

*Prikaz slučaja /
Case report*

A RARE CASE OF GASTRIC
XANTHELASMA
REDAK SLUČAJ KSANTELAZME
ŽELUCA

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Кључне речи

ксантелазма, желудац, ендоскопија, биопсија.

Кључне речи

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Сажетак

Увод Ксантелазме желуца су бенигне туморске лезије које се обично виде као случајан ендоскопски налаз, нејасне етиологије. Инциденција ксантелазме желуца варира од мање од 0,02% у Европи до око 1% у Кини и другим земљама источне Азије. Чешћа је код жена. Иако су ксантелазме желуца бенигне лезије, оне могу опонашати различита малигна стања, па чак и бити повезане са премалигним лезијама као што су узнапредовали атрофични гастритис и интестинална метаплазија. **Приказ случаја** Представљамо случај ксантелазме желуца код мушкарца старости 70 година примљеног ради гастроскопије. У биоптичким узорцима узетим током ендоскопије из већег броја вариолиформних лезија слузнице желуца, уочена је фовеоларна хиперплазија, интестинална метаплазија као и групе полигоналних ћелија, светле, пенушаве цитоплазме са једним хиперхроматичним униформним једром у ламини проприји слузнице. Ћелије су показале биле имунохистохемијски позитивне на *CD68* а негативне на *CK AE1/AE3* након чега је потврђена дијагноза желудачне ксантелазме. **Дискусија и закључак** Ксантелазме желуца су бенигне асимптоматске творевине, које понекад могу бити удружене, или чак представљати предиктивни маркер за интестиналну метаплазију или за развој карцинома желуца. Док је етиологија желудачних ксантелазми још увек слабо схваћена, неки аутори сугеришу да трансформација макрофага у пенасте хистиоците настаје након фагоцитозе бактерије Хеликобактер пилори. Због хистолошке сличности са различитим карциномима желуца, неопходно је имати у виду овај налаз приликом патохистолошке анализе желудачних биопсија.

INTRODUCTION

Gastric xanthelasmas are benign tumor-like lesions that were first described in 1887.¹ The etiology is unclear, but it is thought that gastric xanthelasmas develop as a result of the accumulated lipids, or as an inflammatory response due to repeated mucosal damage.² Sometimes this condition is associated with dyslipidemias, and can coexist with various conditions such as chronic gastritis, atrophic gastritis, Helicobacter pylori associated gastritis and gastric dysplasia. The prevalence of gastric xanthelasmas is expected to increase with increasing age, but it can be seen in patients as young as 3 years.³

The incidence of gastric xanthelasmas varies from less than 0.02% in Europe to around 1% in China and other East Asian countries.⁴ It is more common in females.²

This condition is usually asymptomatic, and is usually seen as an incidental endoscopic finding in patients with abdominal pain, dyspepsia and abdominal distension.¹

On endoscopy it is seen as a one or more yellowish-white plaques or nodules measuring from 2 to 20mm.³

Although gastric xanthelasmas are benign lesions, they can mimic different malignant conditions, and can even be associated with premalignant lesions such as advanced atrophic gastritis and intestinal metaplasia.²

CASE REPORT

We present a rare case of gastric xanthelasma in a 70-year-old man admitted for gastroscopy.

He suffered from meteorismus and flatulency. Besides that, he complained of enlarged haemorrhoidal blood vessels and he stated that he was previously diagnosed with intestinal polyps in the large bowel. From his personal anamnesis we found out that the patient had frequently drank.

Esophagogastroduodenoscopy was performed, and multiple varioliform lesions measuring up to 5mm were spotted on the body and antrum of the stomach. No changes were detected in esophagus and duodenum. Biopsy was taken and the biopsy material was sent to histopathological analysis. In the biopsy samples, stained with H&E and Giemsa stains, foveolar hyperplasia and intestinal metaplasia were found, while *Helicobacter pylori* was not detected (Figure 1). During the analysis groups of polygonal cells with pale, foamy cytoplasm and a large, hyperchromatic, uniform nuclei were spotted in the lamina propria of the mucosa. The cells showed immunohistochemical positivity for CD68 (Figure 2), and were negative for pancytokeratine CK AE1/AE3 (Figure 3). With this findings in mind, a final diagnosis of gastric xanthelasma was made.

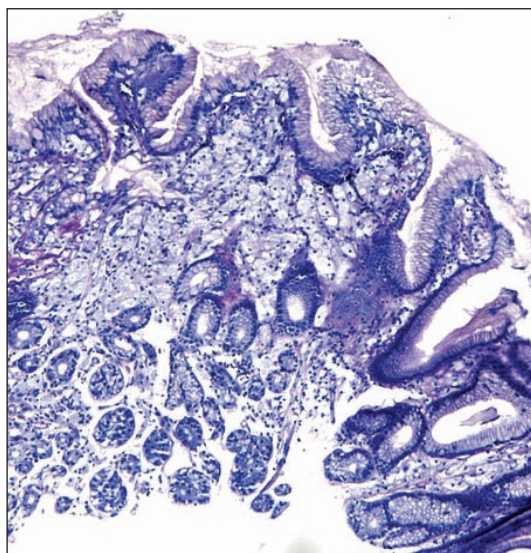


Figure 1. Gastric biopsy, Giemsa x100. Foamy histiocytes in lamina propria characteristic for gastric xanthelasma.

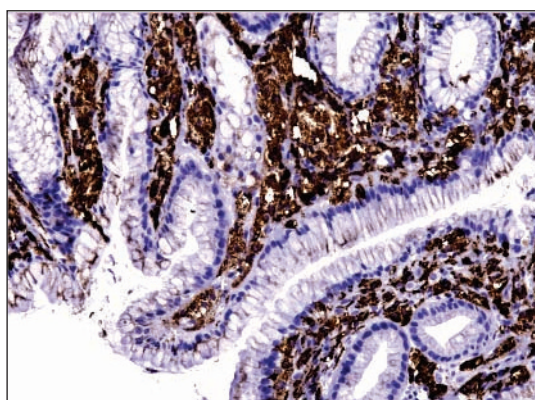


Figure 2. Foamy histiocytes show diffuse cytoplasmic immunopositivity for CD68, x200.

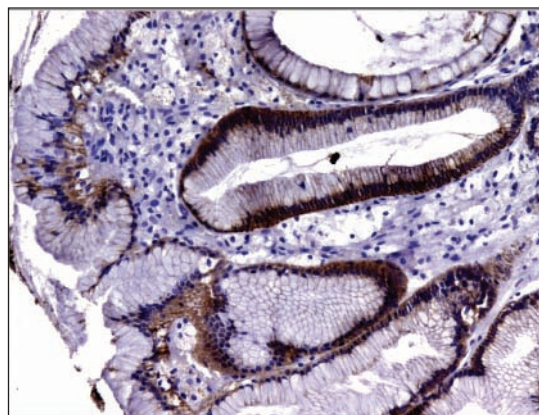


Figure 3. Positivity for CK AE1/AE3 is seen in gastric epithelial cells, but not in foamy macrophages present in lamina propria, x200.

DISCUSSION

Gastric xanthelasmas are usually benign, asymptomatic findings, but they can sometimes be associated, and even be a predictive marker for the intestinal metaplasia or even for the development of gastric carcinoma.⁵

Histologically they are usually seen as a cluster of large foamy histiocytes filled with mixture of lipids, that are found in the gastric mucosa and submucosa.^{4,6} They can occur in every part of the gastrointestinal tract, but are most commonly seen in the antrum and pyloric regions of stomach³, with only one case of gastric xanthelasma described in the fundus of an 13-year-old boy.⁷ Histologic appearance of xanthelasmas may in some cases be misinterpreted as a certain malignant lesions such as clear cell or signet ring cell adenocarcinomas, so it is very important to diagnose this condition properly.⁴ Sometimes immunohistochemistry is needed for the confirmation of gastric xanthelasmas with the most common stains in use being CD68 and pancytokeratin. Characteristic immunohistochemical profile for gastric xanthelasmas is CD68 cytoplasmic positivity, which proves histiocytic origin, while pancytokeratin and other markers indicative for gastric carcinomas, are negative.⁸

While etiology of gastric xanthelasmas is still poorly understood, some authors suggest that the transformation of macrophages into foamy histiocytes comes from the phagocytosis of *Helicobacter pylori* bacteria that are present in lamina propria of mucosa. This is confirmed as *Helicobacter pylori* antigens are often identified, even without the clear finding of the bacteria during pathohistological evaluation.⁹

CONCLUSION

Although gastric xanthelasmas are benign conditions, the fact that this finding can be a predictive factor for pre-malignant or even malignant conditions, it is clearly important to recognise it on endoscopy and on biopsy specimens.

Conflict of interest disclosure

No conflict of interest and no financial disclosure were declared by the authors.

Abstract

Introduction Gastric xanthelasmas are benign tumor-like lesions, usually seen as an incidental endoscopic finding with unclear etiology. The incidence of gastric xanthelasmas varies from less than 0.02% in Europe to around 1% in China and other East Asian countries. It is more common in females. Although gastric xanthelasmas are benign lesions, they can mimic different malignant conditions, and can even be associated with premalignant lesions such as advanced atrophic gastritis and intestinal metaplasia.

Case report We present a rare case of gastric xanthelasmas in a 70-year-old man admitted for gastroscopy. In the biopsy samples taken from multiple varioliform lesions in the gastric mucosa, that were spotted on endoscopy, foveolar hyperplasia and intestinal metaplasia were detected, with groups of polygonal cells with pale, foamy cytoplasm and a large, hyperchromatic, uniform nuclei in the lamina propria of the mucosa. The cells were positive for CD68, and negative for CK AE1/AE3 and the diagnosis of gastric xanthelasma was made. **Discussion and Conclusion** Gastric xanthelasmas are usually benign, asymptomatic findings, but they can sometimes be associated, and even be a predictive marker for the intestinal metaplasia or even for the development of gastric carcinoma. While etiology of gastric xanthelasmas is still poorly understood, some authors suggest that the transformation of macrophages into foamy histiocytes comes from the phagocytosis of *Helicobacter pylori* bacteria that are present in lamina propria of mucosa. Because of similarity with different pathohistological findings, including different gastric carcinomas, it is very important to recognize gastric xanthelasmas on gastric biopsies.

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