Case Report

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Gastric xanthelasma: case report

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ABSTRACT

Xanthelasma, also known as Xanthoma or lipid island, is an uncommon gastrointestinal tract (GIT) tumor-like lesion and the stomach is its most frequent location in upper GI lesions, specifically in the gastric antrum, as a single lesion. The pathogenesis appears to be related to healing processes in response to tissue damage provoked by inflammation induced by *Helicobacter pylori* infection. Many studies have reported that successful *H. pylori* eradication helps prevent gastric cancer (GC) development. We present a case of a 77 years old patient that showed endoscopic diagnosis of erythematous gastropathy, a gastric antrum xanthelasma and *H. Pylori* infection. After confirmed H. pylori eradication, the lesion had complete regression. The successful eradication of *H. pylori* probably led to a total regression of the lesion. Gastric xanthelasma (GX) has been shown to be an independent predictive marker for early GC detection after *H. pylori* eradication. GX could be a useful marker for predicting the development of gastric cancer.

Keywords: Xanthelasma, Xanthoma, Gastric cancer, Marker, H. pylori, Inflammatory response

INTRODUCTION

Xanthelasma, also known as xanthoma or lipid island, is an uncommon gastrointestinal tract (GIT) tumor-like lesion and the stomach is the most common site of reported upper GIT lesions, specifically in the gastric antrum, as a single lesion. 1-6 Gastric xanthelasma (GX) is a rare, non-neoplastic finding with a prevalence ranging from 0.2 to 7%. 1-3 The pathogenesis of GX is not clear, however it appears to be related to healing processes in response to tissue damage provoked by inflammation Helicobacter pylori infection.1,4 induced by Endoscopically, these lesions usually present as welldemarcated round, yellow- white nodules or plaques, resembling certain malignant lesions. 1,6 Microscopically, GX is characterized by collections of foamy macrophages in the lamina propria, secondary to phagocytosis of the bacteria. Histological confirmation of GX is mandatory because its appearance may mimic malignancy and once

the histological diagnosis of GX is confirmed, it is necessary to look for accompanying premalignant conditions.¹ Metabolic and inflammatory factors were found associated with xanthelasma. Other factors such as fasting plasma glucose, neutrophil, and carcinoembryonic antigen (CEA) were proved to be independent factors for GX occurrence.²

CASE REPORT

A 77-year old man presenting with nonspecific abdominal pain is referred to our Surgical Department with the endoscopic diagnosis of erythematous gastropathy and an xanthelasma located at the antral region, specifically in the lesser curvature. Biopsy were sent to histopathological analysis, and they confirmed the endoscopic diagnosis. *H. pylori* infection was also present.

The patient then underwent *H. pylori* eradication. The follow-up endoscopy showed a complete regression of GX and confirmed the eradication of *H. Pylori*.

Maintains follow-up with annual endoscopy and is now asymptomatic.

DISCUSSION

Xanthoma's etiology and clinical significance are still unclear. However, several studies have identified GX as an independent predictor for gastric cancer (GC) development. At prediction of gastric cancer (GC) development and the incidence of gastric xanthelasma has been shown to be significantly higher in patients with diabetes mellitus. The diagnosis should be confirmed in order to eliminate the possibility of gastric malignancy.

In our case, xanthoma was diagnosed in an elderly male patient, where erythematous gastropathy was present. He had no history of diabetes mellitus, but the lipid status was not studied. The successful eradication of *H. pylori* led to a total regression of the lesion.

Many studies have reported that successful *H. pylori* eradication helps prevent gastric cancer development. GX has been shown to be an independent predictive marker for early GC detected after *H. pylori* eradication.⁵

CONCLUSION

Gastric xanthelasma (GX) has been under looked, as it has been considered a benign lesion. As gastric cancer is still one of the leading causes of cancer-related deaths worldwide, GX could be a very useful marked for predicting the development of gastric cancer and GX seems to be treated or even cured with *H. pylori*'s eradication.

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REFERENCES

- Alzahrani M, Alqunaitir A, Alsohaibani M, Al-Rikabi AC. Gastric xanthelasma associated with hyperplastic polyp and mucosal erosions: report of an unusual case and literature review. Oxf Med Case Reports. 2018;2018(8):omy051.
- 2. Chen Y, He XJ, Zhou MJ, Li YM. Gastric xanthelasma and metabolic disorders: A large retrospective study among Chinese population. World J Gastroenterol. 2017;23(43):7756-64.
- 3. Sekikawa A, Fukui H, Sada R, Fukuhara M, Marui S, Tanke G, et al. Gastric atrophy and xanthelasma are markers for predicting the development of early gastric cancer. J Gastroenterol. 2016;51:35.
- 4. Hori S, Tsutsumi Y. Helicobacter pylori infection in gastric xanthomas: immunohistochemical analysis of 145 lesions. Pathol Int. 1996;46(8):589-93
- Shibukawa N, Ouchi S, Wakamatsu S, Wakahara Y, Kaneko A. Gastric Xanthoma Is a Predictive Marker for Early Gastric Cancer Detected after Helicobacter pylori Eradication. Intern Med. 2019;58(6):779–84.
- Sekikawa A, Fukui H, Maruo T, Tsumura T, Kanesaka T, Okabe Y, et al. Gastric xanthelasma may be a warning sign for the presence of early gastric cancer. J Gastroenterol Hepatol. 2014;29(5):951-6.
- 7. Kitamura S, Muguruma N, Okamoto K, Tanahashi T, Fukuya A, Tanaka K, et al. Clinicopathological assessment of gastric xanthoma as potential predictive marker of gastric cancer. Digestion. 2017;96(4):199-206.
- 8. Andrejić BM, Božanić SV, Solajić NS, Djolai MA, Levakov AM. Xanthomas of the stomach: a report of two cases. Bosn J Basic Med Sci. 2012;12(2):127–9.

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