boy with no past medical history presented the emergency department for evaluation of three days of abdominal pain, decreased oral intake, and no bowel movements. Two days prior to this presentation, he had one episode of bilious, non-bloody emesis after which he presented to a community hospital where he was treated with ondansetron and intravenous fluids and subsequently discharged. However, he continued to have decreased oral intake and abdominal pain. Review of systems was negative for fever, chills, hematemesis, or hematochezia. Physical exam showed an irritable African American boy in moderate distress, who appeared ill but non-toxic. Patient was noted to have curly hair with a normocephalic head without noted alopecia. Respiratory and cardiovascular exams were normal. Abdomen was mildly distended with guarding and was tender to palpation in all four quadrants with no hepatosplenomegaly or palpable masses. His neurologic
Exam was nonfocal and he was developmentally appropriate. Laboratory values were only significant for mild hypoalbuminemia. Electrolyte and renal function were within normal limits. His emergency department treatment course included initiation of morphine, intravenous hydration, and placement of a nasogastric tube. A preliminary abdominal film showed no evidence of intussusception or visualization of the appendix, but multiple loops of slightly dilated bowel with air-fluid levels suggestive of partial obstruction. Abdominal ultrasound showed moderate ascites and mildly dilated fluid filled bowel loops. Abdominal CT was significant for incomplete small bowel obstruction, moderate ascites, and moderately hyperenhancing small bowel wall distally concerning for inflammatory etiology and possibly suggestive of segmental volvulus or internal hernia. The patient was taken to the operating room for exploratory laparotomy where an obvious intraluminal jejunal mass was found along with significant ascites and dilated loops of bowel. A longitudinal enterotomy removed an approximately 30cm trichobezoar (Figure 1).

DISCUSSION
Trichotillomania and trichophagia are much more common in females who have other psychiatric comorbidities or developmental delay.9 This patient’s presentation is unusual in several aspects including his male gender, young age, and lack of obvious developmental delay and comorbidities. There were minimal signs on physical exam, such as alopecia, which is a typical finding in a patient with trichotillomania.11,12 He did have the positive personal history of hair consumption, a strong family history of pica, including hair consumption in two of his seven siblings and a mother who admitted to cravings for cornstarch when she was pregnant. This positive family history for consuming non-nutritional substances is not documented in other literature but would be interesting to consider in future research. His family history was also positive for significant psychosocial stressors including lower socioeconomic status, a large single parent family with few resources, and an absent father.

CONCLUSION
This case demonstrates the importance of considering trichobezoar in the differential diagnoses for a young patient with abdominal pain of no obvious etiology regardless of gender. An accurate personal and family history of trichophagia, pica, or other psychiatric diagnoses is crucial in the evaluation of abdominal pain. With astute assessment, diagnosis, and treatment, the prognosis of trichobezoar is quite good.8,9

None of the authors report any relevant disclosures.

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