Pneumatosis coli due to pharmacological constipation

Cesar Prieto, MD; Ignacio Fernandez-Urrien, MD; Bruno Sangro, MD, PhD; Jose Carlos Subtil, MD, PhD
Digestive Diseases Division

Miguel Angel Idoate, MD, PhD
Department of Pathology

David Cano, MD
Department of Radiology

Miguel Muñoz-Navas, MD, PhD
Digestive Diseases Division, University of Navarra, Pamplona, Spain

A 56-year-old woman was being treated with tramadol (up to 300 mg/day) for joint pain. After 20 days of treatment, tramadol was discontinued because of intense constipation followed by severe lower abdominal pain, diarrhea, and tenesmus. On admission to the hospital, symptoms persisted; results of standard laboratory tests were unremarkable. A CT scan of the abdomen and pelvis showed a myriad of gas-filled cysts in the wall of the rectum, sigmoid, and descending colon (A, middle). Colonoscopy revealed these lesions to be 5 to 20 mm, subepithelial cyst-like lesions protruding into the lumen; the overlying mucosa was normal (B). CT and colonoscopic findings were confirmed by EUS (C). Histopathologic analysis showed a submucosal dissection by gas-filled spaces (D, H&E, orig. mag. x40). Pneumatosis coli due to pharmacological constipation was diagnosed. Antibiotics and high-flow oxygen therapy were followed-up by rapid symptomatic and radiological improvement (A, upper-left corner).

DISCLOSURE: The authors have no commercial associations that might be a conflict of interest.