

Short communication



Melanosis coli is not a rare colonoscopic finding in Nigeria

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Received: 08 May 2020 - **Accepted:** 27 May 2020 - **Published:** 16 Jun 2020

Keywords: Melanosis coli, Nigeria, colonoscopy, anthraquinone-containing laxatives, polyps

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Cite this article: Aderemi Omololu Oluyemi et al. Melanosis coli is not a rare colonoscopic finding in Nigeria. PAMJ Clinical Medicine. 2020;3(56). 10.11604/pamj-cm.2020.3.56.23217

Available online at: <https://www.clinical-medicine.panafrican-med-journal.com//content/article/3/56/full>

Melanosis coli is not a rare colonoscopic finding in Nigeria

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Abstract

This report examines melanosis coli cases seen during colonoscopic assessment over a 3 year period in a Lagos, Nigeria-based practice. A prevalence figure of 5.2% (35 cases out of 697 procedures) was discovered. The authors would thus like to opine that this pigmentation anomaly is not rare in Nigerian colons and that the more recent increase in the prevalence might be connected to the upsurge in consumption of anthraquinone-containing laxatives in the general population.

Introduction

The term “melanosis coli” (MC) was first coined by Virchow in 1857 to describe the appearance of brown or black pigmentation in the colon [1]. It has been shown that this discolouration is actually from lipofuscin deposits (and not melanin, as previously thought) in the macrophages that have ingested apoptosed colonocytes [2]. It is most commonly reported as associated with long term use of anthraquinone-containing laxatives [3]. Melanosis coli is thought not to be associated with significant pathology [4,5] and is readily reversible after withdrawal of the offending drug [6]. Some have opined that it is only rarely seen in Africa [6]. This work sought to examine the occurrence of this phenomenon in clients that had colonoscopy at a private center in Lagos, Nigeria and its possible association with other polyps.

Methods

This was a retrospective, observational study. Records of a private endoscopy services center were ploughed for biodata, presenting complaints and colonoscopic findings from a 33 month period (covering January 2017 till the October 2019). A single colonoscopist (the first author) carried out over 95% of these procedures. The data obtained was then analyzed and is thus presented.

Results

Colonoscopy procedure was conducted on 697 clients at this center. Of these, 35 (5%) were found to have MC (male= 18, female=17; M: F ratio= \sim 1:1). The average age of the patients was 53.3 years (range from 28-78 years). The presence of MC was not associated with any polyp in these individuals. A review of data from procedures done 28 months prior to the sample date (i.e. August 2014 till December 2016) did not reveal any patient with MC. The indication for the procedure was chronic constipation in 8 (23%) of the MC patients either singly or in combination with hematochezia (1 of 8). There was pancolonic involvement in the majority

of cases seen- 21 (60%). Involvement was restricted to the right side of the colon alone in 7 (20%) of the MC cases, thus the cecum was involved in all of the cases- no case of only left sided involvement was noted.

Discussion

Melanosis coli is thought to be the one of the commonly encountered pigmentation changes in the intestinal tract mucosa that is seen in endoscopic specimens [7]. The pathogenesis of their appearance has variously been discussed and is outside the scope of this piece [2]. The prevalence of this condition is not known but some have opined that it is a rare finding [6]. The findings of this study is that this is not should no longer be regarded as a rare lesion in the African colon. This result is in keeping with the widely known phenomenon of MC being commonly present in the population both visibly to the examining eye and more so in microscopic samples of the colon [8]. Thus, it appears that African prevalence figures are more likely to mirror those from outside the continent if more attention was paid to study MC. The pattern of predominantly right side vs left side occurrence in this study is also in keeping with results from other studies [3,8]. The high prevalence of pancolonic involvement might point to a duration-of-exposure-dependent spread of colonic changes - starting from the right side and spreading more distally [3,8]. The striking difference in the absence of this phenomenon over 28 month period prior to the date of this study reflects the upsurge in the use of anthraquinone-containing laxative compounds as therapy for constipation in the past couple of years in this country. The study did not find any relationship between MC and the presence of polyps which is in keeping with the more recent thinking that there exists little relationship between these two entities [4,5].

Conclusion

In view of the marked increase in cases of MC in the recent times, this article submits that it should no longer be considered a rare occurrence in the African colon. The widespread use “or abuse” of these anthraquinone-containing compounds for their laxative effect is what is considered the root cause of the rise in MC. The presence of MC was not associated with an increase in polyps.

What is known about this topic

- *Melanosis coli is a common effect of anthraquinone-containing laxative use;*
- *The effect is readily reversed upon discontinuation of the laxatives;*
- *Data about the occurrence is lacking in African literature. While some opine that is rarely seen in these parts.*

What this study adds

- *The study provides data that it is not so rarely seen during colonoscopy in Nigerian patients;*
- *Seeks to stimulate research to document the actual prevalence among Africans which will help settle the question of its rarity or otherwise, among other things.*

Competing interests

The authors declare no competing interests.

Authors' contributions

Aderemi O. Oluayemi: study design; collection of data; data analysis/interpretation; writing & editing of the manuscript. Opeyemi O. Owoseni. Collection of data; data analysis/interpretation; writing & editing of the manuscript. All the authors have read and agreed to the final manuscript.

Acknowledgments

The authors wishes to thank the management of Clinix Healthcare, Ilupeju, Lagos for the use of their records and picture archives.

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