

Depressed gastric-type adenoma in nonatrophic gastric mucosa without *Helicobacter pylori* infection

Gastric adenoma is a benign epithelial tumor and is frequently observed as an elevated rather than a depressed lesion and in *Helicobacter pylori*-infected mucosa [1]. We describe a rare case of depressed gastric-type adenoma in nonatrophic gastric mucosa without *H. pylori* infection.

A 59-year-old man was referred to our hospital for further examination and treatment of gastric neoplasia. Endoscopy revealed a whitish depressed lesion, 10 mm in diameter, in the greater curvature of the lower gastric body (► Fig. 1). Atrophy and intestinal metaplasia were not observed in the background gastric mucosa (► Fig. 2). Furthermore, serum *H. pylori* antibody, serum pepsinogen, and urea breath tests were all negative, indicating that the gastric mucosa was not infected by *H. pylori*.

Magnifying endoscopy using narrow-band imaging showed an irregular microsurface pattern with round and oval pits and a slightly irregular microvascular architecture with discordant looped vessels (► Fig. 3) in the lesion. In accordance with the vascular pattern, surface pattern (VS) classification system [2], these findings were categorized as an irregular microsurface pattern and an irregular microvascular pattern with a demarca-

tion line, which were indications of malignancy. Thus, although the biopsy specimen showed adenoma (► Fig. 4), endoscopy revealed malignant findings. Endoscopic submucosal resection was performed for histologic evaluation (► Video 1).

Histologically, the tumor cells showed gastric-type adenoma. Immunohistochemically, the tumor cells were positive

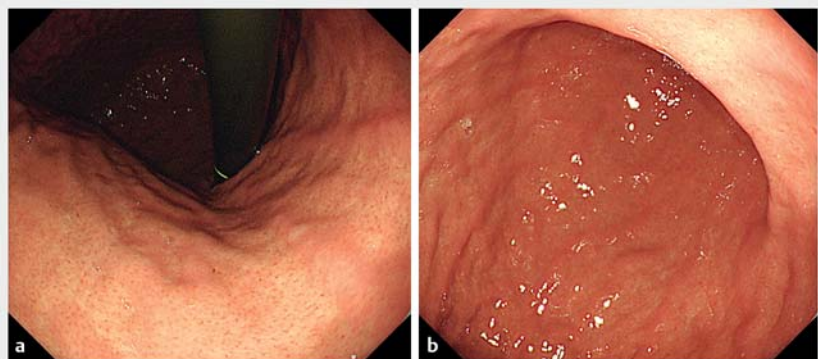
for mucin (MUC) 5AC and MUC6 but negative for MUC2 and CD10 (► Fig. 5 a–d). There are a few reports on depressed-type gastric adenomas in *H. pylori*-noninfected gastric mucosa, and some reports state that some gastric adenomas may progress to adenocarcinoma [3]. There is no consensus about the treatment for gastric adenoma in *H. pylori*-noninfected gastric mucosa. However,



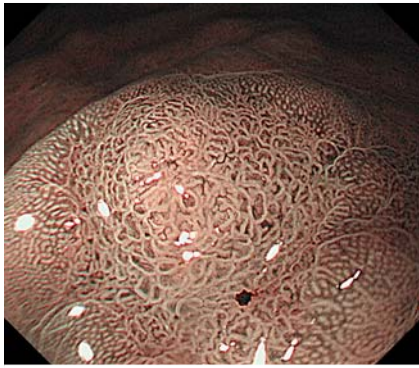
► **Video 1** Depressed gastric-type adenoma in nonatrophic gastric mucosa without *Helicobacter pylori* infection: endoscopic submucosal resection performed for histologic evaluation.



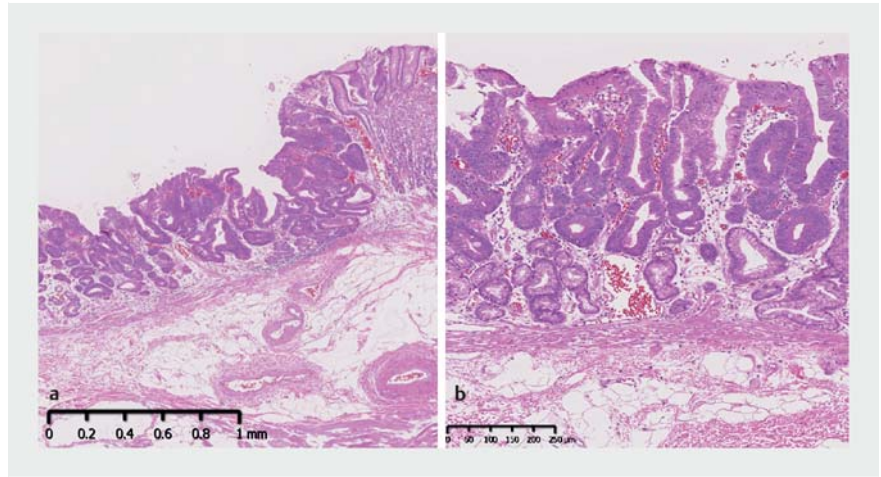
► **Fig. 1** Endoscopic image showing a whitish depressed lesion, 10 mm in diameter, in the greater curvature of the lower gastric body.



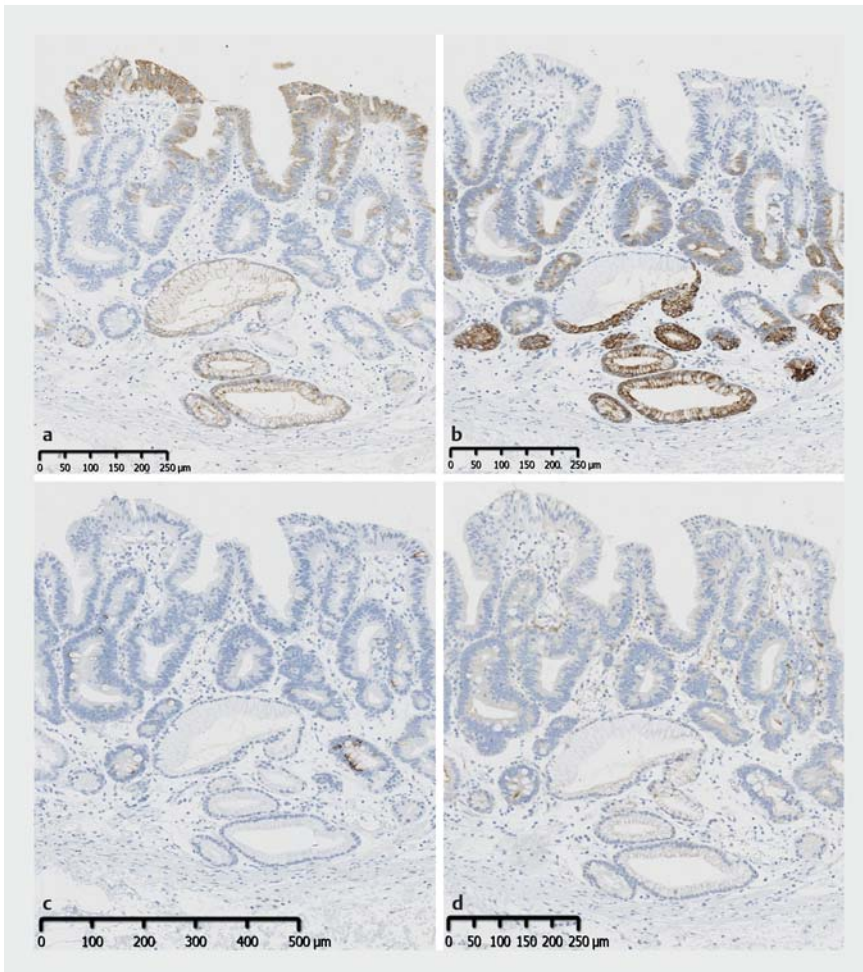
► **Fig. 2 a, b** Atrophy and intestinal metaplasia were not observed in the background gastric mucosa.



► **Fig. 3** Magnifying endoscopy with narrow-band imaging showed an irregular microsurface pattern with round and oval pits and slightly irregular microvascular architecture with discordant looped vessels.



► **Fig. 4 a, b** Histological examination showed gastric-type adenoma.



► **Fig. 5** Immunohistochemical analysis indicated that the lesion was a gastric-type adenoma. The tumor cells were: **a** mucin (MUC) 5AC-positive; **b** MUC6-positive; **c** MUC2-negative; and **d** CD10-negative.

we recommend that endoscopic submucosal dissection as a total biopsy is also necessary. It is important to accumulate further cases to clarify the characteristics of gastric adenomas in *H. pylori*-non-infected gastric mucosa.

Endoscopy_UCTN_Code_CCL_1AB_2AD_3AB

Competing interests

The authors declare no conflicts of interest for this article.

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