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Sessile Serrated Adenomas and Melanosis Coli

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Sessile serrated adenomas are a relatively new category for colorectal polyps. These polyps usually occur on the right side of the colon, are large, flat and somewhat difficult to see during endoscopy. Some authors feel that up to a third of colorectal cancers arise from these lesions.

The World Health Organization has recently developed pathologic criteria for distinguishing serrated colorectal polyps into hyperplastic polyps, sessile serrated adenoma/polyp with or without cytological dysplasia, or traditional serrated adenoma[1]. Sessile serrated adenomas are thought to be the principle serrated precursor of colorectal cancers.

An excellent and comprehensive review regarding these lesions has recently been published by Rex et al[2] and is available on line at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3629844/

These polyps are gaining attention as it seems they may either behave like more advanced adenomas, or perhaps are lesions which suggest a subsequent risk of more advanced lesions, similar to dysplasia in ulcerative colitis.

We recently saw a patient with abdominal pain and, constipation. This patient previously was found to have both tubular adenomas and a larger flat serrated polyp in the transverse colon thought to possibly represent sessile serrated adenoma without dysplasia.

Her repeat interval colonoscopy at 3 years was notable for marked melanosis coli ***(Figure 1)*** and two large flat white lesions, each about 15 mm in size. Histology demonstrated sessile serrated adenomas ***(Figures 2A & 2B)***. These lesions were very easy to see during colonoscopy using white light, because the polyps did not exhibit the dark staining seen in the surrounding melanosis coli.

Melanosis coli is thought to be a benign accumulation of brown pigment of lipofucin contained in macrophages resulting from the use of anthraquinone containing laxatives such as Senna. Pigment deposition is reversible with discontinuation of the laxative. Although some earlier reports suggested that anthranoid laxatives increased the risk of colonic

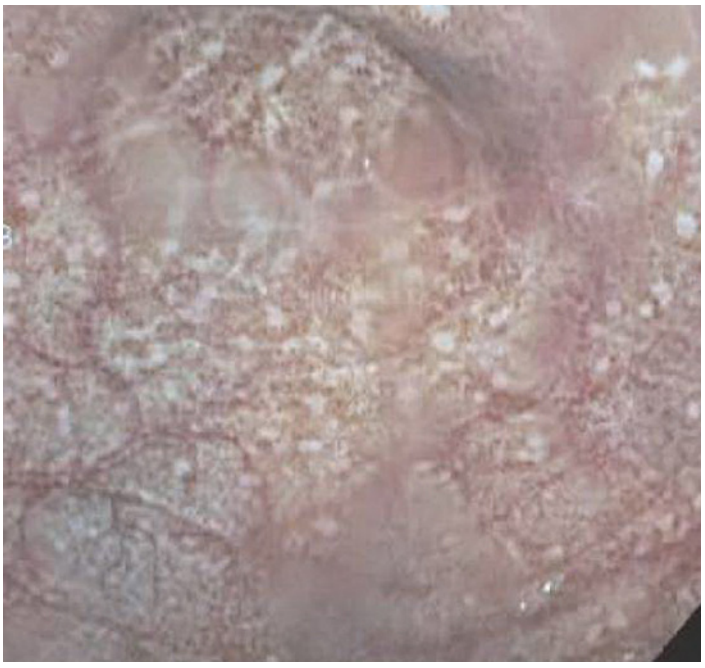

Figure 1: *The patient's colon showing melanosis coli.*

Figure 2A: *Images of flat lesions which were removed. Histology demonstrated sessile serrated adenomas and melanosis coli.*

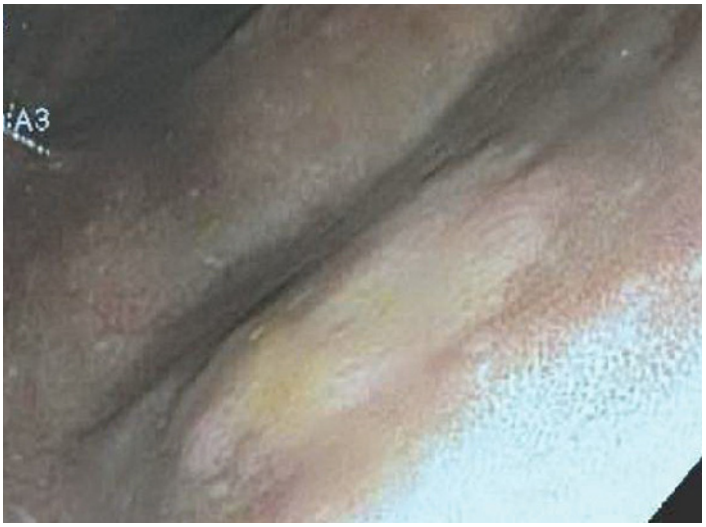

Figure 2B: *Image of flat lesions which were removed. Histology demonstrated sessile serrated adenomas and melanosis coli.*

dysplastic lesions[3], subsequent controlled studies showed no increased risk[4].

This report suggests that identification of non-pigmented polypoid lesions identified among the background of melanosis coli may be a helpful marker of serrated adenomas. It would be interesting to determine if induced melanosis coli would increase the detection rate for sessile serrated adenomas.

References:

1. Bosman FT, Carneiro F, Hruban RH, Thiese ND (Eds). *WHO Classification of Tumors of the Digestive System,* **IARC, Lyon 2010.**

2. Rex DK, Ahnen DJ, Baron JA, Batts KP, Burke CA, Burt RW, Goldblum JR, Guillem JG, Kahi CJ, Kalady MF, O'Brien MJ, Odze RD, Ogino S, Parry S, Snover DC, Torlakovic EE, Wise PE, Young J, Church J. *Serrated lesions of the colorectum: review and recommendations from an expert panel.* **Am J Gastroenterol. 2012 Sep;107(9):1315-29.**

3. Siegers CP, von Hertzberg-Lottin E, Otte M, Schneider B. *Anthranoid laxative abuse--a risk for colorectal cancer?* **Gut. 1993 Aug;34(8):1099-101.**

4. Nusko G, Schneider B, Schneider I, Wittekind C, Hahn EG. *Anthranoid laxative use is not a risk factor for colorectal neoplasia: results of a prospective case control study.* **Gut. 2000 May;46(5):651-5.**