

Pseudomelanosis Coli and Adenomatous Polyps

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Fig 1. Endoscopic view of the colonic mucosa showing the dark brown mucosa and a pink adenomatous polyp.

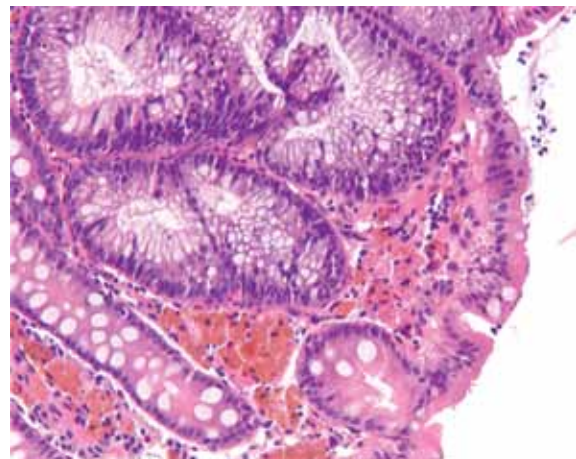


Fig 2. Histology sections (x20) of colonic biopsies, showing stromal tissue containing macrophages with brown pigment.

A 63-year-old patient was referred for surveillance colonoscopy. Twelve years earlier she had been diagnosed with a Dukes C2 adenocarcinoma located in the sigmoid colon, for which she underwent resection. Since then, she had used large amounts of senna to regulate her bowel movement. The colonoscopy revealed an impressive alternating brown and grey pigmented appearance in the entire colonic mucosa, supporting the diagnosis of pseudomelanosis coli, whereas the ileum showed normal pink-coloured mucosa. Throughout the colon, seven sessile polyps ranging in size from 5 to 10 mm and 12 polyps ranging in size from 2 to 4 mm were observed (Fig. 1). These polyps were easily detected due to their contrasting pink colour. All polyps were removed with either hot or cold snare polypectomy or with biopsy forceps.

Histology sections revealed mild dysplasia with atypical epithelial cells with normal underlying colonic mucosa. Furthermore, the endoscopic suspicion of pseudomelanosis coli was histologically confirmed by stromal tissue containing macrophages with brown pigment (Fig. 2).

Pseudomelanosis of the gastrointestinal mucosa has been described in the entire gastrointestinal tract, such as in the

stomach, small bowel and colon [1]. This benign condition is associated with chronic use of laxatives containing anthraquinone. In our patient the dark brown colour of the mucosa resulted in enhanced visualisation of adenomatous polyps, in the same fashion as endoscopic dye application does. The reason why adenomas do not contain pigment is unclear [2]. Most likely, pigment-laden macrophages are restricted to the normal mucosa whereas macrophages without pigment preferentially migrate to benign or malignant neoplastic tissue [3].

In conclusion, pseudomelanosis coli facilitates the detection of small adenomas in the colon.

Reference

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3. Regitnig P, Denk H. Lack of Pseudomelanosis coli in colonic adenomas suggests different pathways of apoptotic bodies in normal and neoplastic colonic mucosa. *Virchows Arch* 2000;436:588-94.