

Gastric polypoid intramucosal carcinoma and an adjacently located leiomyoma at the cardia

Kardiyada gastrik polipoid intramukozal karsinom ve komşuluğunda yerleşmiş bir leiomyom

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We report a 65-year-old patient with a gastric polyp of 2.5 cm in diameter located at the cardia on upper gastrointestinal (GI) endoscopy. Pathological examination of the excised polyp showed intramucosal carcinoma. Endoscopic ultrasonography (EUS) reported the lesion as early gastric carcinoma with probable submucosal involvement. On serial sections of the gastrectomy material, the lesion was an intramucosal carcinoma and surprisingly there was a leiomyoma located adjacently.

Key words: Gastric polyp, early gastric cancer, leiomyoma

65 yaşındaki hastanın üst gastrointestinal (GI) endoskopisinde, kardiya yerleşimli 2.5 cm çaplı polip saptanmıştır. Çıkarılan polipin patolojik incelemesinde intramukozal karsinom olduğu saptanmıştır. Endoskopik ultrasonografide (EUS), lezyon, olası submukozal yayılımı olan erken mide kanseri olarak değerlendirilmiştir. Gastrektomi materyalinin seri kesitlerinde, lezyonun intramukozal karsinom olduğu anlaşılmış ve komşuluğunda yerleşmiş bir de leiomyom saptanmıştır.

Anahtar kelimeler: Gastrik polip, erken mide kanseri, leiomyom

INTRODUCTION

The overall incidence of gastric polyps on routine endoscopic examinations ranges between 1.2-3% in different studies (1-3). Histologically, they are classified as inflammatory, regenerative, hyperplastic and adenomatous. Only 5-10% of them are adenomas. Gastric adenomas are usually solitary, asymptomatic and generally located in the antrum. Malignant potential is related to their size, histological features and age of the patient (4-5). Malignancy risk of adenomas smaller than 2 cm in diameter was reported as 1-5% and of larger ones as 50% (6).

Once an adenomatous gastric polyp is found, it is highly recommended to remove the entire polyp to obtain the accurate diagnosis, removing the precancerous lesion and deciding a management plan (7). Gastric polyps that have been completely excised and contain invasive cancer may require additional evaluation. Endoscopic ultrasonography

(EUS) may provide knowledge about the depth of the lesion and help the physician to decide whether local resection is sufficient or gastrectomy is needed.

We report a patient with gastric polypoid intramucosal carcinoma and an adjacently located leiomyoma at the cardia. The patient had been diagnosed preoperatively as early gastric carcinoma with probable submucosal involvement on EUS. However, the lesion was an intramucosal carcinoma on serial sections of the gastrectomy material and surprisingly, there was a leiomyoma located adjacently.

CASE REPORT

A 65-year-old female with chronic, remitting dyspeptic complaints like fullness and nausea after meals for about four years admitted to our gas-

troenterology clinic. There were no other symptoms. On physical examination, there was no pathological finding except for conjunctival paleness. Laboratory studies revealed a hemoglobin level of 11 g/dl (normal: 12-14) and serum ferritin 3.1 ug/L (normal: 20-300). Upper gastrointestinal (GI) endoscopy was performed and a large polyp of 2.5 cm in diameter located in the cardia, just below the gastroesophageal junction, was detected. The polyp was not pedunculated. A large portion of it was excised by snare polypectomy. A small part of the lesion remained after the procedure. It was planned to remove the remnant in a second endoscopy. Pathological evaluation of the lesion was reported as adenomatous polyp with high grade dysplasia (HGD). However, in some foci, there was suspicion of intramucosal carcinoma. In the second endoscopy, the remnant was excised by snare polypectomy. However, the base of the lesion seemed irregular and multiple biopsies were taken. Pathological examination of both the excised remnant polyp and biopsies from the base of the lesion were also reported as adenomatous polyp with HGD and high suspicion of intramucosal carcinoma in some foci. The specimens were consulted with two other pathologists, and the diagnosis of intramucosal carcinoma strengthened (Figure 1). EUS was performed to determine the depth of carcinoma invasion. EUS showed probable submucosal invasion of the lesion without involvement of muscularis propria. Pathological lymph node enlargement was not detected. The lesion was not technically suitable for endoscopic submucosal resection and surgical resection was decided. Total gastrectomy was performed. On macroscopic evaluation of the gastrectomy material, the lesion seemed only as an irregularity on the surface. Serial sections from the lesion revealed intramucosal carcinoma. There was no submucosal involvement. Surprisingly, adjacent to the intramucosal carcinoma, there was a leiomyoma of 0.8 cm in diameter located in the submucosa (Figure 2). On retrospectively examined preoperative EUS images, the leiomyoma was seen as a small ovoid hypoechoic lesion arising from the muscularis propria, the fourth echo layer (Figure 3).

DISCUSSION

Our patient with chronic dyspeptic complaints and iron deficiency anemia presented with a large gastric polyp located in the cardia on upper GI endoscopy. The polyp was an adenoma complicated

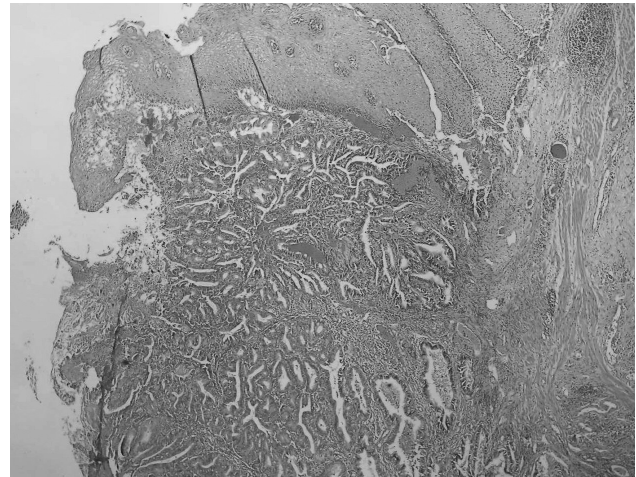


Figure 1. The microscopic appearance of the excised gastric polyp, reported as intramucosal carcinoma.

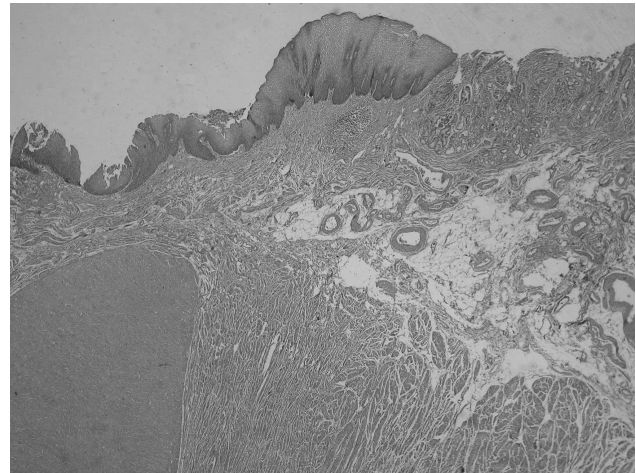


Figure 2. A coincidental leiomyoma located adjacent to the intramucosal carcinoma on pathological evaluation of gastrectomy material.

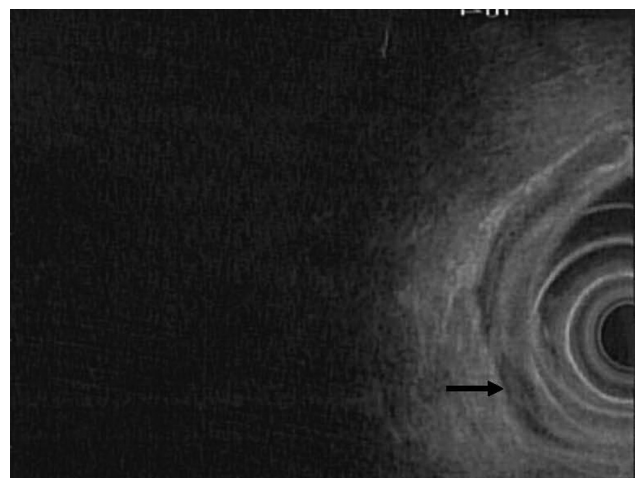


Figure 3. The leiomyoma seen (retrospectively) as a small, ovoid hypoechoic lesion arising from the fourth echo layer on EUS.

with adenocarcinoma on pathological examination. It is well known that only 5-10% of the gastric polyps are adenomatous and most are located at the antrum. This is a very distinct case with gastric polypoid intramucosal carcinoma in the cardia and a coincidental leiomyoma located adjacently.

The excised polyp was first reported as HGD with high suspicion of intramucosal carcinoma in some foci. When reviewed by two other experienced pathologists, the diagnosis was revised to invasive carcinoma. HGD of the gastric epithelium is associated with high prevalence of invasive carcinoma, and distinction by endoscopic biopsy is difficult. Experienced pathologists often disagree in distinguishing invasive carcinoma from HGD in gastric biopsy specimens (8).

Gastric polyps that have been completely excised and contain invasive cancer may require additional evaluation. Lewin et al. (9) showed that the rate of

nodal metastasis in early gastric polypoid cancers confined to mucosa was 1.8% compared to 18.5% with submucosal involvement. The assessment of submucosal invasion is important in deciding between endoscopic resection and surgical resection.

EUS is commonly used to evaluate the changes beneath the mucosa in order to diagnose the depth of carcinoma invasion. Histological diagnosis of intramucosal carcinoma in our case led us to perform EUS to reveal the depth of the lesion. The overall diagnostic accuracy of EUS in differentiating mucosal cancer from submucosal cancer was reported between 63.6-81% (10,11). The sensitivity of EUS for mucosal and submucosal cancers ranges from 63% to 70% and 46% to 78%, respectively, in different studies (12,13). In our case, the probable submucosal invasion on preoperative EUS was not confirmed on pathological examination of the gastrectomy material.

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