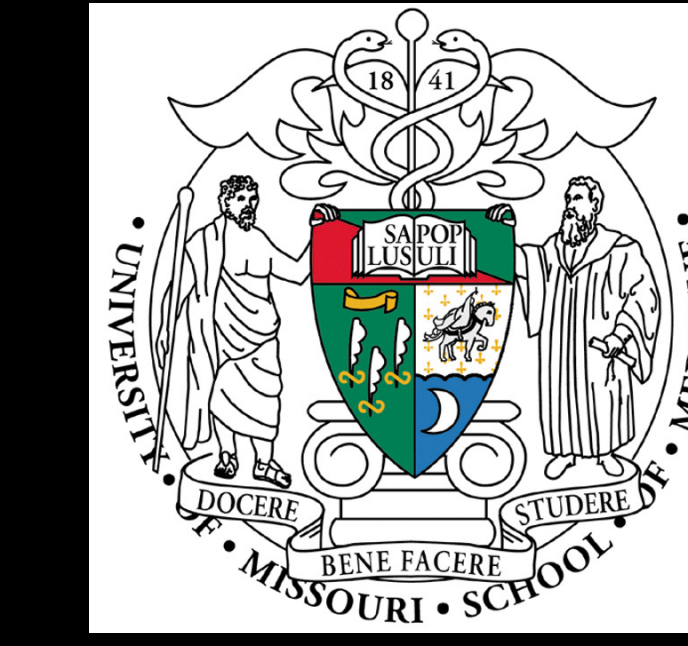




# GASTROSPLENIC FISTULA: A RARE CAUSE OF UPPER GASTROINTESTINAL BLEEDING



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## INTRODUCTION

- Gastrosplenic fistula (GSF) is a rare entity.
- Reported etiologies of GSF are splenic or gastric malignancies, splenic abscess, Crohn's disease, gastric ulcers, and abdominal trauma.
- Here, we present a case of idiopathic GSF resulting in life threatening bleeding.

## CASE DESCRIPTION

- 41-year-old man with a history of hereditary spastic paraplegia, sacral decubitus ulcers with diverting sigmoid colostomy presented with malaise and melanic stools through colostomy.
- On arrival to the ER, he was tachycardiac (113/min), normotensive with BP 126/82 mmHg.
- Hemoglobin was significantly low at 4.9 g/dL. He was resuscitated with IV fluid and multiple blood transfusions.

### CT angiography of abdomen/pelvis

- Revealed direct contiguity between the gastric fundus and spleen indicating GSF. There was no active contrast extravasation.

### Splenic artery (SA) angiogram

- Hyperemia along the posterior wall of the stomach corresponding to the site of ulceration on CT scan. Embolization of the main SA and right gastroepiploic artery was performed.

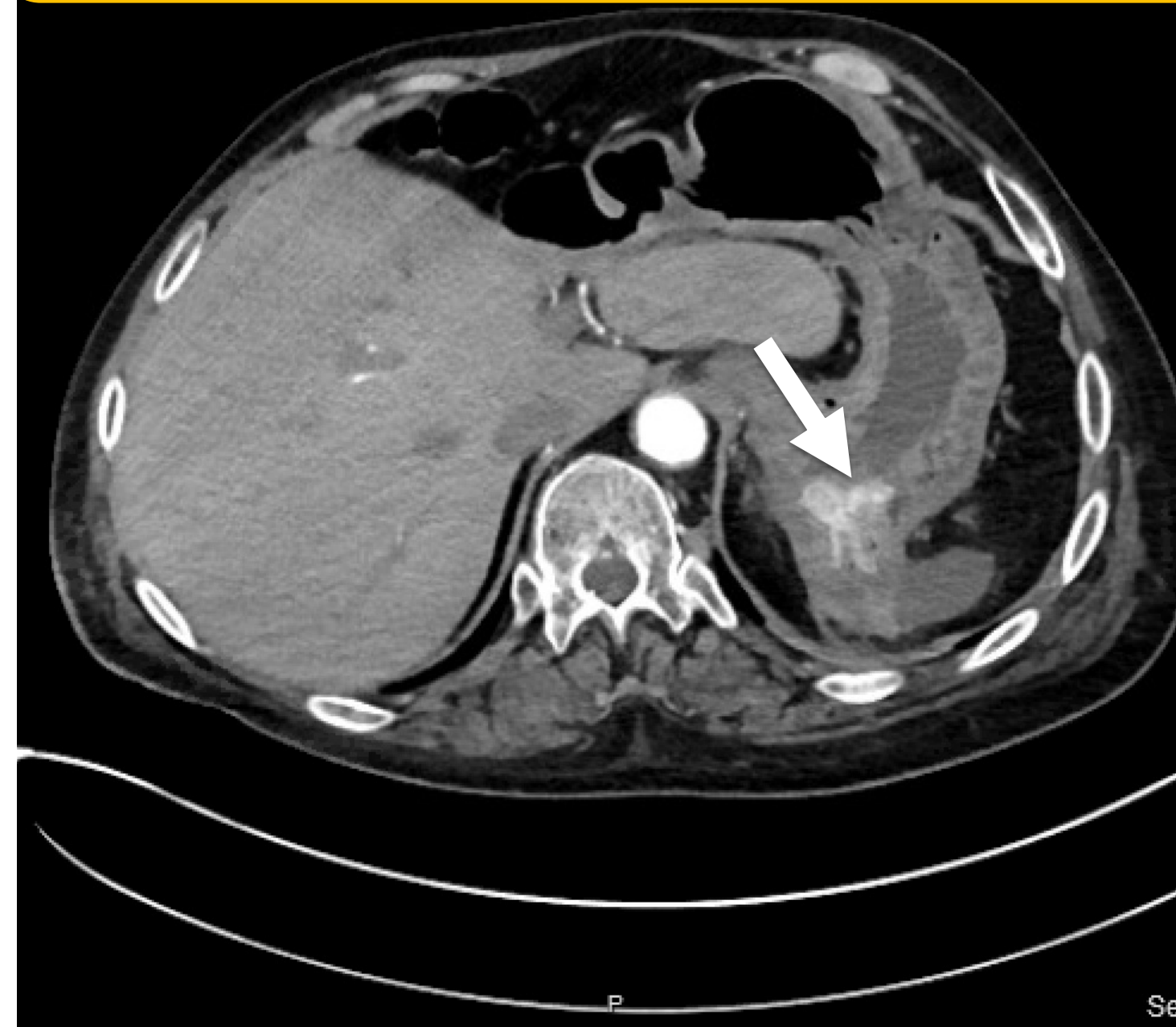
### EGD

- Mass in gastric fundus with invasion of splenic tissue into the gastric mucosa.

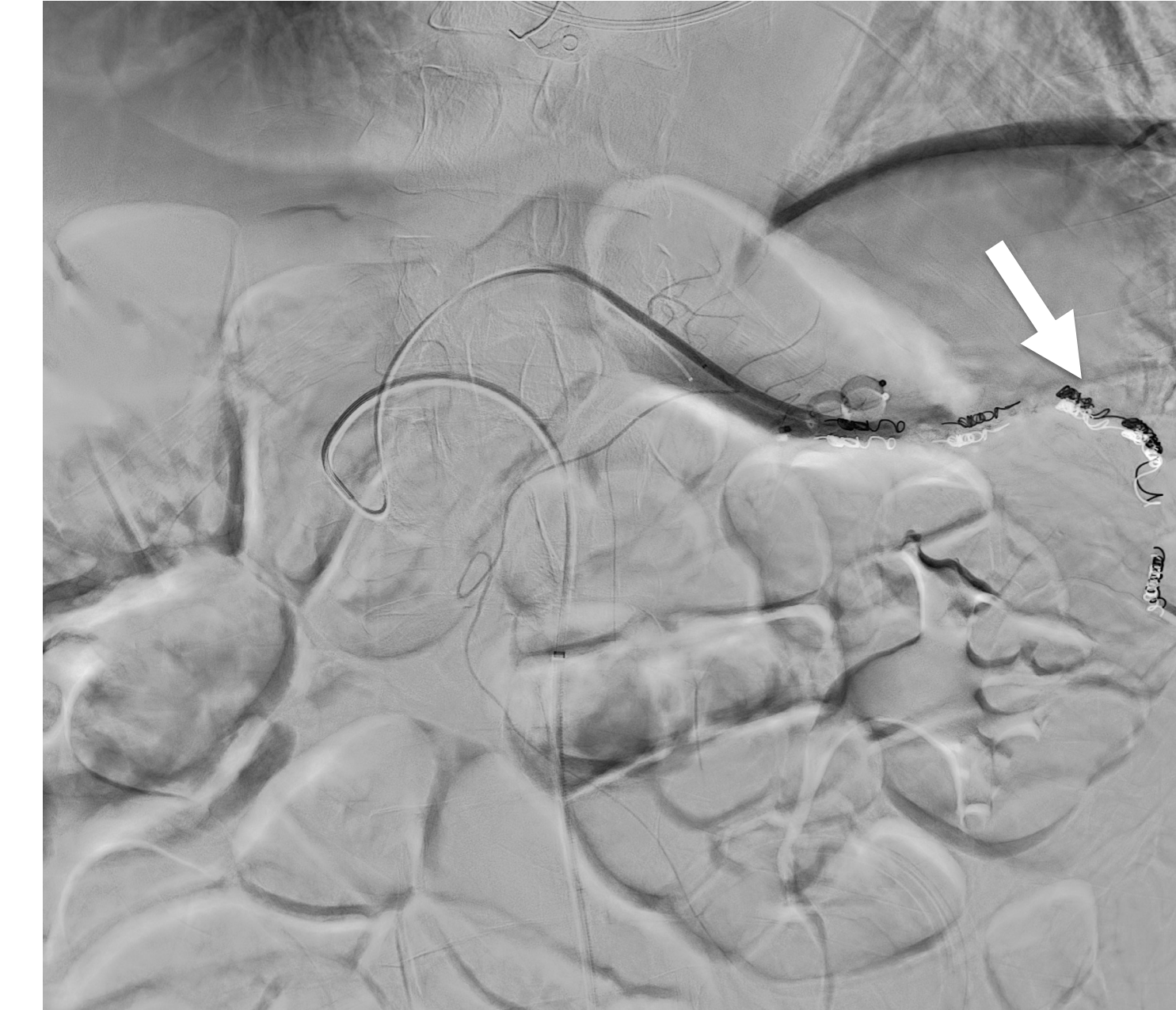
### Gastric biopsies

- Mild chronic inflammation, reactive gastropathy.
- Negative for H. pylori or malignancy.

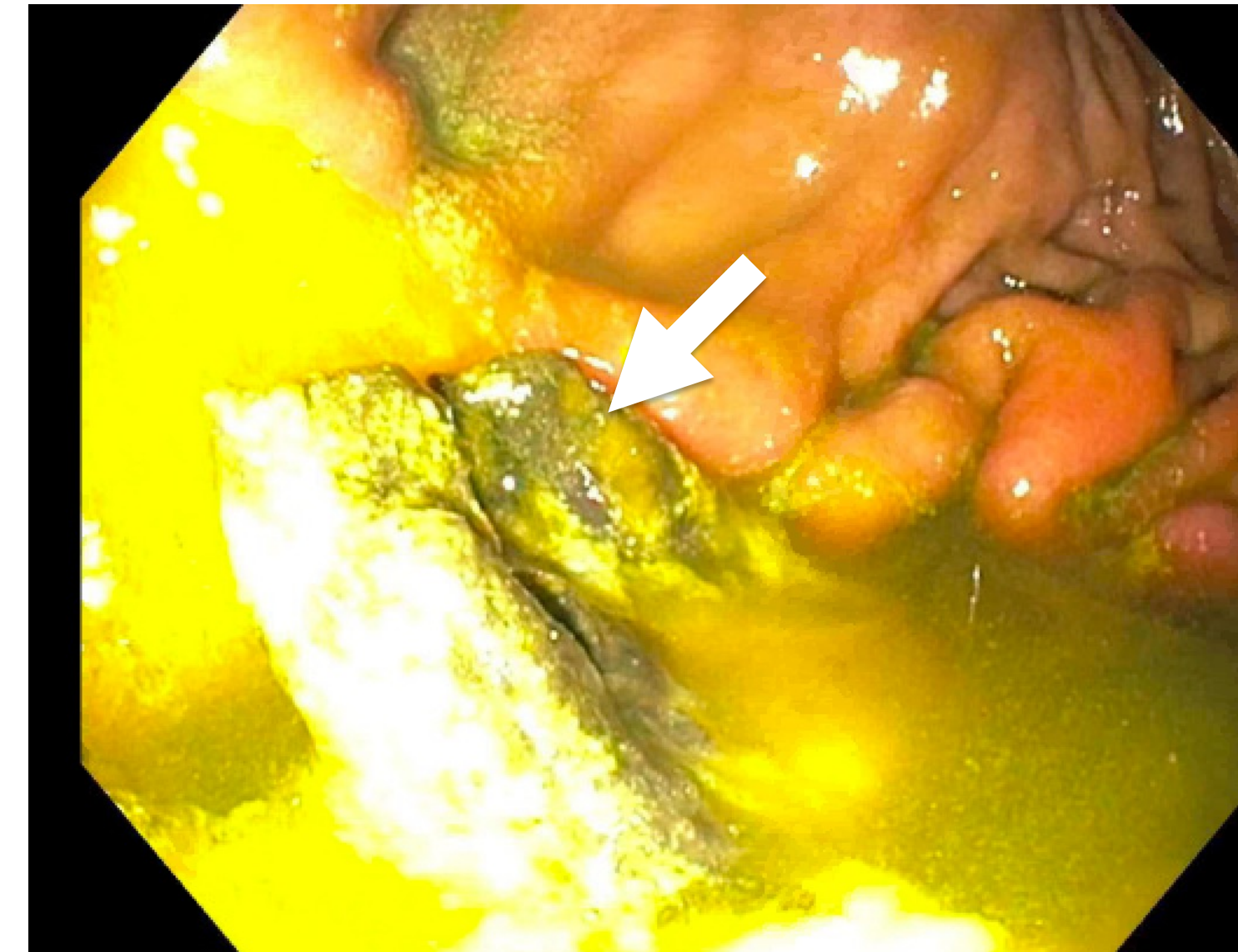
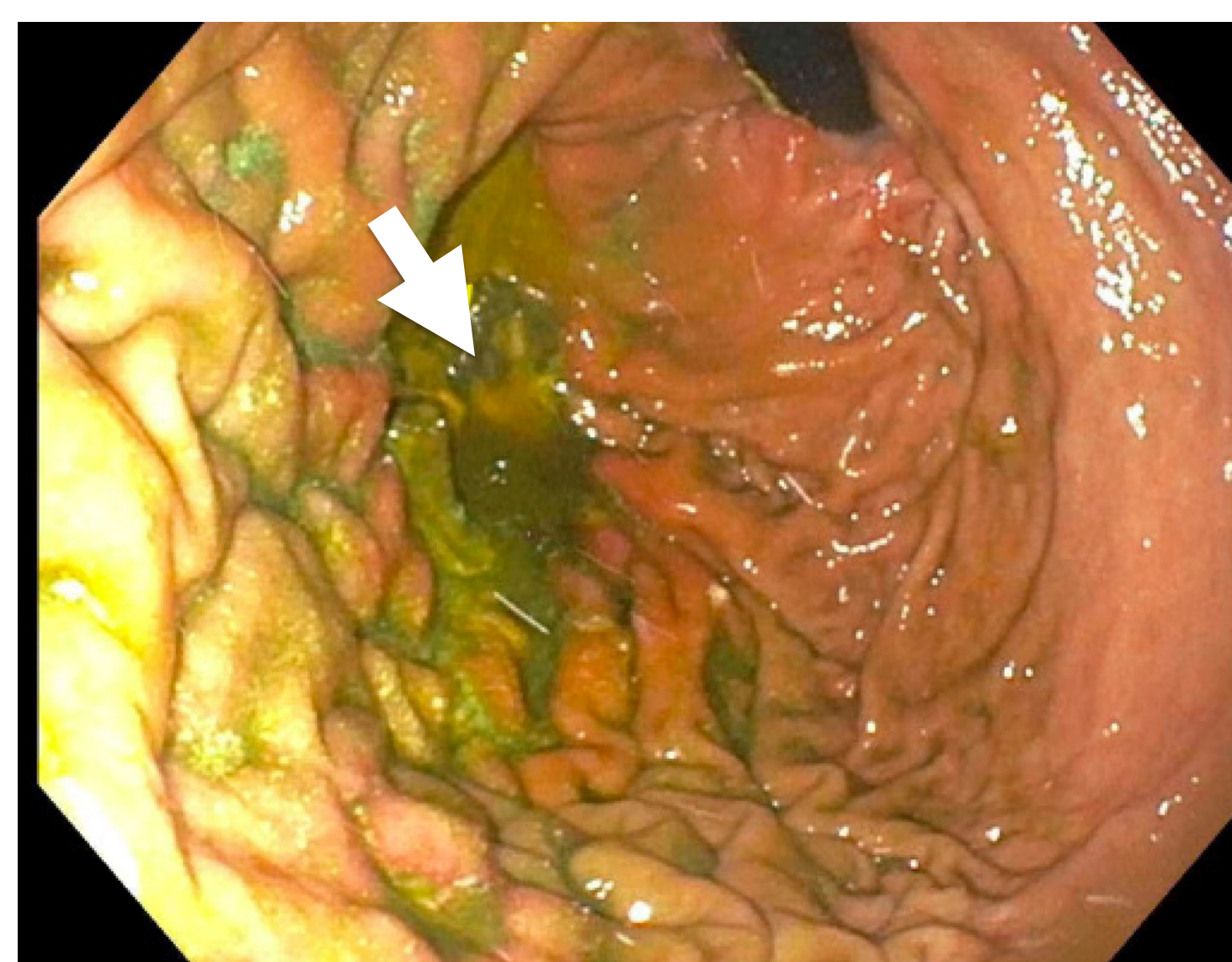
## IMAGES



**Figure 1.** CT angiogram showing GSF. Arrow shows an increased density (site of ulceration) within the fundus of the stomach with a direct contiguity with the spleen which has abnormal enhancement. Wedge-shaped defects are present within the spleen.



**Figure 2.** Angiography of the splenic artery demonstrated hyperemia along the posterior wall of the stomach corresponding to the site of ulceration on CT scan (left). Gelfoam slurry, coil, and Amplatzer embolization were performed to occlude splenic artery perfusion (right).



**Figure 3.** EGD visualization of the gastric fundus. Large benign gastric tumor in the gastric fundus, consistent with splenic tissue invading the gastric mucosa. Moderately congested mucosa in the gastric fundus. Endoscopic images correlate with previous CT imaging.

## CASE DESCRIPTION

### Surgical Management

- A partial gastrectomy and splenectomy were performed.
- Operative findings were consistent with a large type V gastric ulcer at the fundus with direct extension into the spleen.

### Surgical pathology

- Acute inflammation, patchy acute serositis and mucosal ulceration, Negative for malignancy

## DISCUSSION

- We present a case of upper gastrointestinal hemorrhage due to idiopathic GSF in adults which is a rare entity.
- EGD evaluation is critical as it enables direct visualization of fistulous opening, active bleeding and tissue biopsy.
- In our case gastric biopsies were unremarkable except evidence of acute inflammation. Idiopathic GSF with type V gastric ulcer may result in life threatening gastrointestinal hemorrhage from erosion of the splenic vessels.
- Early embolization of splenic vessels is required in hemodynamically unstable patients followed by radical surgical resection such as splenectomy and gastrectomy.
- A high index of clinical suspicion is required for early identification and management of GSF as massive hemorrhage may result in a high rate of mortality.