Helicobacter pylori-positive inlet patch without concurrent *Helicobacter pylori* gastritis: case report of a patient with sleeve gastrectomy

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A 54-year-old Hispanic male presented to the clinic with chronic dyspepsia and uncontrolled reflux symptoms not responding to acid-suppression therapy with a proton pump inhibitor (PPI). His past history was remarkable for sleeve gastrectomy one year previously. PPI therapy was stopped two weeks prior to endoscopy to promote the yield of a *Helicobacter pylori* (*H. pylori*) test. Esophagogastroduodenoscopy revealed gastric-like mucosa 2 cm in diameter in the proximal esophagus, suggestive of an inlet patch (Fig. 1). The biopsy of the esophageal lesion confirmed the gastric mucosa, showing mild chronic inflammation and a positive immunohistochemical stain for *H. pylori* (Fig. 2). Biopsies from the gastric mucosa were only significant for chronic gastritis, with a negative *H. pylori* stain.

Gutierrez *et al* suggested that 73% of cases of *H. pylori* gastritis were associated with *H. pylori* infection of an inlet patch and that such an infection is highly related with the density of *H. pylori* colonies in the stomach [1]. To our knowledge and to date, this report is the first case of isolated *H. pylori* infection in a cervical inlet patch without concurrent *H. pylori* gastritis [2,3].

The case is also unique because of the prior history of sleeve gastrectomy. The mechanism of isolated *H. pylori* infection in patients who have undergone sleeve gastrostomy remains unclear; our proposed theory is that the altered stomach anatomy reduces its isolation and promotes *H. pylori* colonization in other parts of the gastrointestinal tract.

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Figure 1 Narrow-band imaging of the gastric-like mucosa in the upper esophagus

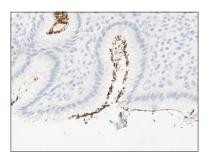


Figure 2 Immunohistochemical stain reveals that the inlet patch gastric mucosa is positive for *Helicobacter pylori* microorganisms (immunoperoxidase 20x)

Further studies are warranted to confirm the mechanism of isolated *H. pylori* colonization in a cervical inlet patch and its association with sleeve gastrectomy.

References

- Gutierrez O, Akamatsu T, Cardona H, Graham DY, El-Zimaity HM. *Helicobacter pylori* and hetertopic gastric mucosa in the upper esophagus (the inlet patch). *Am J Gastroenterol* 2003;98:1266-1270.
- 2. Alagozlu H, Simsek Z, Unal S, Cindoruk M, Dumlu S, Dursun A. Is there an association between *Helicobacter pylori* in the inlet patch and globus sensation? *World J Gastroenterol* 2010;**16**:42-47.
- Truong LD, Stroehlein JR, McKechnie JC. Gastric heterotopia of the proximal esophagus: a report of four cases detected by endoscopy and review of literature. *Am J Gastroenterol* 1986;81:1162-1166.