



# Rectal Xanthoma: A Rare Clinical Finding

Wooten, Joseph D.; Mohan, Neena; Cappelle, Saraswathi A; Hennawy, Randa P.

Temple University Hospital Department of Gastroenterology

## Introduction

Xanthomas are localized lipid deposits within an organ system. They are more commonly found as cutaneous lesions and less likely to appear in the gastrointestinal tract. The incidence of gastrointestinal xanthomas is not well documented, but the vast majority of authors agree they occur more frequently in the stomach. Colonic xanthomas are rare and usually incidental endoscopic findings. There are several case reports that present gastrointestinal xanthomas, however a small subset of these cases are located in the rectum. Here we present a case of rectal xanthoma and discuss its macroscopic and microscopic features.

## Case Description

- 55 year old female with a recent diagnosis of atrophic metaplastic autoimmune gastritis presents for colonoscopy.
- In the rectum was an area concerning for a subepithelial lesion, encompassing about one quarter of the rectal circumference. (Figure.1)
- Overlying this suspicious area, the mucosa had hues of yellow which was biopsied.
- Pathology showed fragments of colonic mucosa with mild chronic inactive inflammation with histiocytic aggregate and focal surface glandular hyperplasia suggestive of xanthoma. (Figure.2)
- EUS was subsequently performed (Figure.3) with local wall thickening (up to 8mm) found in distal rectum. This was primarily due to increased thickness of deep mucosa.
- Biopsies obtained during EUS were negative for malignancy or dysplasia.
- Patient will undergo repeat colonoscopy in 3 years for surveillance.

## Figures & Imaging



Figure 1



Figure 2  
Histiocytes noted in the lamina propria (blue arrows)



Figure 3

## Discussion

- Colorectal xanthomas are intestinal lesions with aggregates of lipid laden macrophages called foamy histiocytes. (Noted in Figure 2)
- These cells are distributed in the lamina propria, between the colonic glands and muscularis mucosa.
- Unlike cutaneous xanthomas, gastrointestinal xanthomas are not associated with dyslipidemia.
- There has been a reported case of colonic xanthomas presenting as submucosal masses in the rectum and sigmoid.
- In a case series of 28 patients with colorectal xanthomas, 23 were sessile and 5 were pedunculated. Twelve xanthomas appeared reddish in color, 5 were white, and 2 were of a yellow hue.
- The relationship between colorectal xanthomas and malignancy is unclear. Of the 28 colorectal xanthomas, 4 hyperplastic lesions were found within the xanthoma, while 4 adenomas and 2 adenocarcinomas were found adjacent to xanthomas.
- Chronic injury is believed to be associated with the cause of colorectal xanthomas.
- Adding case reports to the literature will help assess potential correlation with polyps and malignancies.

## References

1. Andrejić, Bojana M., et al. "Xanthomas of the stomach: a report of two cases ." *Bosn J Basic Med Sci.* (2012): 127–129.
2. Gencosmanoglu, Rasim, et al. "Xanthelasma of the upper gastrointestinal tract ." *J Gastroenterol.* (2004): 215-9.
3. Iwamuro, Masaya, et al. "Two Cases of Rectal Xanthoma Presenting as Yellowish to Whitish Lesions during Colonoscopy." *Case Rep Gastrointest Med.* (2017).
4. Kim, Sang Hun, et al. "A Case of Ascending Colonic Xanthoma Presenting as a Lateral Spreading Tumor ." *Intestinal Res.* (2014): 162–165.
5. Nakasono, Masahiko, et al. "Colorectal xanthomas with polypoid lesion: report of 25 cases." *Journal of Pathology, Microbiology and Immunology* (2004): 3-10.
6. Zak, Ales, et al. "Xanthomas: clinical and pathophysiological relations." *Biomed Pap Med Fac Univ Palacky Olomouc Czech Repub.* (2014): 181-8.