

# Malignant Transformation of a Gastric Duplication Cyst: A Rare Entity

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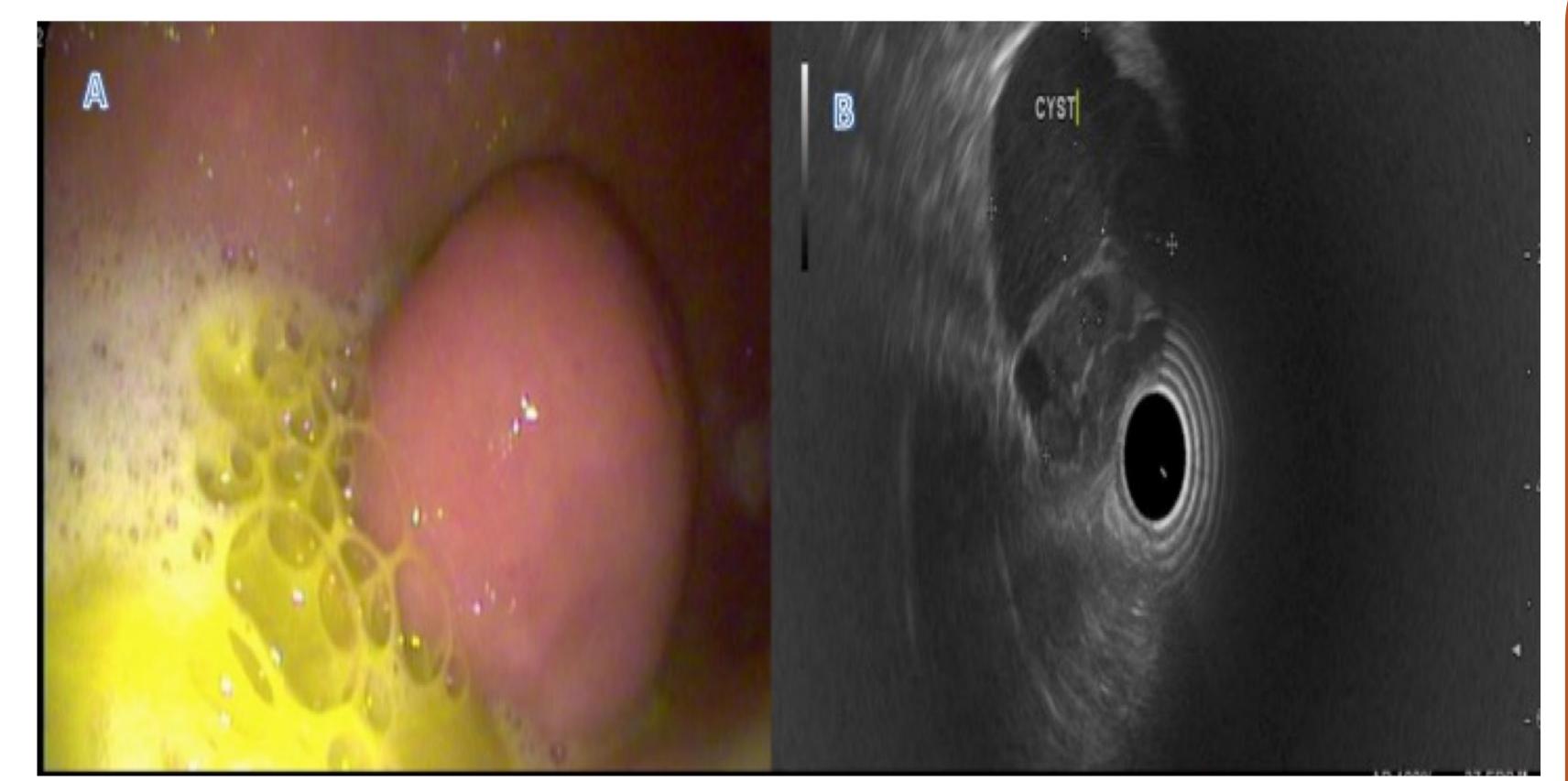
### INTRODUCTION

- Gastrointestinal tract duplication cyst (GTDC) are rare congenital malformation that can occur anywhere along the alimentary tract, most commonly in the ileum, esophagus and colon.
- Gastric duplication cysts account for 4-9% of all intestinal duplication cysts.
- In most adults malignant transformation of duplication cyst is extremely rare and is an incidental finding on endoscopy or radiologic examination.
- We present a case of gastric duplication cyst with malignant transformation.

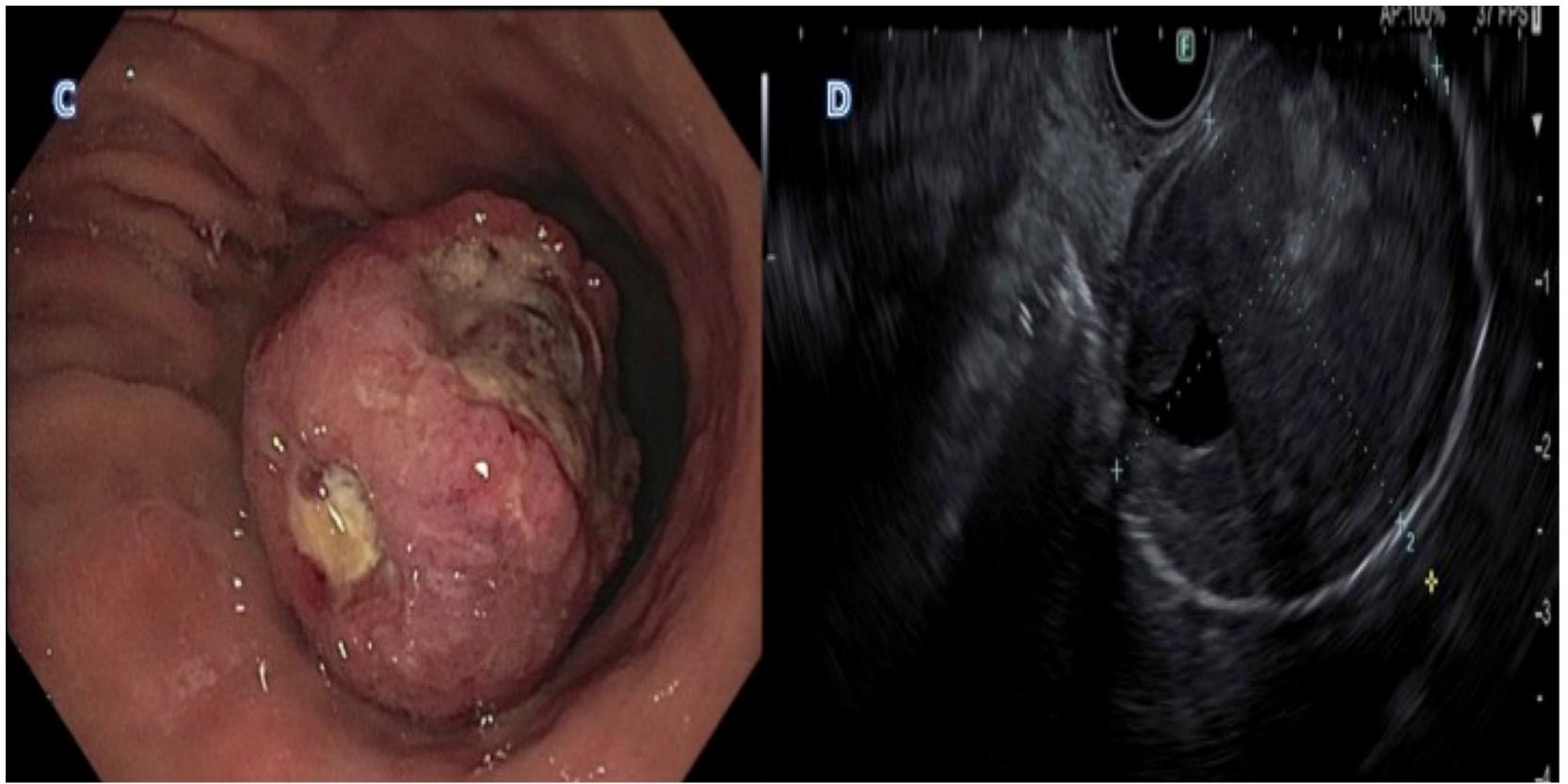
#### CASE DESCRIPTION

- 69-year-old female with a history of breast cancer status post resection and chemoradiation, left-sided ulcerative colitis controlled on mesalamine was found to have an incidental gastric sub-epithelial lesion on EGD (Image A).
- Subsequently, the patient underwent an EUS (in 2012) where diagnosis of a gastric duplication cyst was made. FNA was performed which was negative for malignant cells (Image B). The lesion/cyst was stable in size and appearance on EGD performed in 2019.
- Three years later in 2022, she presented to the emergency room with melena.

## **IMAGES**



**A)** Gastric submucosal lesion in the body of the stomach (performed in 2012). **B)** EUS: 37 x 33 mm multiseptated anechoic lesion with internal debris.



**C)** Gastric mass occupying the entire lumen of distal gastric body with two overlying umbilicated ulceration over the mass measuring 7 mm and 2 cm in size. **D)** EUS: hypoechoic round mass of mixed features in the body of the stomach measuring 43 mm x 32 mm.

- Repeat EGD revealed a large ulcerated subepithelial mass in the same area of the greater gastric curvature (Image C).
- EUS showed a hypoechoic round mass with isoechoic and anechoic components with well defined borders. Gastric biopsy revealed poorly differentiated carcinoma and FNA was positive for malignant cells and signet ring cells carcinoma.
- Computed tomography of the abdomen & pelvis revealed liver metastasis.

#### DISCUSSION

- This is an unfortunate case of malignant transformation of a gastric duplication cyst.
- There have only been less than 15 cases reported in the literature.
- Due to limited cases, no predictors for malignant changes have been found including symptoms, size, location, tumor markers, or macroscopic findings.
- If there is any suspicion of malignant transformation in the presence of a gastric duplication cyst, surgical resection is recommended.