

Gastritis Cystica Profunda: A Deeper Problem

Kaitlin R. McCurdy, MD, Kamalpreet Parmar, MD, and Silvio W. de Melo, MD

Department of Internal Medicine, Division of Gastroenterology and Hepatology, University of Florida College of Medicine, Jacksonville, FL

CASE REPORT

A 46-year-old woman underwent upper endoscopy for persistent nausea. Endoscopic examination of the stomach revealed prominent gastric folds in the gastric body. Biopsy by cold forceps demonstrated hyperplastic mucosa with ulceration (Figure 1). Endoscopic ultrasound (EUS) revealed a 45-mm sessile polyp with bleeding in the anterior wall of the gastric body (Figure 2). Endoscopic mucosal resection (EMR) of the lesion was performed and histology confirmed the diagnosis of gastritis cystica profunda (GCP) (Figure 3). The patient experienced no postendoscopy complications, and follow-up gastroscopies were scheduled.

Gastritis cystica profunda is a rare gastric lesion consisting of cystic dilation of the gastric glands extending into the submucosa and is likely underreported.¹ Although the exact mechanism of GCP is unknown, injury and inflammation to the mucosa are thought to be central to pathogenesis.² This disruption of the muscularis mucosa ultimately allows for migration of epithelial cells into the submucosal layer and subsequent cystic dilation. Typical presentation of GCP is nonspecific and includes abdominal pain, bleeding/anemia, fullness, and anorexia/weight loss; however, some patients remain asymptomatic. Previously, GCP was thought to be benign; however, more recently, GCP has been considered to be a possible precancerous lesion.¹ This categorical change arises after recent reports of dysplastic changes within the submucosal glands of select cases of GCP.³ Gastritis cystica profunda most commonly presents in the gastric body or fundus and macroscopically appears as giant gastric folds, submucosal tumors, or isolated polyps at sites of prior surgical anastomoses. The differential diagnosis of a submucosal tumor includes gastric adenocarcinoma, gastrointestinal stromal tumors, inflammatory myofibroblastic tumors, neuroendocrine tumors, schwannomas, heterotopic pancreas, lipomas, sarcomas, cysts, lymphomas, and leiomyomas. Gastritis cystica profunda and EUS can be helpful in differentiating these entities.⁴ The findings of a heterogeneously enhancing polypoid lesion with cystic



Figure 1. Sessile polyp seen in the anterior gastric body on upper endoscopy.

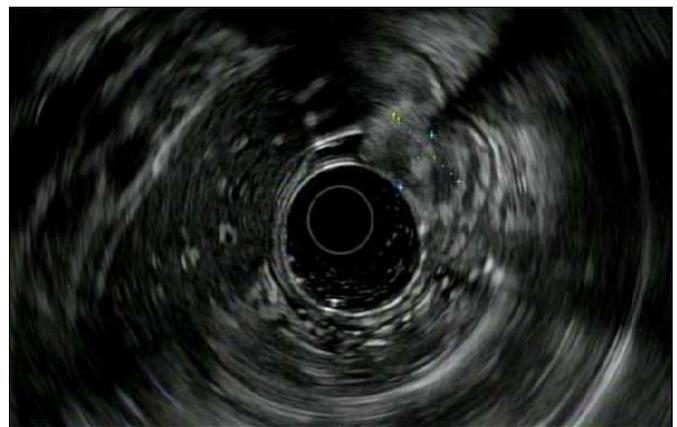


Figure 2. Endoscopic ultrasound of the sessile polyps in the gastric body.

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Correspondence: Silvio W. de Melo Jr., 4555 Emerson Street, Suite 300, Jacksonville, FL 32207 (silvio.demelo@jax.ufl.edu).



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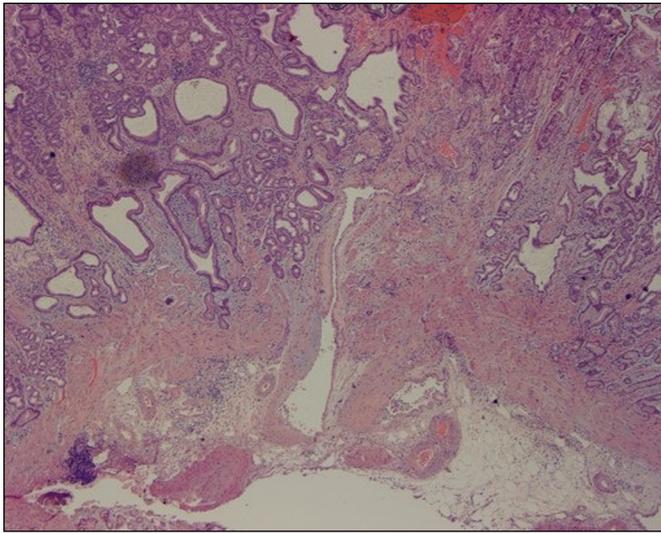


Figure 3. 2x objective view of the base of the polyp. There are multiple cystically dilated glands present, extending beyond the muscularis mucosa into the submucosa. The submucosa contains chronic inflammation and thickened, splayed muscle bundles which move between the dilated glands.

components on EUS should raise the suspicion for GCP.^{2,4} Previously, gastric resection was the treatment of choice, but more recently, EMR and endoscopic submucosal dissection have become the diagnostic modalities of choice, with only some cases needing further treatment with surgical resection. In the case of our patient, EUS showed a sessile polyp measuring 45 mm with overlying bleeding.

The lesion was completely resected using EMR without complication, avoiding the unnecessary surgical resection. This case represents a likely underdiagnosed pathology, GCP, which endoscopists should consider in their broad differential of submucosal tumors, as their course is generally benign and can be treated with simple EMR or endoscopic submucosal dissection.

DISCLOSURES

Author contributions: KR McCurdy drafted the manuscript. K. Parmar performed the pathological analysis. SW de Melo revised the manuscript and is the article guarantor.

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Informed consent was obtained for this case report.

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