

Hiatal Hernia without Cameron Lesions as an Etiology of Iron Deficiency Anemia



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CASE PRESENTATION

64-year-old female with a history of gastroesophageal reflux disease, iron deficiency anemia, and hiatal hernia presented to the emergency department with lightheadedness.

- History:
 - Denied
 - Abdominal pain
 - Hematemesis
 - Hemoptysis
 - Hematochezia
 - Melena
 - Recent changes
 - Stopped taking proton pump inhibitor and iron supplements due to cost
 - Social history
 - Tobacco: 1 cigarette/day
- Vitals: Afebrile, hypertensive, and tachycardic
- Exam: pale older adult; 1+ bilateral pitting edema to the ankles
- Labs:
 - Hemoglobin: 4.3 g/dL
 - Mean Corpuscular Volume (MCV):58.9 fl
 - Haptoglobin: 96 mg/dL
 - Lactate dehydrogenase (LDH):
 244 IU/L
 - o Ferritin: <10 ng/mL</p>
 - o Iron: 8 ug/dL
- Imaging
 - Large hiatal hernia

CASE CONTINUED

Initial Resuscitation

- 3 units of packed red blood cells
- Hemoglobin re-check:
- 7.9 g/dL

Consultant Involvement/ Findings:

- Gastroenterology consult for occult bleeding etiology
 - Endoscopy and colonoscopy performed
- Scope findings
 - Endoscopy
 - Reflux esophagitis
 - Large hiatal hernia
 - No Cameron lesions
 - Normal stomach mucosa
 - Normal duodenum mucosa
 - Colonoscopy
 - Medium sized external hemorrhoids
 - Moderate diverticulosis in sigmoid colon
 - Otherwise normal colon
 - Biopsy findings
 - No histologic abnormalities
 - No helicobacter organisms

TREATMENT

- Re-started on proton pump inhibitor
- 1000mg of intravenous iron dextran

What Makes this Case Unique?

-Hiatal hernia leading to iron deficiency anemia is often under-recognized

DISCUSSION

Case of iron deficiency anemia in a patient with a hiatal hernia

Causes of Iron Deficiency Anemia

- Blood loss
- Decreased absorption
- Reduced oral intake
- Hiatal hernias

Proposed Mechanism

- Patients with hiatal hernias can develop mucosal defects called Cameron lesions
- Even in absence of these lesions, pathophysiology thought to be due to the healing and recurring erosions

KEY POINTS

- Iron deficiency anemia can exist in the absence of Cameron lesions
- Treatment is typically with a proton pump inhibitor +/- Nissen fundoplication

REFERENCES

Camaschella C. Iron deficiency. *Blood*. 2019;133(1):30-39. doi:10.1182/blood-2018-05-815944

Panzuto F, Di Giulio E, Capurso G, et al. Large hiatal hernia in patients with iron deficiency anaemia: a prospective study on prevalence and treatment. *Aliment Pharmacol Ther*. 2004;19(6):663-670. doi:10.1111/j.1365-2036.2004.01894.x

Pauwelyn KA, Verhamme M. Large hiatal hernia and iron deficiency anaemia: clinico-endoscopical findings. *Acta Clin Belg*. 2005;60(4):166-172. doi:10.1179/acb.2005.030