

Gastric Duplication Revealed by Acute Intestinal Obstruction in An Infant: A Case Report

RAYADI Mahassine¹, AMOR Ayoub^{2*}, BOUGUEDDACH Fatima-Zahra³, ABOULKHEIR Anas⁴, IDRISSE Fawzi⁵, HAMMOUMI Zineb⁶, FERRAM Nadir⁷

^{1,2,3,4,5,6,7}Department of Pediatric Surgery, Abderrahim HAROUCHI University hospital of Casablanca, Casablanca, Morocco

ABSTRACT: Gastric duplication is a rare congenital anomaly often diagnosed in childhood. Its presentation may vary and can mimic other gastrointestinal conditions.

Case Presentation: We report the case of a 1.5-year-old girl admitted for hemorrhagic syndrome and melena. Initial endoscopy suggested chronic gastritis and duodenitis. The patient later developed signs of intestinal obstruction. Imaging showed small bowel thickening without clear etiology. Surgical exploration revealed diffuse peritonitis without clear obstruction. A postoperative CT scan suggested gastric duplication. Reoperation confirmed a communicating gastric duplication, treated by partial gastrectomy. **Conclusion:** Gastric duplication should be considered in unexplained pediatric gastrointestinal symptoms. Surgical management is curative with favorable outcomes.

KEYWORDS: Gastric duplication cyst, Congenital gastrointestinal malformation, Surgical resection.

INTRODUCTION

Gastric duplication is a rare congenital malformation representing less than 10% of all gastrointestinal duplications. It typically presents in early childhood with nonspecific symptoms such as abdominal pain, vomiting, or gastrointestinal bleeding. Diagnosis is often challenging and requires imaging and surgical exploration. We present a rare case revealed by acute intestinal obstruction.

CASE PRESENTATION

A 1.5-year-old girl was admitted with hemorrhagic syndrome and melena. Upper gastrointestinal endoscopy revealed chronic gastritis and duodenitis. Three months later, she developed signs of bowel obstruction, including abdominal distension and cessation of stool and gas passage.

Clinical examination showed a stable, conscious patient with a distended and tympanic abdomen. Abdominal X-ray revealed small bowel air-fluid levels. CT scan showed small bowel thickening in the right iliac fossa, with possible Meckel's diverticulitis.

Emergency laparotomy revealed turbid fluid, diffuse fibrinous membranes, and dilated small bowel loops without a clear transition point or perforation. Drainage was performed.

Postoperative CT scan suggested gastric duplication. A second surgery revealed adhesions and a communicating duplicated stomach. Partial gastrectomy with closure of communication was performed using linear stapler and thermofusion device.

Postoperative course was uneventful.



Figure 1: Intra operative view of the gastric duplication

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Figure 2: Intra operative view of gastric duplication after dissection of the Omental Bursae

DISCUSSION

Gastric duplication is an uncommon congenital anomaly that may remain asymptomatic or present with complications such as bleeding, obstruction, or infection. In this case, the initial presentation with melena suggests mucosal ulceration within the duplicated segment.

The diagnostic challenge lies in nonspecific imaging findings. CT scan may suggest duplication, but definitive diagnosis is often intraoperative. The presence of peritonitis without perforation suggests inflammatory complications.

Surgical resection is the treatment of choice. Complete excision is recommended to avoid recurrence and potential malignant transformation.

This case highlights the importance of considering duplication cysts in atypical pediatric abdominal presentations.

CONCLUSION

Gastric duplication is a rare but important differential diagnosis in pediatric gastrointestinal pathology. Early recognition and surgical management are essential to prevent complications.

REFERENCES

- 1) Holcomb GW, Gheissari A, O'Neill JA. Surgical management of alimentary tract duplications.
- 2) Stringer MD. Alimentary tract duplications in children.
- 3) Puligandla PS, Nguyen LT. Gastrointestinal duplications.
- 4) Chen JJ et al. Gastric duplication cysts in children.
- 5) Ildstad ST et al. Duplications of the alimentary tract.