

Helicobacter pylori Negative Mucosa-Associated Lymphoid Tissue (MALT) Lymphoma Presenting as a Severe Upper Gastrointestinal Bleed

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Case Description

A 75-year-old male with history notable for cerebral vascular accident on dual antiplatelet therapy presented after one episode of large volume melena. On initial presentation, the patient was confused and unable to provide additional history. His vital signs were significant for blood pressure of 65/28 mmHg and heart rate of 111 bpm. Labs revealed hemoglobin of 10.3 g/dL, creatinine of 1.39 (baseline of 0.9), and lactate of 5.2 mmol/L.

The patient was resuscitated, and a pantoprazole infusion was started. Upper endoscopy revealed a 1 cm clean-based ulcer with heaped-up margins in the gastric body. Pathology of the ulcerated tissue revealed extensive lymphoid infiltrate with atypical lymphoid cells consistent with MALT lymphoma (figure 1). Gastric antral and body biopsies were negative for *H. pylori* infection.

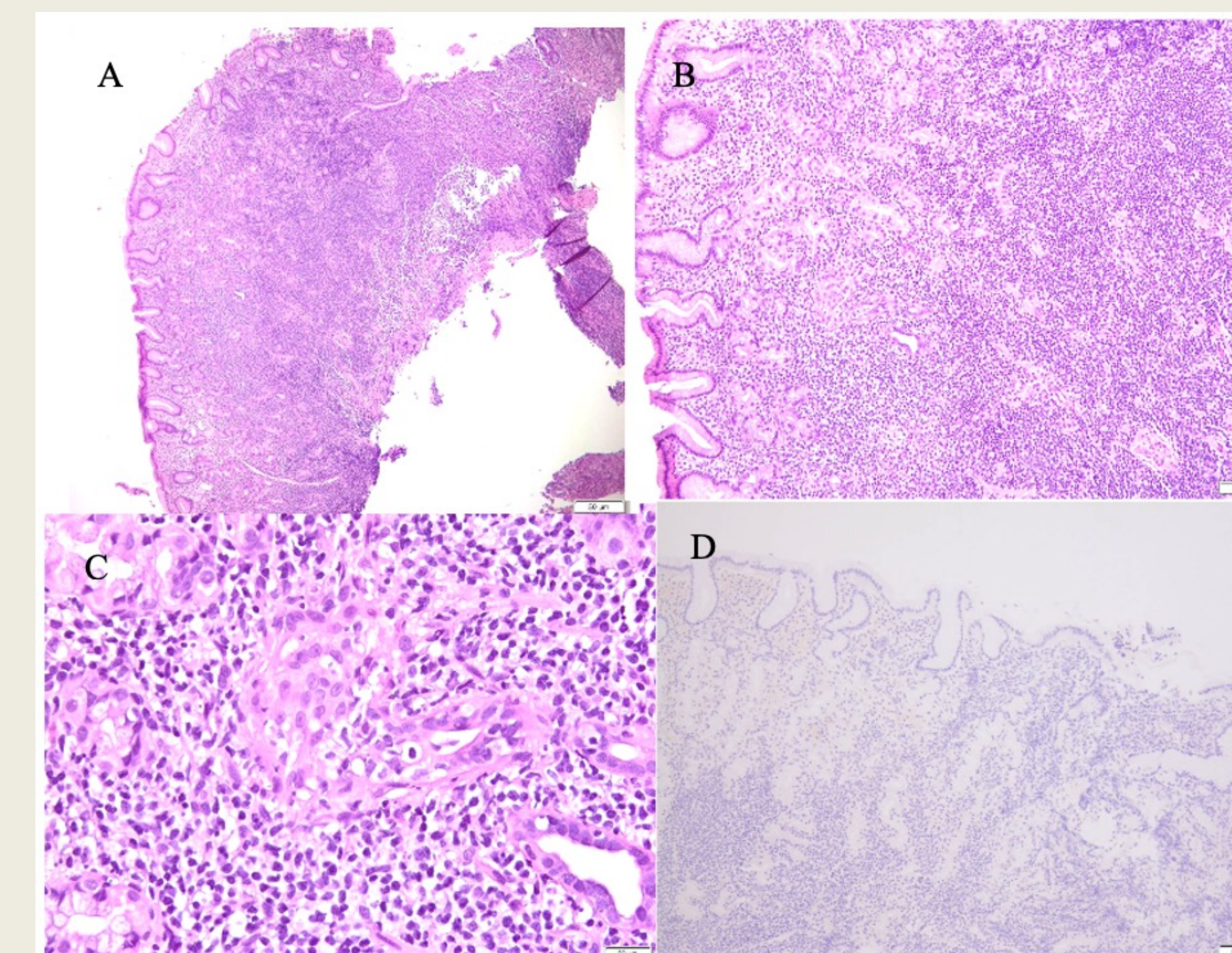


Figure 1: A) Gastric mucosa with extensive diffuse lymphoid infiltrate in lamina propria (40x). B) Destruction of gastric glands by dense lymphoplasmacytic infiltrate (100x). C) Lymphoepithelial lesions; infiltration and distortion of gastric glands by aggregates of (usually 3 or more) neoplastic lymphoid cells (400x). D) Immunostaining for *H. pylori* is negative (100x).

INTRODUCTION

Mucosal associated lymphoid tissue lymphoma (MALT Lymphoma) is a non-Hodgkin lymphoma arising from memory B cells. *H. pylori* is thought to create a favorable microenvironment for neoplastic B cells, which leads to lymphoma. Surveillance and treatment of *H. pylori* is the only daily practice that holds clinical value in preventing gastric MALT lymphoma.² As a result, the incidence of *H. pylori* gastric MALT lymphomas has decreased in western countries.⁵

While nearly 90% of gastric MALT lymphoma is typically associated with *H. pylori* infections, new reports suggest higher rates of gastric MALT lymphoma in *H. pylori* negative patients.⁴ Clinicians must be aware that gastric MALT lymphoma may arise outside of an *H. pylori* infection. At the time of diagnosis of gastrointestinal MALT lymphoma, bleeding is rarely encountered and when present, is most often occult.⁶

DISCUSSION

While gastric MALT lymphoma typically presents with constitutional symptoms or dyspepsia, this case highlights an exceedingly rare presentation of *H. pylori* negative MALT lymphoma presenting with hemorrhagic shock. There is still much to learn about *H. pylori* negative MALT lymphoma, and the pathogenesis remains unclear.¹

Identifying the pathogenesis for *H. pylori* negative MALT lymphomas will be paramount to improving detection and treatment options for patients. Several theories currently exist to explain the pathogenesis, including genetic alterations causing activations to nuclear factor-kappa, infection with organisms other than *H. pylori*, or the presence of autoimmune disease.¹

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