Gastrointestinal Hemorrhage With Gastritis and Pancolitis as Sole Presentation for Granulomatosis with Polyangiitis Flare

Sarah Khan MD, Motasem AlKhayyat MD, Almaza Albakri MD, Sebouh Setrakian MD, Katherine Falloon MD, Mohannad Abou Saleh MD, Patricia Ajayi-Fox MD.
Department of Gastroenterology and Hepatology, Cleveland Clinic Foundation. Cleveland, Ohio.

Introduction

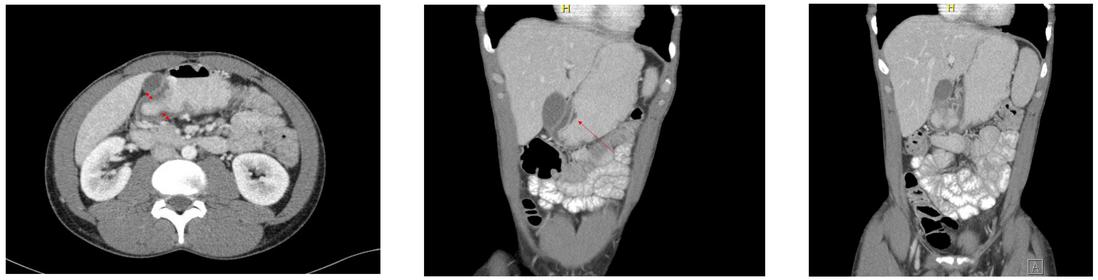
Granulomatosis with polyangiitis (GPA) is a rare small to medium vessel vasculitis. Estimated prevalence within the United Stated for GPA is 3/100,000 patients. The disease classically affects the upper respiratory tract, lungs and kidneys. Rarely, the gastrointestinal system is affected. In such cases, it is important to distinguish GPA from mimics, and diagnosis is guided by clinical judgement taken together with histologic analysis.

Case Description

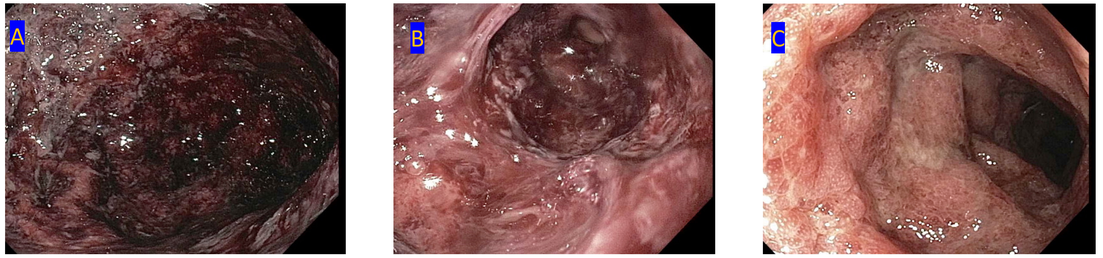
A 27- year old male with history of GPA who presented with 2 weeks of bloody and black bowel movements associated with abdominal pain and bloody vomiting. Past medical history was notable for GPA diagnosed in childhood with presence of nasal inflammation, pulmonary nodules and rapidly progressive crescentic glomerulonephritis.

- Labs: WBCs to 13.6k/uL, elevated CRP to 2.5mg/and elevated creatiine to 1.47mg/dL.
- Abdominal CT scan: thickening and edema of the gastric antrum, suggestive of gastritis.
- Stool testing: positive for fecal calprotectin and lactoferrin, and negative for common bacterial pathogens.
- Serum C3 and C4 were normal, ANCA antibodies were negative, both on acute presentation and during routine testing previously.
- Endoscopy: striking hemorrhagic inflammation of the stomach
- Colonoscopy showed pancolitis throughout examined colon. Gastric and colonic biopsies showed acute mucosal inflammation and non-necrotizing vasculitis, without granulomas.

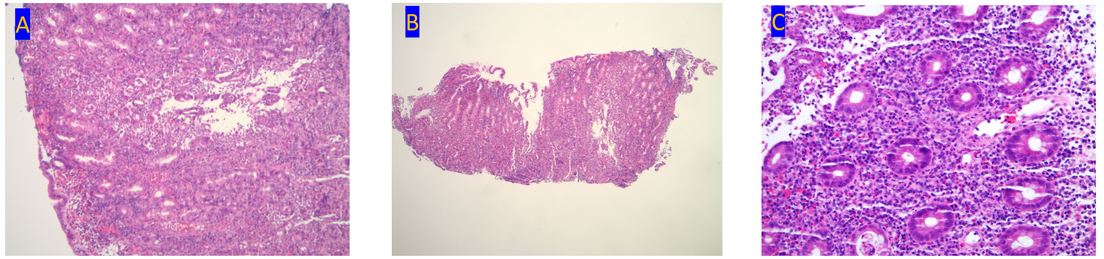
Results



CT Abdomen/Pelvis: Thickening and edema of the walls of the gastric antrum suggesting gastritis. No bowel obstruction or bowel dilatation.



Endoscopy and colonoscopy findings. A, B. Hemorrhagic gastritis. Diffuse severe hemorrhage with clots throughout stomach.
C. Colitis. Severe inflammation with adherent blood, edema, erosions, erythema and granularity.



A, B. Gastric mucosa. **C. Colonic mucosa**. Chronic active gastritis and colitis, neutrophilic epithelial injury, micro abscesses, cryptitis, crypt abscesses and vasculitis. No granulomas are identified, negative H pylori.

Case Resolution

He was started on intravenous methylprednisolone, with rapid resolution of his symptoms thereafter. He was discharged on a prednisone taper. On follow up, his gastroenterologist and rheumatologist co-managed his illness with azathioprine, with good response.

Discussion

Gastrointestinal manifestations of GPA are rare, with estimated prevalence of 6-7% of GPA patients. Gastrointestinal vasculitis causes inflammation with resulting end organ ischemia, leasing to a wide spectrum of clinical presentation.

Predominantly intestinal manifestations are described, including mesenteric ischemia and bleeding. Manifestations are associated with higher vasculitis severity on scoring indices, higher need for surgery and increased mortality. Interestingly, absence of granulomas on biopsy of the GI tract does not appear to be atypical [1, 2].

An important differential for gastrointestinal GPA is Crohn's disease. Although co-existence of GPA and IBD has been described, it is very rare [3]. Due to the paucity of data, current guidelines do not provide recommendations on management of GI manifestations on ANCA-associated vasculitis.

Contact
Sarah Khan, MD
Cleveland Clinic Foundation
Email: khans21@ccf.org

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