Ectopic gastric mucosa in the rectum mimicking an early depressed cancer treated by endoscopic mucosal resection



Figure 1 Colonoscopy showed a depressed lesion mimicking an early cancer in the lower part of the rectum. Magnification with chromoendoscopy using 0.4% indigo carmine or 0.05% crystal violet staining revealed a type I-like pit pattern in the depressed area. **a** Conventional view. **b** Chromoscopic view with 0.4% indigo carmine. **c** Magnification after 0.4% indigo carmine dye spraying. **d** Magnification with 0.05% crystal violet staining.



Figure 2 Histologically, the specimen resected by endoscopic mucosal resection showed ectopic gastric mucosa of the fundic type. **a** Loupe view (H&E, magnification × 5). **b** Lowpower view of the border between the ectopic gastric mucosa and normal rectal mucosa (H&E, magnification × 40). A 69-year-old man visited our hospital due to a positive fecal occult blood test. He was asymptomatic and his medical history included myocardial infarction and hypertension. At colonoscopy, a depressed lesion, approximately 7 mm in size, was identified in the posterior wall of the lower part of the rectum. Chromoendoscopy with 0.4% indigo carmine defined the depression, which mimicked an early depressed cancer. However, magnified observation after 0.05% crystal violet staining demonstrated a type I-like pit pattern according to Kudo's classification in the depressed area (**> Figure 1**) [1]. Therefore, this lesion was diagnosed as non-neoplastic based on the pit pattern analysis. An endoscopic biopsy provided a histological diagnosis of ectopic gastric mucosa of the fundic type. Although the lesion exhibited no change in size or morphology after 1 year of follow-up, it was completely removed by endoscopic mucosal resection (EMR) for both diagnostic and therapeutic reasons. Histological examination of the resected specimen revealed fundic-type gastric mucosa surrounded by normal rectal mucosa; Helicobacter pylori was not detected in the resected specimen (**S** Figure 2).

Ectopic gastric mucosa of the rectum and anus are less common than other sites [2]. A review of the literature has revealed 44 cases including the current one [3], and only two cases, including ours, were reported to be depressed in morphology. At colonoscopy, most depressed lesions are neoplastic, and thus careful endoscopic observation is necessary. We have applied magnification with chromoendoscopy for diagnosis. Finally, this lesion was endoscopically diagnosed as nonneoplastic, as it disclosed a type I-like pit pattern [1]. We rarely biopsy lesions diagnosed as non-neoplastic endoscopically. However, as depressed lesions exhibiting a type I pit pattern have been seldom detected or reported, an endoscopic biopsy was taken for histological evaluation.

Unlike ours, more than 90% of the reported cases were symptomatic, and complete relief could be obtained following treatment, including surgical resection or endoscopic polypectomy or ablation [3]. Sporadic cases of cancers have also been reported to arise from ectopic gastric mucosa [4]. Although our patient was asymptomatic, malignant transformation could not be totally denied. Therefore, EMR was conducted for both diagnostic and therapeutic reasons. Endoscopy_UCTN_Code_CCL_1AD_2AC Endoscopy_UCTN_Code_CCL_1AD_2AJ

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