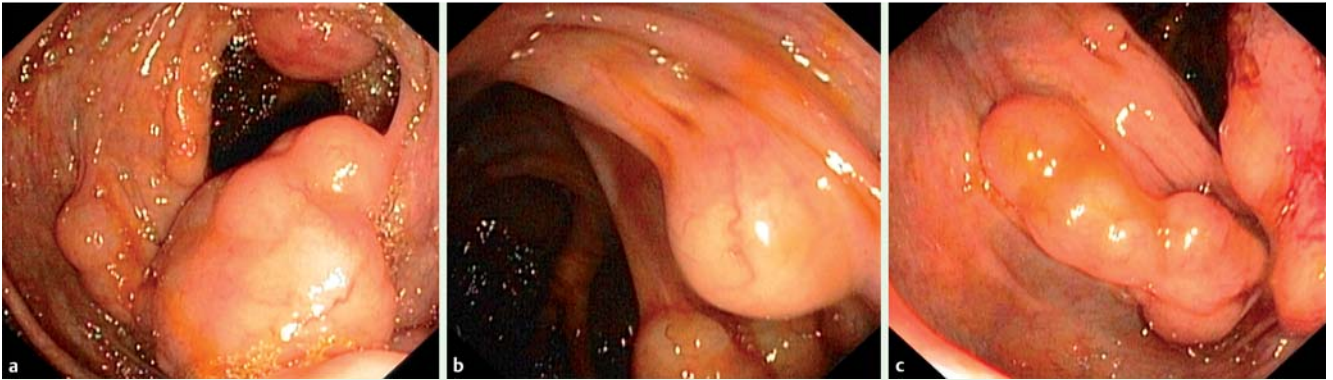
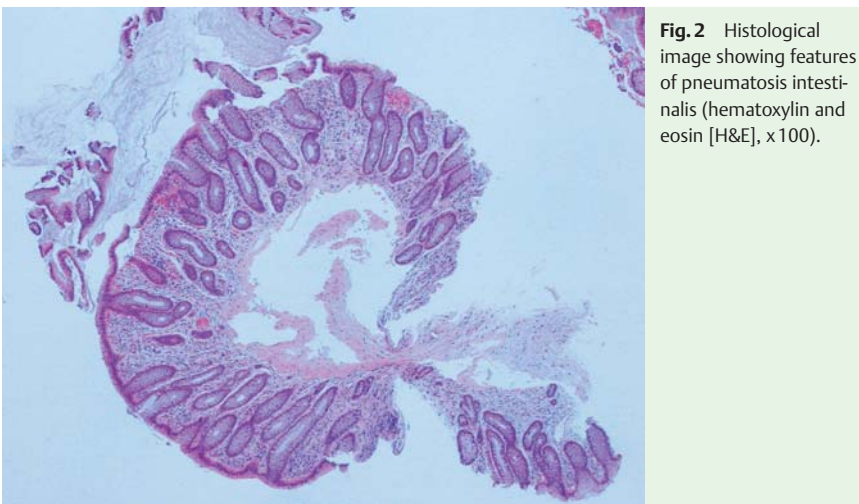


## Asymptomatic pneumatosis cystoides intestinalis diagnosed in the follow-up of a dysplastic polyp



**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).

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.

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.

Endoscopy\_UCTN\_Code\_CCL\_1AD\_2AJ

**Competing interests:** None

**João Santos-Antunes<sup>1,2</sup>, Rosa Ramalho<sup>1</sup>, Susana Lopes<sup>1</sup>, Susana Guimarães<sup>3</sup>, Fátima Carneiro<sup>3</sup>, Guilherme Macedo<sup>1</sup>**

<sup>1</sup> Gastroenterology Department, Faculty of Medicine, Hospital de São João, Porto, Portugal

<sup>2</sup> Department of Biochemistry (U38-FCT), Faculty of Medicine, University of Porto, Portugal

<sup>3</sup> Department of Pathology, Faculty of Medicine, University of Porto, Portugal

**References**

- 1 Wu L-L, Yang Y-S, Dou Y et al. A systematic analysis of pneumatosis cystoids intestinalis. *World J Gastroenterol* 2013; 19: 4973–4978
- 2 Heng Y, Schuffler MD, Haggitt RC et al. Pneumatosis intestinalis: a review. *Am J Gastroenterol* 1995; 90: 1747–1758

**Bibliography**

**DOI** <http://dx.doi.org/10.1055/s-0034-1377435>  
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](mailto:joao.claudio.antunes@gmail.com)