

Melena: An Uncommon Presentation of Scurvy

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Introduction

- Scurvy is the clinical manifestation of vitamin C deficiency and generally presents with hemorrhage (petechiae, ecchymoses, bleeding mucosa), follicular hyperkeratosis, hemolytic anemia, hypochondriasis, hysteria, depression, and fatigue.
- Scurvy is a relatively rare diagnosis in industrialized countries; however, it can be seen in alcoholic, elderly, and institutionalized patients or those following fad diets or suffering from malabsorptive disorders (3,5).
- The association of scurvy and GI pathology is rare, but it exists. There have been reported cases of scurvy presenting as GI bleed (1) and even as the initial manifestation of Whipple's disease (2).

Case Presentation

History and Exam

- A 71-year-old female with past medical history of systemic lupus erythematosus, carcinoid tumor of the small bowel and abnormal bruising presents to the hospital with worsening purpura and pain in her bilateral lower extremities. She described the pain as intermittent polyarthralgia affecting her feet, ankles, knees, hips, shoulders, and elbows.

Work up and management

- Her labs were significant for anemia of 8.2 (baseline of 11) and mildly elevated CRP and ESR of 5.9 and 30 respectively. Workup for IgA vasculitis, antiphospholipid antibody syndrome, small vessel vasculitis, and cryoglobulinemia was started.
- During hospitalization, the patient had multiple black bowel movements and her hemoglobin dropped to 6.8. Iron studies were significant for iron deficiency. She was transfused, GI was consulted, and EGD and colonoscopy were done.
- EGD showed characteristic findings of gastric antral vascular ectasia (Figure 1) which was treated with APC and colonoscopy revealed erythematous mucosa throughout the entire colon (Figure 2). Biopsy was taken of the colon mucosa and came back unremarkable.

- The patient's hgb stabilized and she was discharged with dermatology follow up for biopsy of purpuric skin lesions. After discharge, patient's labs resulted and showed an undetectable level of Vitamin C. She was seen in follow up with her PCP and treatment was started.

Discussion

- The water-soluble vitamin C, found in fruits and vegetables, plays a crucial component in collagen synthesis by activating hydrolases that form stabilizing components of the collagen triple-helix structure. When deficient, small vessels in the skin and mucosa become fragile resulting in submucosal hemorrhage in the stomach, duodenum and colon that presents as hematochezia or melena (3,4,5).

- Treatment typically consists of dietary modification and intravenous vitamin C replacement with resolution of lesions in only a few days. Vitamin C is replaced daily and generally normalizes in 3-4 weeks (1).

- This case demonstrates an unusual presentation of scurvy in the form of GI bleed which led to endoscopy and eventual histologic diagnosis. It is important for gastroenterologists to consider scurvy in the differential diagnosis of patients presenting with GI bleed, purpura and polyarthralgia.

References

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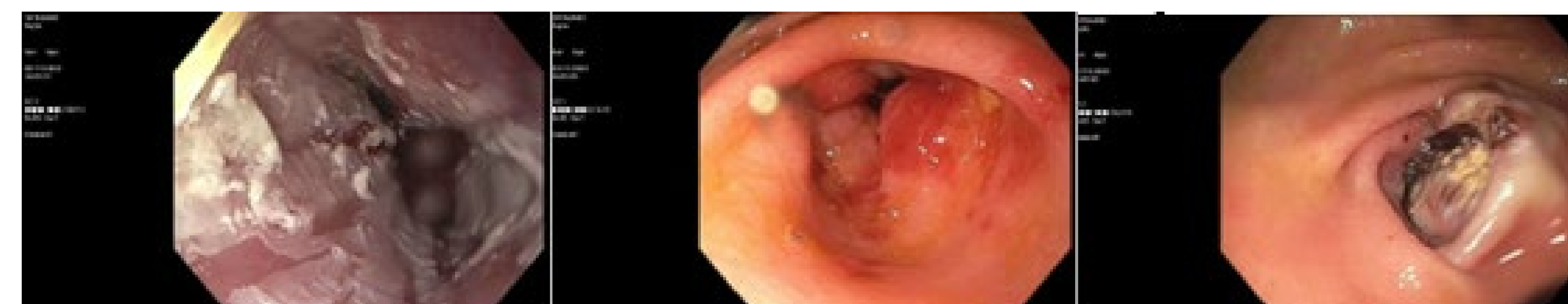


Image 1: EGD findings interpreted as GAVE

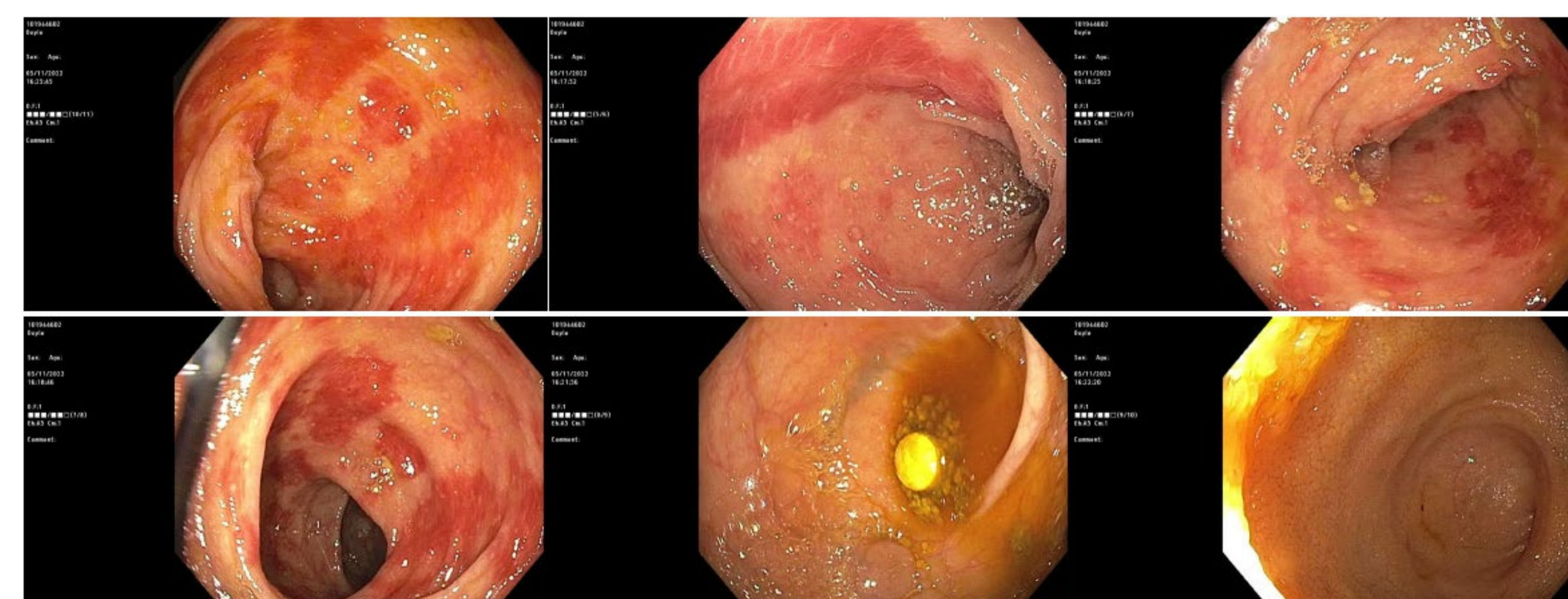


Image 2: Erythematous mucosa seen throughout entire colon