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Case Presentation

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Infantile-Juvenile Trichobezoar Recurrence: A Rare Cause of Palpable Abdominal Mass

Ian Caldeira Ruppen[1*], Jamile Diogo de Araújo[2], Fernanda Romagnole Pugliese[3], Leandro Hideki Otani[4], Mateus Sabaini Venazzi[2], Jhamille Amanda Cardoso do Val[5], Felicia Satie Ibuki Otani[4], Paulo Acacio Egger[2] and Izadora Gabriela Coutinho[2]

[1]Departmentof Medicine, Centro Universitário Ingá (UNINGÁ), Brazil.

[2]Departmentof Medicine, Hospital Universitário Regional de Maringá, Brazil

[3]Departmentof Medicine, Universidade Cesumar (UNICESUMAR), Brazil

[4]Departmentof Radiology, Instituto Maringá de Imagem, Brazil

[5]Departmentof General Surgery, Hospital Universitário Getúlio Vargas, Brazil

Corresponding author: Ian Caldeira Ruppen, Departmentof Medicine, Centro Universitário Ingá (UNINGÁ), Maringá, Paraná, Brazil, E-mail: ian2ruppen@gmail.com

Abstract

The term "bezoar" refers to a solid mass of undigested or poorly digested materials that accumulates in the gastrointestinal tract, representing an uncommon pathological entity. This report describes a clinical case of a large gastric trichobezoar in a 7-year-old child, highlighting its rare occurrence and characteristics, thereby contributing to improved differential diagnosis in cases of abdominal pain and intestinal obstruction.

Keywords: Abdominal mass; Trichobezoar; Infantile-juvenile; Abdominal pain; Trichophagia

Introduction

The term "Bezoar" refers to a solid mass of poorly or undigested materials that accumulate in the gastrointestinal tract, representing an uncommon

pathological entity. This finding was first described by Baudamant in 1779. A trichobezoar is a ball of hair that becomes lodged in the gastrointestinal tract and affects women in about 90% of cases, predominantly between the ages of 10 and 19 years, especially in cases of trichophagia—a psychiatric disorder characterized by the compulsive and persistent ingestion of hair. Its prevalence rate ranges from 0.06% to 4% [1-12].

Objectives

To report a clinical case of a large gastric trichobezoar in a 7-year-old child, describing its rare occurrence and characteristics, thus contributing to a better differential diagnosis in cases of abdominal pain and intestinal obstruction.

Materials and Methods

A retrospective case report was compiled through electronic medical record review, along with a brief literature review for contextual support.

Case Presentation

A 7-year-old female child was admitted to the emergency department with abdominal pain in the lower left quadrant and loss of appetite, having not had a bowel movement for 5 days. She denied fever or nausea. Her usual bowel habit was daily, though the stools were in pellets. Physical examination revealed a malnourished appearance with a distended abdomen and a painful palpable mass in the epigastric and mesogastric regions, with no other significant findings. A total abdominal CT scan was immediately requested, showing a large homogeneous hyperdense mass occupying and distending the entire gastric cavity, extending to the pylorus, measuring 18 x 12 cm, consistent with a bezoar. Following the confirmation, an exploratory laparotomy was performed. The abdominal cavity inventory showed a markedly distended stomach with no signs of damage to other abdominal organs. A gastric fundus incision was made to remove the gastric trichobezoar, followed by gastric repair. The patient had a good postoperative recovery without complications and was able to eat normally. At discharge, the mother was advised on warning signs and instructed to return to the hospital if needed, with Imipramine prescribed and a referral to mental health services for psychiatric follow-up. Almost 2 years after the initial episode of trichophagia, the patient and her mother sought care at the Basic Health Unit, reporting a return of trichotillomania and trichophagia about a month prior, which had recurred following the grandmother's death, indicating a worsening psychiatric condition. The child's food intake, diuresis, and daily bowel habits remained normal. Physical examination revealed alopecia in the frontal region of the head and a non-tender palpable abdominal mass with local hyperresonance. In the interim consultations, the patient was on Fluoxetine 20 mg/dL, 8 drops in the morning. During a follow-up visit with requested tests, an abdominal CT scan with contrast again showed a mass consistent with a bezoar in the gastric region. The child was referred to a specialized hospital for psychiatric evaluation, resumed Imipramine 25 mg, and a new exploratory laparotomy was scheduled. A new surgical approach was performed with an incision in the body and antrum of the stomach, removing another trichobezoar of approximately 20 cm. The patient tolerated oral diet well, with preserved physiological habits, and was discharged on the 10th postoperative day with instructions to

continue psychological and psychiatric follow-up **(Figure 1-5)**.

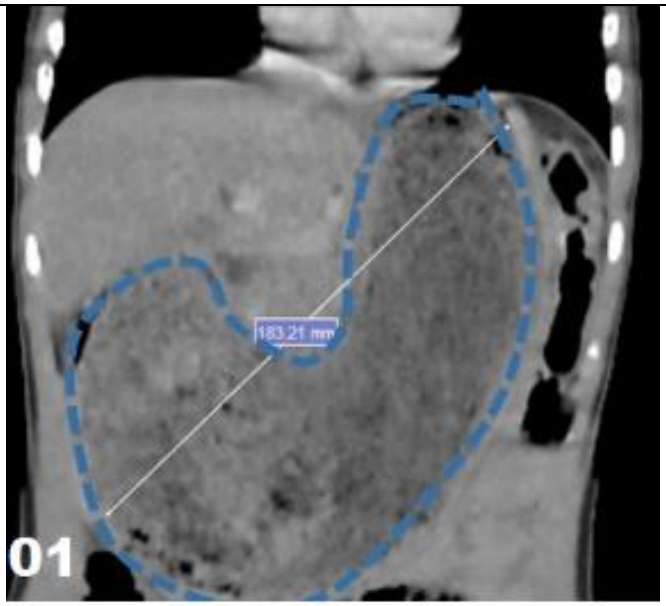

Figure 1: CT scan of the abdomen with coronal reconstruction showing a heterogeneous mass distending the gastric cavity.

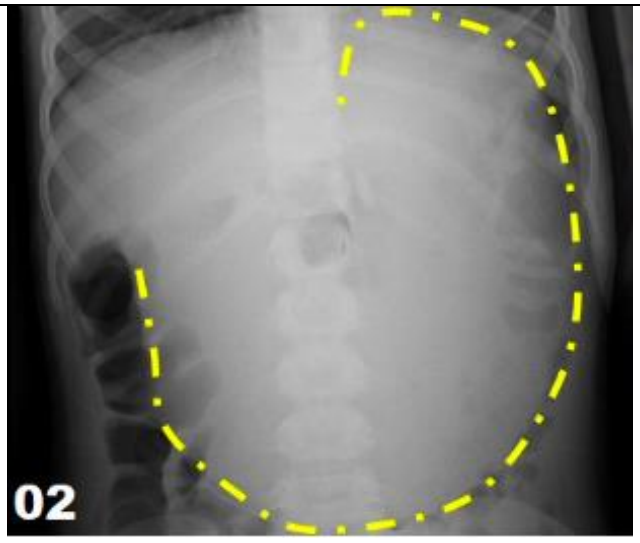

Figure 2: Abdominal X-ray AP showing a radiodense image occupying the epigastric, mesogastric, and right hypochondriac regions.

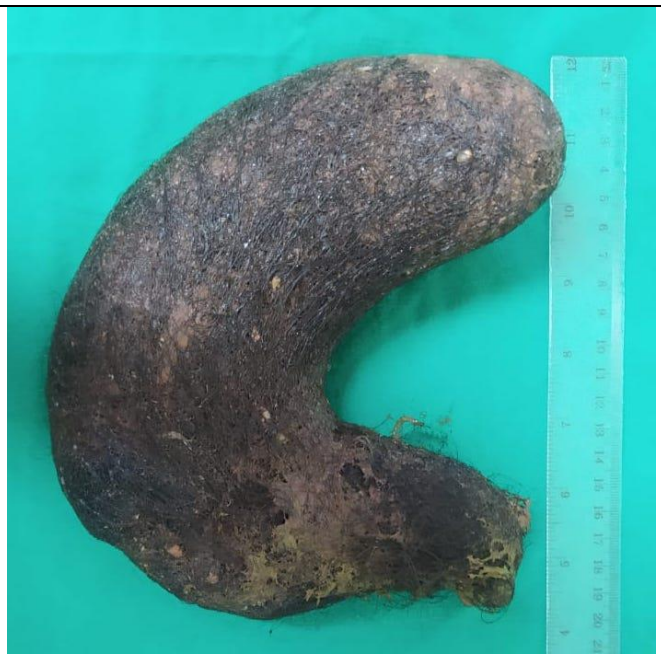

Figure 3: Surgical specimen (19 cm) post-removal of the trichobezoar during the first surgery.

Figure 4: Surgical specimen post-removal of the trichobezoar during the second surgery after 2 years.

Figure 5: Surgical specimen (0.880 kg) post-removal of the trichobezoar during the second surgery after 2 years.

Conclusion

The patient underwent two exploratory laparotomies. Both surgeries were performed in the dorsal horizontal position under balanced general anesthesia, with antiseptic and aseptic techniques, using sterile drapes, and a median supraumbilical incision. During both laparotomies, no visceromegaly or free fluid was observed in the cavity, only a large stomach filled with dense content. A longitudinal anterior gastrotomy in the antrum and body was performed, with removal of the trichobezoar—19 cm in 2021 and 20 cm in 2023. Gastric repair was done with continuous sutures using 2.0 polyglactin thread, in two layers. Hemostasis and cavity cleaning were performed with warm 0.9% saline, and abdominal wall closure was done with continuous sutures using 0 polyglactin thread and dermorrhaphy with 5.0 poliglecaprone thread, with occlusive dressings and the specimen sent for histopathological examination. Given the case presented, prompt clinical and radiological recognition of this rare condition is crucial for initiating early treatment, which includes surgery and psychiatric follow-up, to prevent future episodes.

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