



IMAGES IN PAEDIATRICS

Gastric outlet obstruction secondary to *Helicobacter pylori*



Obstrucción del tracto de salida gástrico asociado a *Helicobacter pylori*

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A boy aged 2 years was admitted to the emergency department for a history of ten episodes of postprandial vomiting. The personal history was unremarkable. The physical examination evinced moderate dehydration with normal vital signs. The abdominal examination revealed normal bowel sounds and tympany, with no masses or other anomalies. The abdominal radiograph was normal, and blood tests showed metabolic alkalosis (pH, 7.55; HCO₃, 27.8) and hypochloremia (84 mmol/L). The patient was managed with rehydration and ondansetron, given every 8 h, which failed to achieve oral tolerance. An abdominal ultrasound identified no abnormalities, so upper gastrointestinal endoscopy was performed 24 h after admission.

The endoscopy revealed a narrowing of the pylorus that prevented the endoscope from entering the duodenum (Fig. 1), leading to performance of hydrostatic balloon

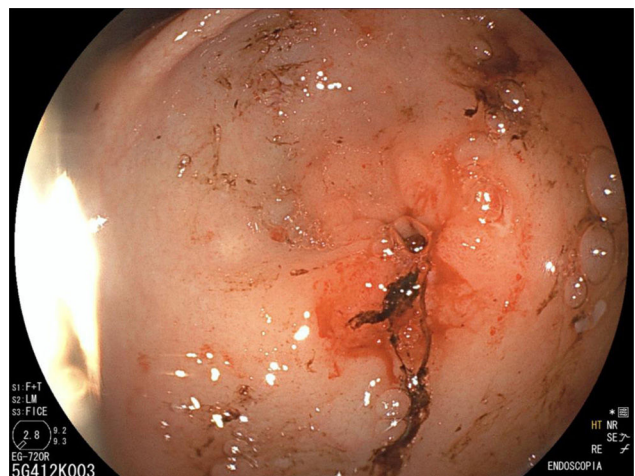


Figure 1 Central pylorus with edema and obstruction impeding passage of the 9.9-mm endoscope.

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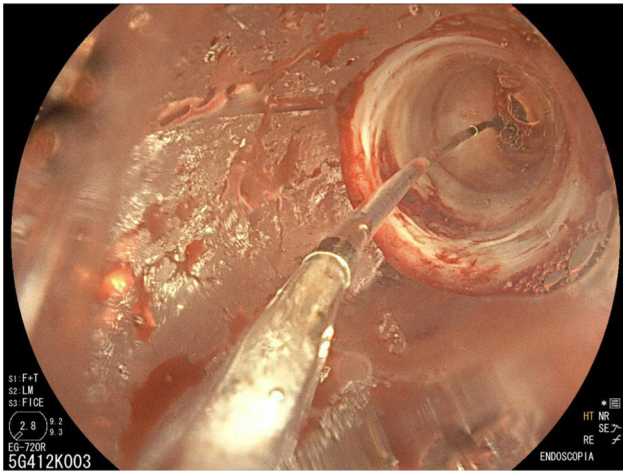


Figure 2 Pyloric dilation with a 12-mm hydrostatic balloon.

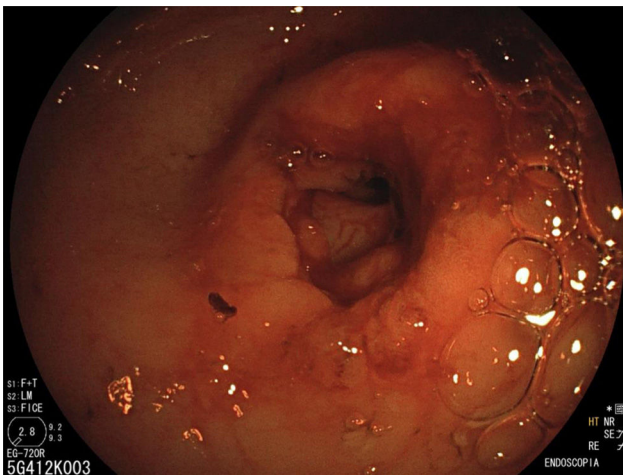


Figure 3 Pylorus following endoscopic dilation, allowing passage to the duodenum.

dilation (Figs. 2 and 3). The analysis of the biopsy specimens led to diagnosis of gastritis associated with *Helicobacter pylori* infection and foveolar hyperplasia.

Gastric outlet obstruction secondary to *Helicobacter pylori* is an uncommon condition associated with duodenogastric reflux secondary to antral dysmotility in which prolonged exposure to biliary acids can cause causes mucosal injury through inflammation, resulting in edema, foveolar hyperplasia and vascular congestion.¹ Its clinical presentation is heterogeneous and characterized by emesis, dyspepsia, and abdominal pain.²

Declaration of competing interest

The authors have no conflicts of interest to declare.

References

1. Türker SN, Barış Z, Şeker NS, Aydemir Y. Histopathological differences in pediatric duodenogastric reflux: a comparative study. *Eur J Pediatr.* 2025;184(6):343, <http://dx.doi.org/10.1007/s00431-025-06163-z>.
2. Arslan M, Balamtekin N. The relationship between primary duodenogastric reflux and *Helicobacter pylori* gastritis in children. *Dig Dis.* 2022;40(3):276–81, <http://dx.doi.org/10.1159/000517263>.