

Who Turned Out the Lights? An Impressive Case of Melanosis Coli

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Case Report

A 58-year-old man with a history of hemorrhoidectomy and chronic constipation presented for routine surveillance colonoscopy. He took an over-the-counter herbal laxative containing senna for constipation. The rectal mucosa showed a brownish discoloration in a moire pattern, characteristic of melanosis coli. Advancing beyond the rectum, the full circumference of colonic mucosa turned jet black in appearance (Figure 1). These findings persisted throughout the colon until the terminal ileum (Figure 2). Two random biopsies were consistent with melanosis coli.

Melanosis coli, strictly translated to excessive melanin production of the colon, is a misnomer that describes the dark pigment that arises from lipofuscin, rather than melanin, located in mucosal macrophages.¹ Laxative use is a well-known cause, with anthraquinones being commonly implicated. Anthraquinone laxatives, such as senna and rhubarb, induce apoptosis of the mucosal cells, which are then phagocytosed by macrophages producing lipofuscin (Figure 3).² However, it is now recognized that apoptosis of the mucosal cells of any cause results in this hyperpigmentation.¹ Therefore, melanosis coli may be seen in absence of laxative use, such as with topical psoriasis treatments containing anthralin.³ Melanosis coli is a benign condition with no link to cancer, and in some instances may result in easier detection of both benign and malignant polyps, as these do not take up the pigmentation.^{4,5}

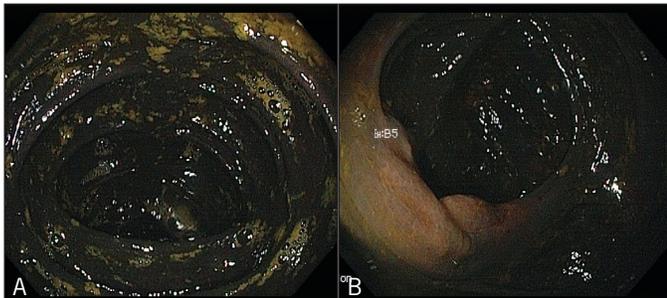


Figure 1. Endoscopic findings of (A) prominent mucosal hyperpigmentation with black appearance in the transverse colon, and (B) notable sparing of hyperpigmentation of the small bowel mucosae of the ileocecal valve.

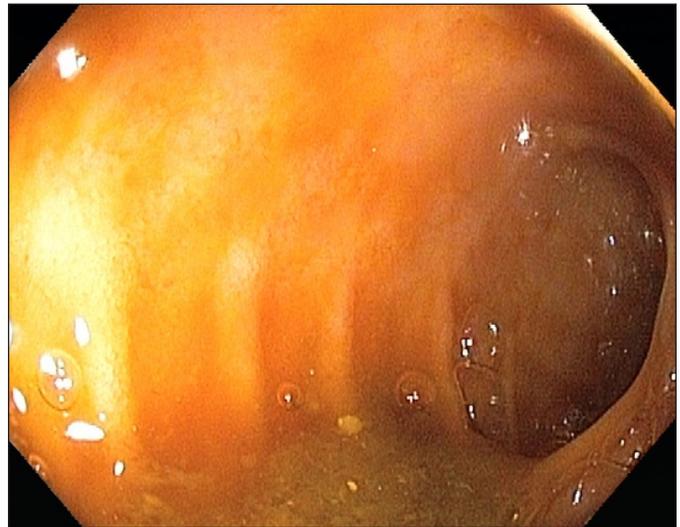


Figure 2. Normal appearing terminal ileum, completely spared of hyperpigmentation.

Disclosures

Author contributions: K. Cowley prepared the manuscript and is the article guarantor. HW Jennings and M. Passarella edited and approved the manuscript.

Financial disclosure: None to report.

Informed consent was obtained for this case report.

Received: August 24, 2015; Accepted: June 16, 2015

ACG Case Rep J 2015;3(1):13-14. doi:10.14309/crj.2015.85. Published online: October 9, 2015.

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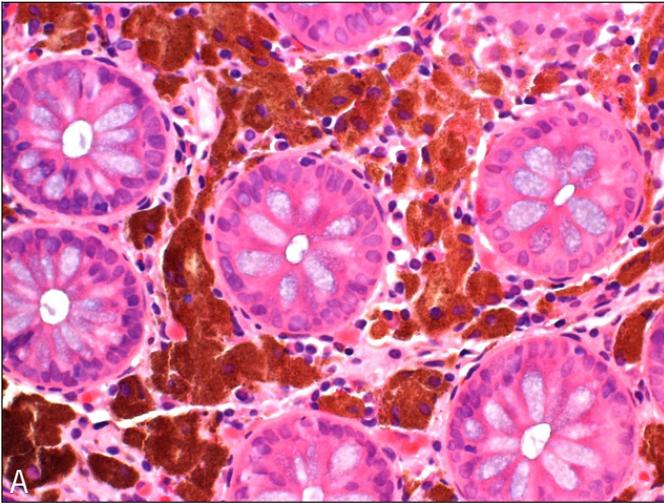


Figure 3. Prominent pigment-laden macrophages of the lamina propria at 40x magnification.

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