



HETEROTOPIC GASTRIC MUCOSA OF THE ESOPHAGUS AS A POTENTIAL CAUSE OF PEPTIC STENOSIS AFTER ROUX-EN-Y GASTRIC BYPASS

HETEROTOPIA DE MUCOSA GÁSTRICA DO ESÔFAGO COMO UMA POTENCIAL CAUSA DE ESTENOSE PÉPTICA APÓS BY-PASS GÁSTRICO EM Y-ROUX

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Heterotopic gastric mucosa of the proximal esophagus (HGMPE) is a congenital island of salmon-colored, abnormally located gastric epithelium, commonly present distally to the upper esophageal sphincter (UES). It can vary from microscopic and small foci to extensive and circumferential patches¹¹.

Most are largely asymptomatic⁸, found incidentally during esophagogastroduodenoscopies (EGD), with an underestimated prevalence ranging from 2.6 to 21%^{1,9}.

However, it can lead to complications such as bleeding, ulceration, neoplastic transformation, acid production, and laryngopharyngeal reflux, specifically chronic cough, throat discomfort, hoarseness, globus sensation, and regurgitation³.

Secretion can be acidic, as demonstrated by pH monitoring, and proton pump inhibitor may improve pharyngeal manifestations⁷, but non-acidic mucus can also lead to symptoms².

The inlet patch is commonly a potential site for *Helicobacter pylori* infection. It is closely related to active inflammation and associated with *H. pylori* infection in the stomach⁵. The fact that HGMPE is commonly missed in EGDs can be explained, since it is located in the upper esophagus, a difficult area to examine due to the UES contraction, and is commonly neglected during device removal.

On the other hand, Roux-en-Y gastric bypass (RYGB) is notorious for its potential to treat reflux disease due to various mechanisms: weight loss, reduction of intrabdominal pressure, diversion of bile transit, reduction of acid-producing parietal cells^{6,10}. Therefore, addressing patients with presumed gastroesophageal reflux disease (GERD) after this procedure can be challenging. Missed hiatal hernias, intrathoracic migration of the pouch, bulky reservoirs with acid production, short alimentary limbs that allow bile reflux, and gastrogastic fistulas are among other causes.

For example, a 38-year-old female patient presented with dental demineralization and recurrent GERD symptoms in the last 2 years. She was submitted to RYGB 5 years ago at

another service due to grade II obesity (body mass index [BMI] 35.9) associated with hypertension and GERD. Her current BMI is 23.8 and presents remission of all diseases. During the investigation, pHmetry revealed increased upper esophageal acid exposure and a DeMeester score of 63; EGD showed an extensive circumferential HGMPE in the upper esophagus, with incipient circumferential ring formation with subtle reduction of the organ's lumen (Figure 1) similar to peptic reaction, with no complications of the pouch (Figure 2). Biopsies found a columnar cardiac epithelium with chronic inflammation; no metaplasia or *H. pylori* were present (Figure 3). She achieved full symptomatic control with dexlansoprazole 60 mg and is being followed to assess the need for interventional therapies. Treatment involves H2 antagonists, proton pump inhibitors, and invasive therapies, such as argon plasma coagulation² and radiofrequency ablation⁴.

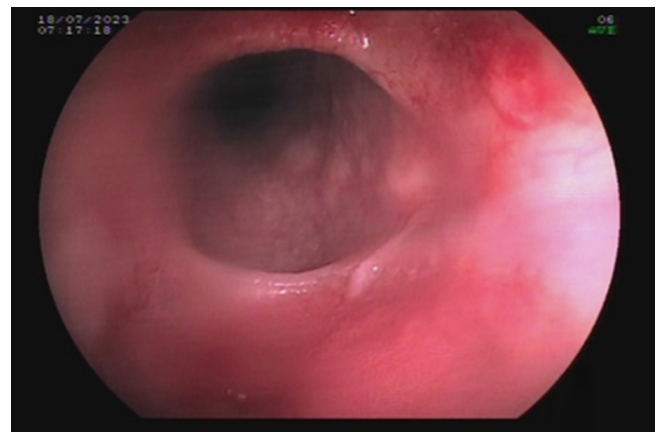


Figure 1 - Circumferential ectopic gastric mucosa with distal ring formation, causing subtle reduction of the organ's lumen.

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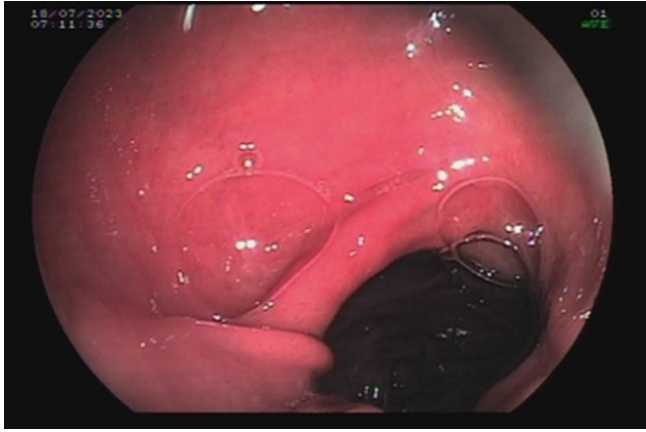


Figure 2 - Gastric pouch and gastrojejunal anastomosis.

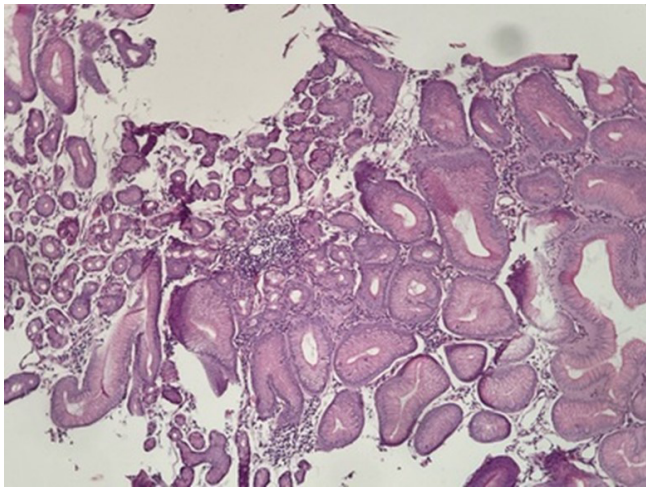


Figure 3 - Histopathology revealed columnar cardiac epithelium with chronic inflammation.

Therefore, a detailed esophageal inspection is mandatory in every examination, and it is important to report HGMPE in patients seeking endoscopy due to pharyngolaryngeal symptoms, since it may be the cause. A discrepancy of acid exposure in the upper and lower esophagus should raise suspicion.

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