Incidental Finding of Gastric Xanthoma
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Introduction
- Gastric xanthomas (GX) consist of loose collections of lipid-laden macrophages in the lamina propria.
- Present as sessile, single, or multiple, 1- to 5-mm, yellowish white mucosal nodules or plaques.
- GX tend to increase with age, and the frequency is highest in the seventies.
- Males are affected more than females, with a 3:1 male predominance.
- In one study, 42.5% were solitary and 17.5% had more than five lesions.
- Xanthomas are mostly diagnosed in the stomach, mainly in the antrum and pyloric region, while the esophagus, small and large intestine are very rare localizations.
- The histologic appearance of xanthomas can resemble certain malignant lesions such as clear cell type of carcinoid tumors and signet ring cell type adenocarcinoma.

Case Presentation
- A 62 year old African American female with past medical history of hypertension and depression presented with a 4 month history of fatigue, light-headedness, and decreased appetite.
- Labs showed hemoglobin of 11.5, hematocrit of 36.4, MCV of 70.9.
- Iron studies showed iron of 65, TIBC 247, and ferritin 134.

Clinical Course
- Gastroenterology was consulted to evaluate patient for down trending HbH with MCV of 70.
- EGD showed 5 mm white plaque in the antrum, mild gastritis, and patulous pylorus, with normal appearing esophagus and duodenum.
- Colonoscopy showed one 4 mm ascending colon polyp and external hemorrhoids.
- Pathology demonstrated antral mucosa with numerous lamina propria foamy macrophages consistent with xanthoma. Negative for H. pylori or dysplasia. PAS stain-negative.

Discussion
- GXs consist of accumulation of fat in foamy histiocytes in the lamina propria.
- In rare occasions, GXs can mimic gastric carcinoids of the clear cell variety.
- The foam cells of the tunica propria may be mistaken for signet-ring cells of a superficial cancer (early cancer) in histology. This misinterpretation can be avoided by using the PAS-stain.
- Lipid islands are most commonly found in the stomach when there are pathological changes such as chronic gastritis, intestinal metaplasia, atrophic gastritis, gastric ulcer, and changes caused by bile reflux or partial gastrectomy.
- Transformation of macrophages into foamy cells may be induced by phagocytosis of H. pylori bacteria, which penetrate into the lamina.
- The data about the connection between lipid metabolism disorders and gastrointestinal tract xanthomas is inconclusive.

References