

Title:

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Gastric siderosis: an endoscopic diagnosis challenge

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Dear Editor,

A 71-year-old man with multiple comorbidities had been taking oral ferrous sulfate during the last two years for chronic hemolytic anemia. Upper gastrointestinal endoscopy (UGE) revealed an extensive nodular area in the greater curvature with multiple brownish deposits and spontaneous hemorrhage (1). The biopsy showed superficial fragments of gastric mucosa with mild inflammation of lamina propria and presence of ferric pigment confirmed by positive Perl's iron stain, being these findings suggestive of drug-induced injury (2). After diagnosis of gastric siderosis (GS), iron supplements were discontinued and a UGE nine months later showed no remaining

lesions (3).

GS is characterized by local iron overload in the stomach and is often underrecognized since it is usually indolent, especially when caused by standard doses of oral iron supplements. The typical endoscopic findings consist in erosions, erythema and yellowish-brown discoloration of the mucosa. The most frequent histopathological characteristic is the type B pattern, which shows deposits in the extracellular location, including blood vessels, macrophages, and epithelium, known as "iron pill gastritis." Treatment is conservative, typically involving modification of the iron replacement therapy to a less harmful alternative.

DISCUSSION

GS, especially oral ferrous sulfate-induced, is an underrecognized entity. Awareness of predisposing pathologies and consideration of GS in differential diagnosis can guide treatment strategies and help prevent endoscopic lesions.

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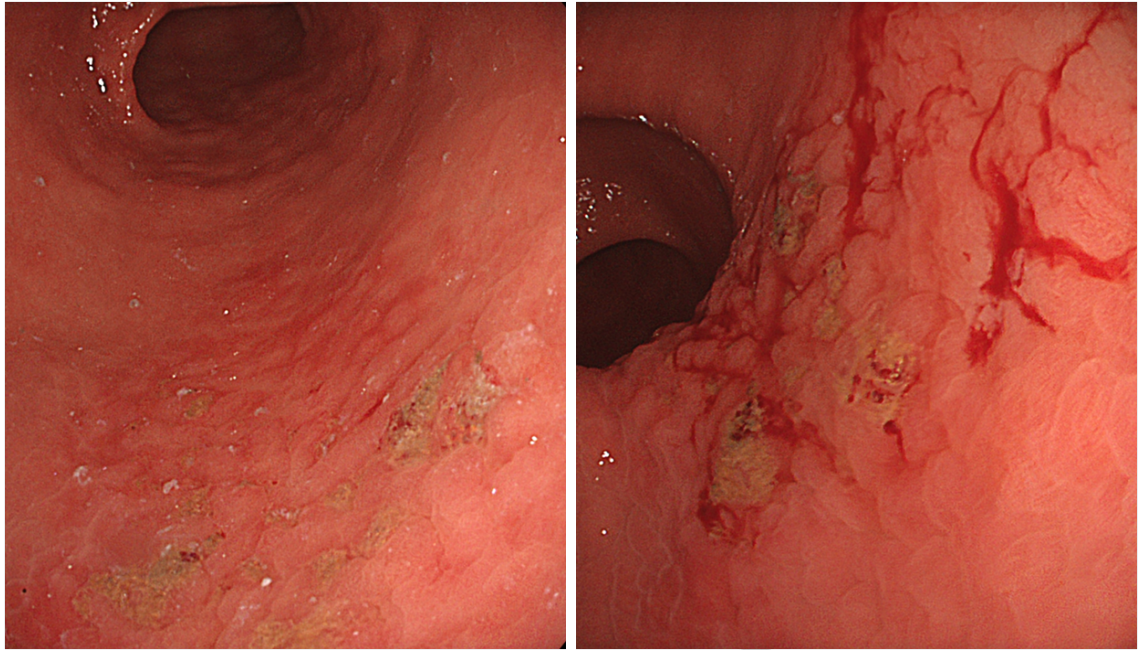


Fig. 1. Endoscopic features of lesions: Magnifying endoscopy with narrow-band imaging reveals extensive nodular area with an irregular margin, in the greater curvature with multiple brownish deposits and spontaneous hemorrhage.

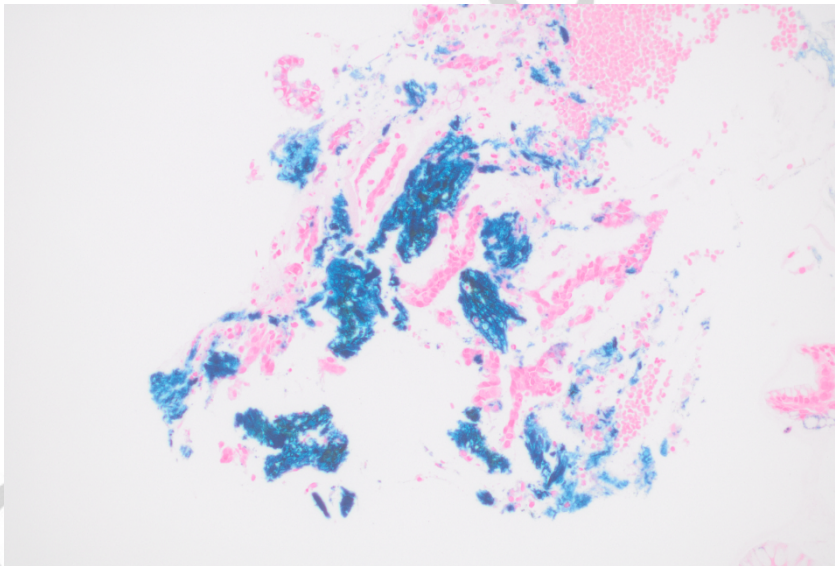


Fig. 2. Histopathology of the stomach. Low-power micrograph of gastric mucosa showed mild inflammation of the lamina propria and ferric pigment, confirmed by a positive Perl's iron stain, indicating drug-induced injury.



Fig. 3. Magnifying endoscopy with narrow-band imaging reveals esophagus, stomach, and duodenum with normal color and vessels. There should be no bleeding, growths, ulcers, or inflammation.