

## A rare case of colonic pseudolipomatosis

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A 54-year-old man was referred to our department for colorectal cancer screening. The colonoscopy revealed, at the ascending colon, several white plaques, some confluent, interspersed with normal mucosa (Fig. 1). Biopsies were performed and the histopathological examination showed a fragment of polypoid colonic mucosa with optically empty vacuoles in the lamina propria (Fig. 2) and irregular cystic spaces of varying sizes, similar to adipocytes in the absence of inflammation or dysplasia.

Colonic pseudolipomatosis is a benign and rare condition, with an estimated prevalence of 0.02-0.3% in colonoscopic series, characterized by the presence of vacuoles with gas content in the lamina propria of the large intestine [1].

The incidence is more frequent between the sixth and seventh decade of life [2]. The pathogenesis remains unclear, but it is now considered to be an iatrogenic change caused by penetration of gas into the mucosa during endoscopy [1,2].

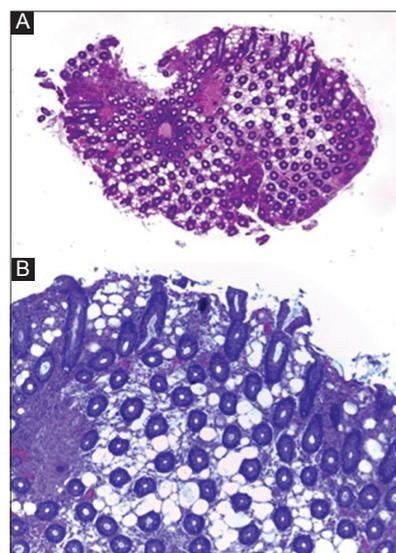
The endoscopic aspect is typical, with whitish or yellowish, single or multiple, mucosal plaques [1,2]. The plaques extend over several mm to 4 cm and can be found equally in the right and left colon [3]. The histological aspect is characterized by presence of optically empty vacuoles measuring 20-240 µm and displacing adjacent lamina propria. These clear spaces have no epithelial lining and are morphologically similar to adipocytes but without lipid content, based on histochemistry and ultrastructure [3].

The differential diagnosis includes cystic pneumatosis, colonic lymphangioma and colonic malakoplakia [2,3].

Conservative management is adequate since the lesions regress spontaneously without complications within weeks.



**Figure 1** Endoscopic appearance of colonic pseudolipomatosis: whitish plaques, some confluent, interspersed with normal mucosa at the ascending colon



**Figure 2** Pseudolipomatosis (H&E) (A) At low power field (40x), numerous cystic spaces were seen in the lamina propria of a polypoid fragment of colon mucosa. (B) A higher power field (100x) revealed adipocyte-like spaces, without inflammatory infiltrate or epithelial dysplasia

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### References

1. Nakasono M, Hirokawa M, Muguruma N, et al. Colonic pseudolipomatosis, microscopically classified into two groups. *J Gastroenterol Hepatol* 2006;**21**:65-70.
2. Martinez CA, Souza CA, Noronha M, et al. Pseudolipomatose do cólon: relato de caso. *Rev Bras Coloproct* 2008;**28**:104-107.
3. Brevet M, Chatelain D, Bartoli E, et al. Colonic pseudolipomatosis: clinical, endoscopic and pathological features in nine cases. *Gastroenterol Clin Biol* 2006;**30**:9-13.