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

Fig. 1 a–c Pneumatosis cystoides intestinalis after screening colonoscopy: endoscopic views of submucosal lesions found in the ascending colon in an area where polypectomy had been done 1 year previously.

Fig. 2 Histological image showing features of pneumatosis intestinalis (hematoxylin and eosin [H&E], x 100).

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.

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Competing interests: None

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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 (▶ **Fig. 1 a–c**), were observed in the ascending colon. With a biopsy forceps and a needle, we deflated some of these lesions, confirming the diagnosis (▶ **Video 1**). Pathologic analysis showed some features of pneumatosis intestinalis with a cyst centered in the muscularis mucosa/submucosa (disruption of the muscle was noted) (▶ **Fig. 2**).

Video 1

Video showing biopsy and deflation of nodules using forceps and an endoscopic needle.

References

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