Double Pylorus Secondary to Peptic Ulcer Disease

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INTRODUCTION

- Double pylorus is an unusual endoscopic finding viewed as a fistula between the gastric antrum and duodenal bulb.
- The presence of double pylorus occurs in 0.001 to 0.4% of upper endoscopy procedures and is more frequent in men and those with peptic ulcer disease.
- We investigate a 74-year-old female with prior *H. pylori* infection and gastroduodenal ulcerations resulting in a double pylorus.

CASE REPORT

- A 74-year-old female was referred to our clinic for evaluation of dyspnea and persistent iron deficiency anemia over several months with a history of alcoholic cirrhosis, right hemicolectomy due to diverticulitis, and gastroduodenal ulcer disease in the setting of a prior *H. pylori* infection.
- Her dyspnea was associated with dull pleuritic epigastric pain radiating to her back, but she denied nausea, melena, hematochezia, dysphagia, odynophagia, and weight loss. She was compliant with oral iron supplementation and reported 3 years of sobriety.
- Vital signs and physical examination were unremarkable.
- CBC displayed macrocytic anemia with iron deficiency on iron panel. Abdominal CT revealed a large paraesophageal hernia and a lobular liver contour compatible with cirrhosis.
- Given her prior antral and duodenal ulceration, EGD was performed, which revealed antral erythema, an 11 cm hiatal hernia, and a double pylorus (Figure 1). Both ostia at the antrum were intubated separately and appeared endoscopically normal. *H. pylori* biopsies were negative.

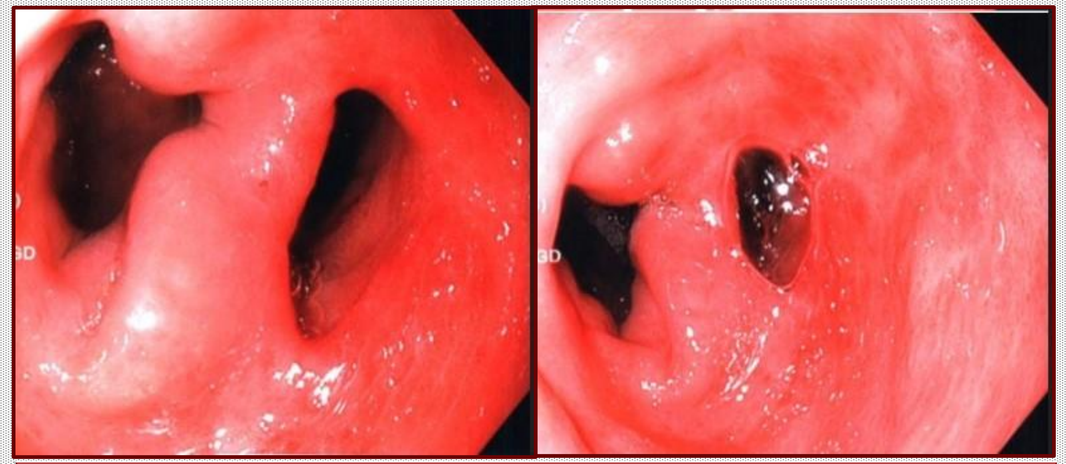

Figure 1: Endoscopic view of the pylorus from the antrum of the stomach

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TREATMENT

- The patient was continued on proton pump inhibitor therapy without further procedural intervention.
- As H. pylori biopsies were negative, no treatment was necessary
- Upon discharge, she was consoled on refraining from excessive NSAID and alcohol use.
- As no active signs of bleeding were identified, she was advised to follow up with her gastroenterologist in 6 months.

DISCUSSION

- Most cases of double pylorus are acquired in the setting of peripyloric ulceration with resulting mucosal perforation from repetitive damage and impaired healing. After perforation occurs, a fistula can form between the gastric antrum and duodenal bulb.
- Common symptoms include dyspepsia, emesis, and chronic abdominal pain. Occult bleeding is common and diagnosis requires upper endoscopy to visualize each ostia of the double pylorus along the lesser curvature.
- Management typically consists of risk factor reduction (NSAID and corticosteroid use, *H. pylori* infection) and pharmacologic promotion of mucosal healing (proton pump inhibitors, H2 receptor antagonists, and antacids).
- Therapy can lead to closure of the double pylorus false lumen in 9% of cases and cause the two pylori to fuse in 27% of cases. However, the double pylorus persists in up to 64% of cases.