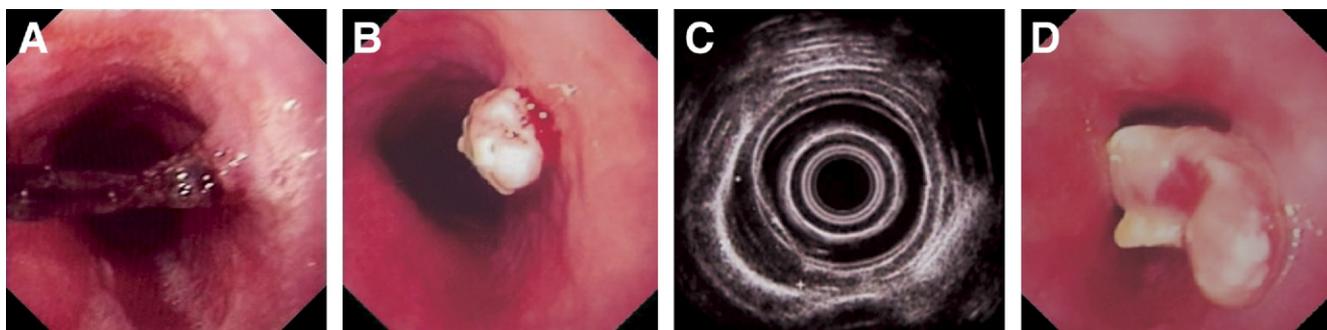


A Metamorphic Lesion



See related article, [Chou J–W et al](#), on page xxvi in *CGH*.

Question: A 65-year-old Caucasian woman presented at the emergency room with acute hematemesis. She referred a short episode of oral bleeding 2 weeks before and complained of solids nonprogressive dysphagia over the last month. She was hemodynamically stable under inotropic support therapy, and a first endoscopic evaluation was performed (Figure A), where it was possible to identify the bleeding origin on the upper esophagus at about 20 cm from dentary arcade. Computed tomography (CT) showed only slight thickening of the upper esophageal wall. A second look endoscopy, 48 hours later, presented different features (Figure B). Ultrasound (US) endoscopy revealed a hypoechoic lesion and suggested muscle layer involvement (Figure C). The patient was proposed for surgery and at that time a third endoscopy revealed another distinct morphology (Figure D).

What is the diagnostic cause for this gastrointestinal bleeding presenting with such metamorphic features?

Look on page 395 for the answer and see the GASTROENTEROLOGY web site (www.gastrojournal.org) for more information on submitting your favorite image to Clinical Challenges and Images in GI.

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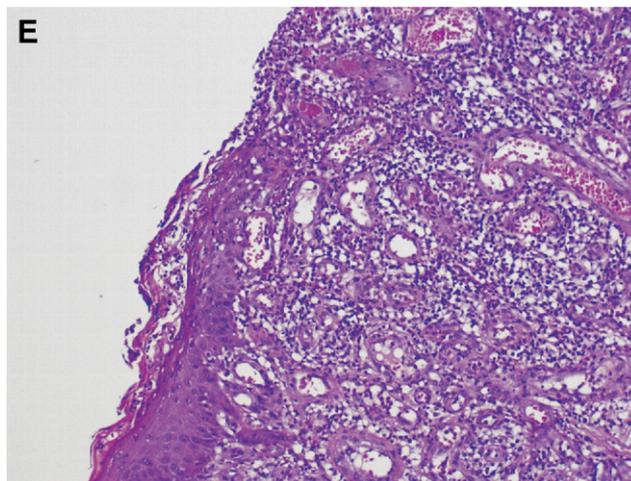
Conflicts of interest

The authors disclose no conflicts.

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Answer to the Clinical Challenges and Images in GI Question: Image 2 (page 41): Esophageal Pyogenic Granuloma

The first image expresses the acute post-bleeding state, a small fresh blood clot with no mucosal lesion being identified (Figure A); 48 hours later at the same place, we found a whitish fibrinoid and nodular clot with some oozing hemorrhage from the base (Figure B). CT scan and US endoscopy excluded any continuity with an extra-esophageal vascular structure, but raised some concern about the possible muscle layer involvement. Taking this information, the location of the lesion and the rebleeding risk, an operative approach was thought to be more appropriated. Before elective intervention, 50 days after the acute episode, endoscopy showed a semi-pedunculated, 12-mm mass with a smooth, friable surface displaying yellowish and red areas (Figure D). The patient underwent the operation and recovered without complication. The pathologic examination revealed newly formed capillaries, endothelial proliferation, a nonspecific inflammatory infiltrate, and fibroblast proliferation forming granulation tissue (Figure E), confirming the diagnosis of pyogenic granuloma (PG).

PG is a specific clinicopathologic entity of lobular capillary hemangioma that presents as a growing, polypoid mass usually achieving its maximal size in few weeks or months. It is frequently friable and resembles exuberant granulation tissue. Postulated predisposing factors include trauma, hormonal influences, and bacterial and viral infections, but there remains controversy regarding the mechanisms underlying its development.^{1,2} PG commonly occurs on the skin and oral mucosa being rarely reported in the esophagus or distal gastrointestinal tract.^{1,2} To our knowledge, only about 25 cases of digestive PG have been published in the English literature.^{2,3} Endoscopy and radiologic imaging techniques can be used in its detection and major differential diagnoses include inflammatory polyps and other vascular tumors such as bacillary angiomatosis and angiomatous variant of Kaposi sarcoma.² Concerning treatment, resection (operative or endoscopic) is often required because of the gastrointestinal bleeding risk inherent to its hypervascular nature.² Although mechanical irritation and trauma as etiologic factors remain controversial, their contribution certainly helps to explain the reactive morphologic changes and the different aspects on endoscopy. The metamorphic pattern could give the clue for an early recognition, although the definitive diagnosis is commonly made by histopathology. However, Serban and Florescu have reported that detection of an adherent whitish or yellowish deposit on the mucosa might be suggestive of PG, with a sensitivity and specificity of 100%. Additionally, a rapid, intraluminal growth and transforming appearance are also good indicative criteria. We believe that the endoscopic iconography shown herein could be a helpful visual tool in providing early recognition for an eventual similar finding during routine endoscopic work.

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