Asymptomatic pneumatosis cystoides intestinalis diagnosed in the follow-up of a dysplastic polyp

A 73-year-old man with a medical history of ischemic cardiomyopathy and atrial fibrillation, who was being treated with digoxin, bisoprolol, and warfarin, underwent a colonoscopy for colorectal cancer screening in April 2013. A 20-mm pedunculated polyp was excised from the ascending colon using a snare after injection of epinephrine in the stalk, and a 30-mm pedunculated polyp was excised, using a similar method, from the sigmoid colon; no other lesions were found. Pathologic analysis showed a low grade dysplastic adenoma in the former and a low grade dysplastic adenoma with areas of high grade dysplasia, with free margins, in the latter. The patient did not experience any immediate complications and remained completely asymptomatic.

A follow-up colonoscopy was performed 1 year later. Multiple round and smooth subepithelial nodules, with normal overlying mucosa, suggestive of pneumatosis cystoides intestinalis, were observed in the ascending colon. With a biopsy forceps and a needle, we deflated some of these lesions, confirming the diagnosis. Pathologic analysis showed some features of pneumatosis intestinalis with a cyst centered in the muscularis mucosa/submucosa (disruption of the muscle was noted).

The pathogenesis of this condition is poorly understood [1, 2]. Traumatic injury of the mucosa caused by polypectomy could allow intraluminal gas to pass through the wall of the colon. This “mechanical theory” [1] is not widely accepted as the cause of pneumatosis intestinalis; however, we conclude that it is the best explanation in this case since the gaseous cysts became evident only after polypectomy in the same region of the colon.

Competing interests: None

João Santos-Antunes1,2, Rosa Ramalho1, Susana Lopes1, Susana Guimarães3, Fátima Carneiro3, Guilherme Macedo1

1 Gastroenterology Department, Faculty of Medicine, Hospital de São João, Porto, Portugal
2 Department of Biochemistry (U38-FCT), Faculty of Medicine, University of Porto, Portugal
3 Department of Pathology, Faculty of Medicine, University of Porto, Portugal
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DOI http://dx.doi.org/
Endoscopy 2014; 46: E425–E426
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
João Santos-Antunes, MD
Department of Gastroenterology,
Faculty of Medicine
Centro Hospitalar S. João
Alameda Prof. Hernani Monteiro
4200-319 Porto
Portugal
Fax: +351-22-5513601
joao.claudio.antunes@gmail.com