

Early Gastric Cancer Associated with a Gastric Lipoma

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CASE REPORT

A 63-year-old woman was referred to our hospital to undergo endoscopic therapy for a lesion suspected of being early gastric cancer. A biopsy had already been performed. The diagnosis was adenoma with *Helicobacter pylori*, but cancer could not be ruled out. Esophagogastroduodenoscopic observations revealed a whitish, elevated lesion 20 mm in diameter with 4 large lobules and a central depression in the posterior wall of the lower corpus (Figure 1). Magnifying narrow-band imaging showed an oval or tubular microsurface pattern and a loop microvascular pattern; it appeared to be malignant rather than benign. These narrow-band imaging findings indicated an epithelial lesion, but the lesion thickness led us to doubt submucosal invasion. Although there was no pillow sign, subsequent endoscopic ultrasonographic (EUS) observation revealed a hypoechoic mass in the mucosal layer without submucosal invasion. EUS also revealed a homogeneous hyperechoic mass in the submucosal layer immediately below the gastric tumor, covered completely by the gastric lesion (Figure 2). Results suggest that this submucosal mass was lipoma and that the lipoma influenced the gastric cancer thickness. The subepithelial lesion was not detected on computed tomography. To avoid creating difficulty for endoscopic submucosal dissection (ESD), we did not attempt biopsy or EUS-guided fine-needle aspiration of the subepithelial lesion through the gastric cancer.

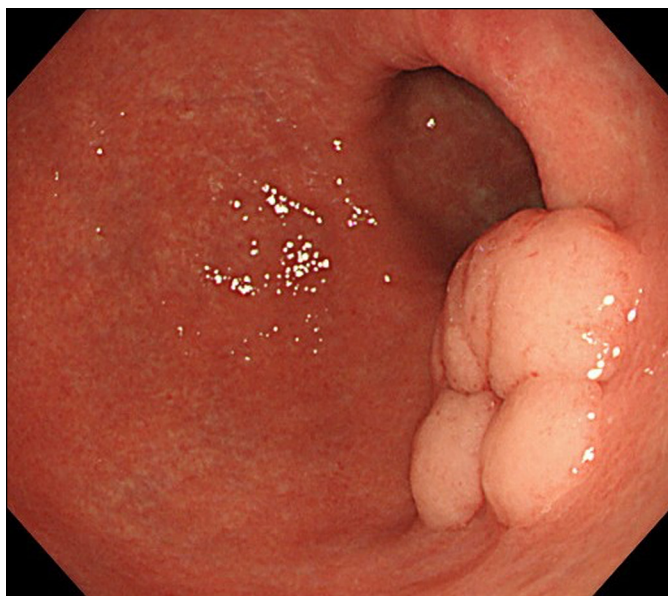


Figure 1. Upper endoscopy showing an elevated lesion in the posterior wall of the lower corpus.

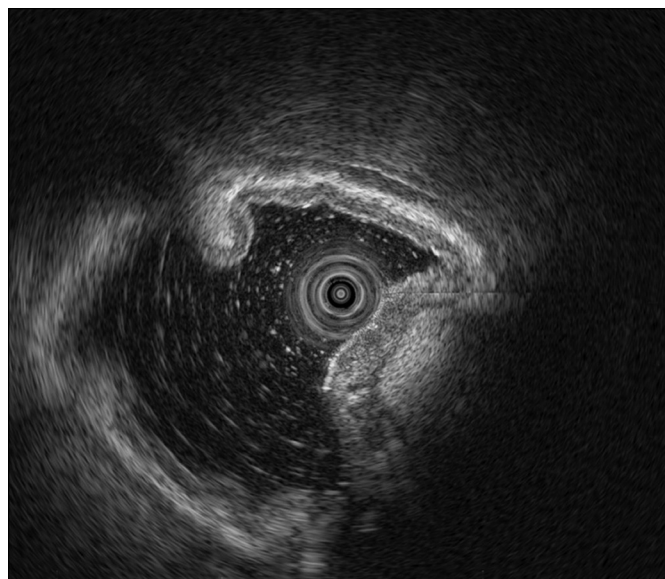


Figure 2. EUS image revealing a hypoechoic mass in the mucosal layer without submucosal invasion, and a homogeneous hyperechoic mass in the submucosal layer.

ACG Case Rep J 2017;4:e78. doi:10.14309/crj.2017.78. Published online: June 7, 2017.

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Figure 3. During ESD, the lipoma emerged immediately below the gastric cancer.

ESD was performed because the gastric cancer appeared to be within the mucosal layer. During careful ESD, a yellowish mass was found emerging from the submucosa (Figure 3). These lesions were removed completely en-bloc with no adverse event. Histopathological analysis revealed a well-differentiated intramucosal adenocarcinoma (20 × 22 mm) and a gastric lipoma 12 mm in diameter (Figure 4).

EUS is extremely useful for subepithelial lesion diagnosis.^{1,2} Without EUS, it was virtually impossible to detect whether the lesion consisted of gastric cancer or gastric cancer with a subepithelial lesion. If the subepithelial lesion had been suspected to be another tumor, especially a neuroendocrine or gastrointestinal stromal tumor, then we would have tried non-exposed endoscopic wall-inversion surgery or surgical operation.³ Use of non-exposed endoscopic wall-inversion surgery would be preferred to laparoscopy-endoscopy cooperative surgery in this case because the lesion surface was carcinoma. We chose ESD because we were able to confirm with EUS that the subepithelial lesion was a lipoma. If the lipoma had not been resected completely by ESD, it would not have posed a significant problem because lipomas are benign

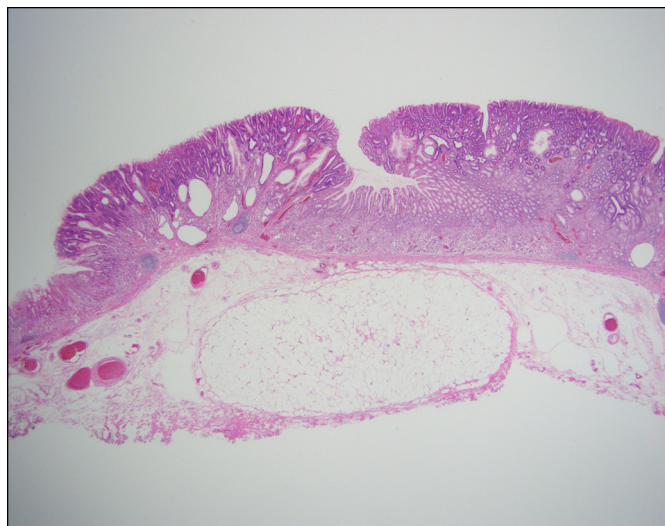


Figure 4. Histopathological image of the lesion (hematoxylin and eosin, 40X), resected en-bloc, showing the gastric lipoma located immediately beneath the gastric cancer.

lesions. We successfully treated the early gastric cancer while avoiding surgical operation.

DISCLOSURES

Author contributions: A. Sato and A. Irisawa wrote the manuscript. A. Sato, G. Shibukawa, and N. Arakawa provided the images. A. Yamabe, M. Fujisawa, and Y. Yoshida reviewed the manuscript. A. Irisawa is the article guarantor.

Financial disclosure: None to report.

Informed consent was obtained for this case report.

Received March 5, 2017; Accepted May 5, 2017

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