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Dead-end stomach: a giant and pedunculated gastric pyloric gland adenoma conditioning gastric outlet obstruction and anemia

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Dear Editor,

We present the case of a 69-year-old female undergoing esophagogastroduodenoscopy for iron-deficiency anemia investigation. She reported intermittent bloating, nausea and vomiting. A pedunculated polyp was identified arising from the greater curvature of the middle gastric body, with a long fibroelastic stalk (30 mm) and a 60-mm congestive head that prolapsed towards the pyloric ring, causing a complete gastric outlet obstruction (GOO). An en-bloc polypectomy was performed and an intraprocedural oozing bleeding from a large visible vessel at the residual stalk was managed using Endoloop®. Immunohistochemistry showed a R0-resection of a mixed-type gastric pyloric gland adenoma (PGA) positive for MUC-5AC

and MUC-6 mucins, in a surrounding *H. pylori*-negative, non-atrophic chronic gastritis. The patient became asymptomatic with anemia resolution.

Adenomas account for up to 10 % of gastric polyps. Histologically, they are categorized into intestinal, foveolar, pyloric, and oxyntic types (1). PGA is a rare subtype, accounting for less than 3 % of all gastric polyps (2). PGAs are usually solitary at the gastric body, and occur in association with autoimmune gastritis, *H. pylori*, and chemical gastritis (2). A normal background gastric mucosa has also been described (35.8 %) (3).

PGAs are devoid of apical mucin cap and label with both MUC-5AC and MUC-6 (2). Choi et al. (3) defined three immunohistochemical phenotypes for PGA: pure pyloric type (25.4 %) with strong MUC-6 expression; predominant foveolar type (3 %) with MUC-5AC diffuse expression but ≤ 10 % of MUC-6 expression and no foveolar differentiation; and mixed type (61.2 %) with variable MUC-5AC/MUC-6 expression.

Most PGAs are asymptomatic, but clinically significant because of their potential for malignant transformation (12-47 %) and complications, including gastrointestinal bleeding and obstruction (1,3). GOO is rare, causing intermittent symptoms by polyp intussusception (ball-valve syndrome) (4,5).

PGA management is challenging, depending on the lesion's size, morphology, and location. This case illustrates a successful endoscopic resection as a minimally invasive procedure of a doubly complicated PGA.

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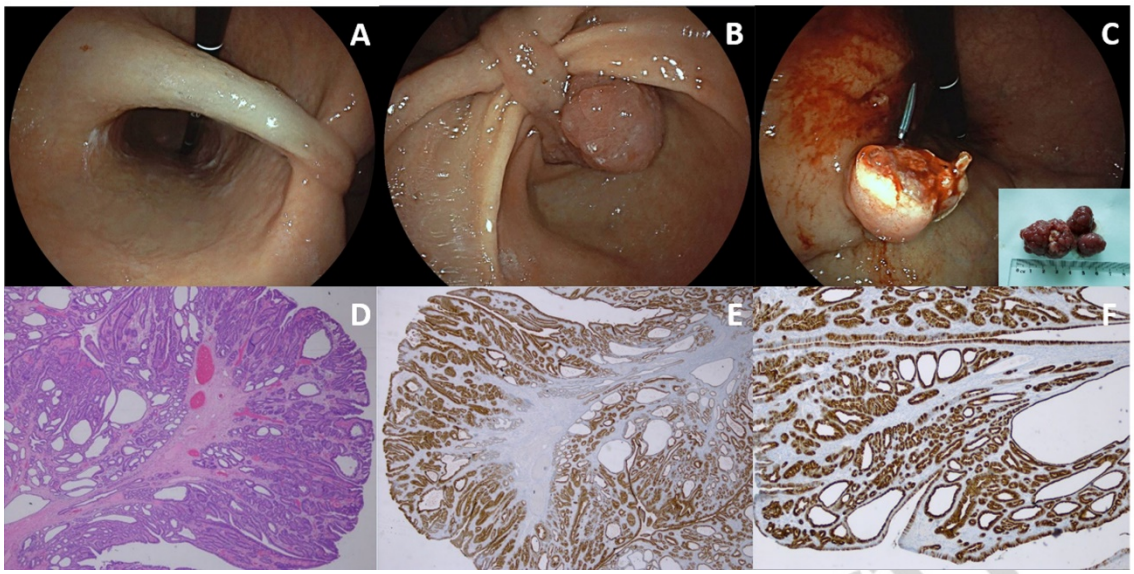

Fig. 1. A. Endoscopic view of the long and fibroelastic stalk of the polyp arising from the greater curvature of the middle gastric body. B. Endoscopic view of the pedunculated polyp with a congestive head prolapsed towards the pyloric ring, causing complete gastric outlet obstruction. C. Successful management of the oozing bleeding from a large visible vessel at the residual stalk with an Endoloop® (lower right corner, polypectomy specimen). D. Histology revealed a gastric pyloric gland adenoma composed of closely packed pyloric glands lined by cuboidal/columnar epithelial cells with eosinophilic cytoplasm and basal nuclei with inconspicuous nucleoli, alternating with areas of glandular dilation (hematoxylin-eosin, 20x magnification). E. Immunohistochemical staining positive for MUC-5AC (20x magnification). F. Immunohistochemical staining positive for MUC-6 (40x magnification).