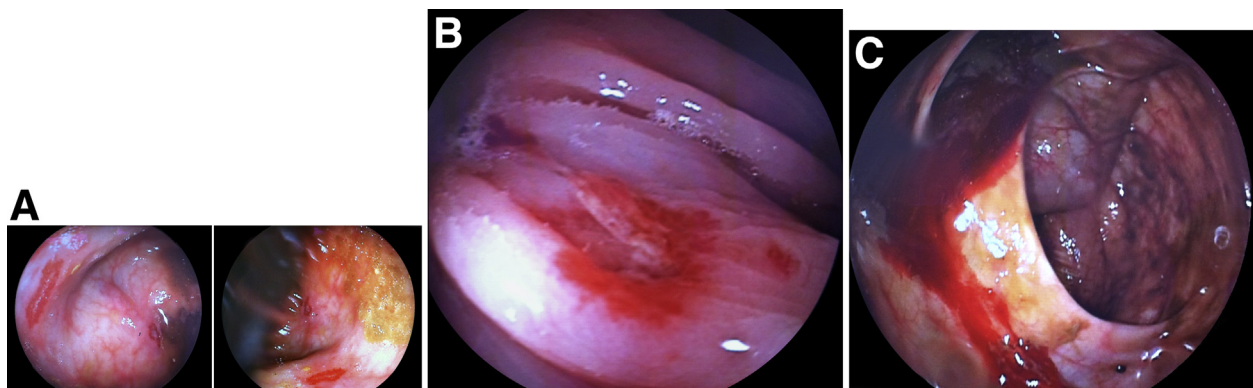


## Bleeding Ulcers of the Right Colon



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**Question:** A 79-year-old man underwent an upper and lower endoscopy for digestive bleeding and recurrent acute anemia. He had a history of hypertension, dyslipidemia, peripheral arterial occlusive disease lower limb arteriopathy. Three months before, an angioplasty of the right external iliac artery, common femoral artery, and profunda artery was performed. Then he developed recurrent digestive pain episodes as well as anemia, leading to perform several endoscopic examinations. These examinations were normal except for small angiectasia of the upper gastrointestinal tract. Finally, he was hospitalized in our department for melena and acute anemia (Hb 6.4 g/dL), which also induced a critical ischemia of the lower right limb.

Upper gastrointestinal endoscopy was normal, while colonoscopy showed multiple small flat or ulcerated lesions (Paris 0-IIb/IIc) of different sizes and shapes, surrounded by a ring of hyperemic mucosa (Figure A, B). The adjacent mucosa was normal. These lesions were located in the caecum and the right colon. Only 1 biopsy was performed, which induced an important active bleeding (Figure C) and required a hemostatic procedure (clipping). He underwent a successful endovascular surgery for right lower limb revascularization.

What was the diagnosis concerning small lesions seen at colonoscopy?

Look on page 450 for the answer and see the *Gastroenterology* website ([www.gastrojournal.org](http://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

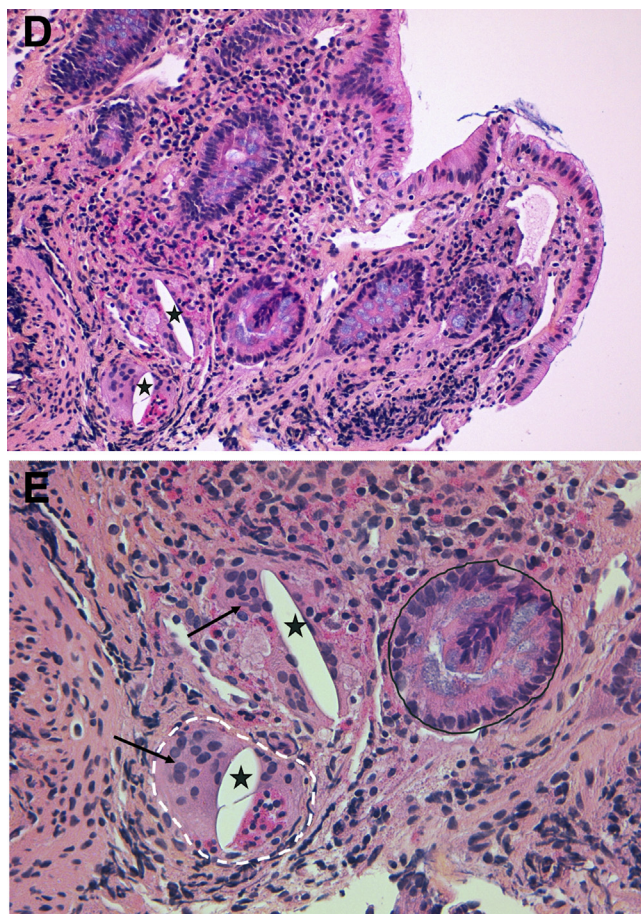
The authors disclose no conflicts.

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## Answer to: Image 4 (Page 449): Cholesterol Crystal Emboli Disease



Histology of the colonic biopsy revealed dilated vessels and cholesterol emboli in the arterial lumen (Figure D; stain: hematoxylin and eosin; original magnification  $\times 10$ ). Figure E (stain: hematoxylin and eosin; original magnification  $\times 40$ ) shows the colon ulcer. Cholesterol crystals (black stars) are surrounded by macrophage infiltrates (black arrows). Endothelium and colonic gland are shown in white dotted line and black plain line, respectively. The digestive tract is the third most common site for cholesterol crystal emboli (CCE) disease,<sup>1</sup> and colon is described to be the most common location.<sup>2</sup> Usually, CCE occurs after an endovascular surgery, an arteriography or even after antiplatelet therapy intake, and is due to the arterial obstruction of the vessels by cholesterol crystals from an atherosclerosis plaque. Renal dysfunction and livedo are the most common clinical presentations.

Diagnosis is often performed after skin biopsy or typical acute renal insufficiency after an endovascular procedure. Our case is original because both endoscopic images and histologic features are rarely seen, essentially because of missed diagnosis. Gastroenterologists should be familiar with this disease because better symptom and image recognition and prompt diagnosis might improve patients' management. Mortality is still around 40%–60% with CCE disease. In patients presenting abdominal symptoms such as diarrhea, abdominal pain, or bleeding, the clinician should keep this diagnosis in mind, because its prevalence is probably underestimated, and may be not so rare with the growing number of patients with arteriosclerosis and the increasing number of vascular procedures.<sup>3</sup> The present patient did not require any supplementary intervention of the digestive tract.

**Keywords:** Digestive Bleeding; Ulcers; Endoscopy.

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