

MCQ Answer: Melanosis coli

MCQ Discussion:

Melanosis coli is usually an incidental gastrointestinal finding seen in patients undergoing endoscopy for lower gastrointestinal bleed, constipation or screening colonoscopy.² This benign condition results from the direct laxative effect of anthraquinones on the colonic mucosa. This leads to the production of lipofuscin, causing the dark discoloration.^{2,3} Despite this, adenomatous polyps can still be easily identified, as they are unaffected by lipofuscin.^{2,3} Anthraquinones are natural occurring laxatives that can be found in many over-the-counter medicinal herbs such as colon detox, rhubarb, buckthorn, cascara sagrada, aloe, and senna.²⁻⁴ Emodin is the most widely occurring anthraquinones in medicinal herbs. In large retrospective study by Nusko and colleagues it was found that there was no increase in incidence in colorectal cancer in patients with melanosis coli compared to healthy controls.⁵ Therefore, this subset of patient does not need any additional colorectal cancer that is different from the general population. Nusko and colleagues also found a high adenoma detection rate compared to controls due to the ease of detection in the setting of a dark colonic background.⁵ The management of melanosis coli is to stop the offending agent and the discoloration will usually resolve on repeat endoscopy.

This is not a case of colon cancer as her biopsy result was negative for carcinoma and a quick resolution of her symptoms makes colon cancer less likely. This is not a case of gastrointestinal melanoma as biopsy did not support this diagnosis, and more importantly, the dark hyperpigmentation in melanoma is usually circumscribed and does not commonly involve the intestinal mucosal in a diffuse pattern. Colonic candidiasis is rare and lesions are generally white and cheese-like. Candidiasis is also more common in immunocompromised patient, which was not the case in the patient. This is not a case of colonic burn because there is no history of caustic ingestion. Colonic burn has imaging and pathology with liquefaction necrosis, which was not reported in this patient's colonic pathology report.

Figure Legends

Figure 1. Diffuse oval shaped brownish-black macules surrounded by normal appearing mucosa in the descending colon, akin to a cheetah's skin. There is also an entire normal mucosal area.

Figure 2. Distal colonic mucosal with black discoloration.