

Case study

MELANOSIS COLI: A RARE ENTITY IN ELDERLY PATIENTS PRESENTING WITH CONSTIPATION

Abstract

Melanosis coli is a condition in which there is blackish to brown discoloration of colon and is commonly associated with chronic laxative usage. It is frequently an incidental finding on colonoscopy or histopathological evaluation. Here, we present to you a case of a sixty six year old man with history of constipation and laxative use.

Keywords: melanosis coli, laxative, constipation

Introduction:

A condition in which the colon develops a brown to blackish discoloration is termed as melanosis coli (MC). It is caused by the accumulation of pigment in macrophages within the lamina propria. Initially it was thought to be caused by melanin but later on, lipofuscin deposited in macrophages within the lamina propria as a result of apoptosis is found to be responsible for this condition.¹⁻³ It is a benign condition and is often an incidental finding on colonoscopy or histopathologic evaluation.^{4,5} The association of this disease is most commonly linked with chronic use of laxatives and is often found in patients with chronic constipation.^{3,6-8} Several studies have revealed an association between melanosis

Comment [A1]: Specify anthroquinones here.

coli and the chronic use of anthraquinone laxatives, such as cascara sagrada, aloe, senna, rhubarb, and frangula.^{9,10} This condition is observed in up to 70% of chronic users of implicated laxatives and the discoloration seems to appear within 4 months of laxative usage. Being a benign and reversible condition, the pigment generally disappears within 1 year of stopping laxatives.¹¹

We present to you a case of 65year old male who presented with altered bowel habits and weight loss and on workup was found to have melanosis coli.

Case Presentation:

A sixty-five year old man presented to us in an outpatient department with complaint of constipation since last 3 months associated with bleeding PR which is mixed with stool, red in color. There is also a history of undocumented, unintentional weight loss along with feeling of abdominal fullness after taking the meal. He use to have similar complain of constipation on and off since last 3 years and he has been taken laxatives since the same duration of time. Prior to coming to hospital, he has a history of homeopathic medications for these complaints for last 15 days. His medical history is significant for diabetes for last 10 years and is well controlled on oral hypoglycemics. On examination, abdomen was soft to palpation but had mild tenderness in left iliac fossa. Vital signs and laboratory

Comment [A2]: Specify which ones and what dosage here.

Comment [A3]: Which ones?

Comment [A4]: Which ones?

investigations were normal. So, he was planned for colonoscopy which was normal with colonic biopsy revealing features of many scattered macrophages containing black to brown pigment likely suggestive of melanosis coli.

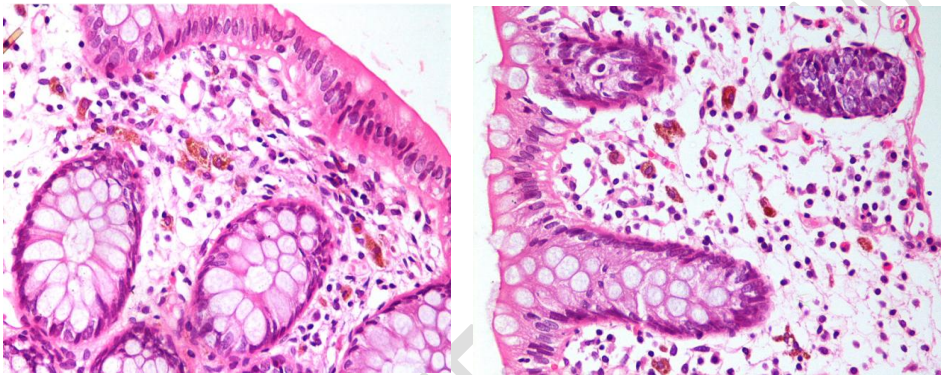


Fig 1: Fragments of colonic mucosa A and B: Both of the images showing intact cryptal architecture with underlying stroma showing mild lymphoplasmocytic infiltrate and many scattered macrophages containing blackish, brown pigments suggestive of melanosis coli

Discussion

Melanosis Coli occurs due to the deposition of blackish brown pigment called lipofuscin in the lamina propria of the colon¹⁻³. There has been association of melanosis coli with the chronic use of anthroquinone laxatives. These include several plants, such as aloe, cascara, and senna. frangula and rhubarb and are sometimes used as over the counter laxatives.^{3,6,7} These agents hinder the regular

capability of epithelial tissue to function, preventing absorption, secretion and motility and causing apoptosis of the cells.^{5,6,12} It should be appropriately termed as "pseudo melanosis coli" based on the histology of the disorder as the change in pigmentation of the mucosa is caused by lipofuscin and not melanin.^{3-5,7} It is an incidental finding on endoscopy or histology, and is most commonly located in the cecum and ascending colon.⁷ Development of melanosis coli can take place 4 to 12 months after the use of laxatives.^{4,6,12} The risk of developing melanosis coli include the elderly patients, those with irritable bowel syndrome, and those with history of chronic constipation.⁵ Studies have shown that among the patients who were diagnosed to have melanosis coli, 95% of them have history of chronic use of laxatives.⁸ In our case, the patient had history of chronic constipation from three years and was on laxatives from the same duration. His colonoscopy was normal with histology of colonic biopsy consistent with features of melanosis coli.

Conclusion

Melanosis coli should be considered in patients with history of constipation taking laxatives for a long duration of time.

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