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Early Gastric Cancer Concurrent with Gastritis Cystica Profunda Resembling Advanced Cancer

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A 45-year-old asymptomatic woman underwent screening upper gastrointestinal endoscopy. Physical and laboratory examinations were unremarkable. Endoscopy revealed a depressed type tumor with pale color and submucosal tumor (SMT)-like enlarged folds on the greater curvature of the middle gastric body (Fig. 1A). Biopsies showed poorly differentiated adenocarcinoma and signet ring cell carcinoma from the depressed lesion; however, repeated biopsies revealed no signs of malignancy from the enlarged folds. *Helicobacter pylori* was positive. Additional barium swallow radiography confirmed swollen folds of the gastric wall (Fig. 1B). Under the preoperative diagnosis of type 4 advanced undifferentiated gastric cancer, a total gastrectomy was performed. The depressed lesion was diagnosed as intraepithelial moderately differentiated tubular adenocarcinoma and poorly differentiated adenocarcinoma without lymph node metastasis (Fig. 2A). The SMT-like lesions showed hypertrophic gastritis with gastritis cystica profunda (GCP) without signs of malignancy (Fig. 2B). Pathological continuity between cancer and GCP was not disclosed. The patient has had no recurrence during the follow-up.

Multiple cystic diseases of the stomach, including GCP, diffuse cystic malformation, and submucosal heterotopic gastric gland, are rare, hyperplastic, and benign lesions characterized by cystic dilatation of the gastric glands extending into the submucosa of the stomach.[1-4] Although the etiologies are unknown, they may follow mucosal injury caused by repeated erosion and regeneration or surgery promoting herniation of glands into the submucosa.[2,3] These disorders may present giant gastric folds and SMT-like forms and are considered as potentially precancerous lesions;[2,4] however, they are difficult to diagnose because of their existence at the submucosa. Possibilities of advanced gastric cancer cannot be ruled out completely in select cases, as shown here. Pathological evaluation using endoscopic ultrasonography with fine needle aspira-

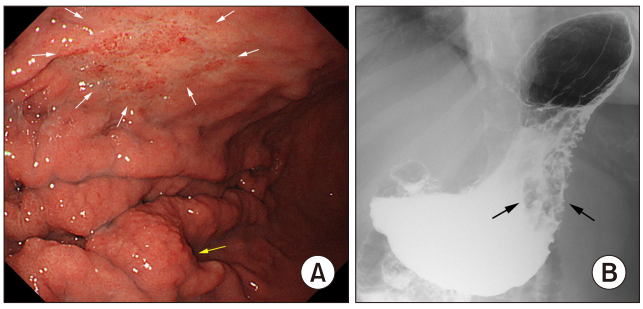

FIG. 1. (A) Endoscopy revealed a depressed type tumor with pale color (white arrows) and submucosal tumor-like enlarged folds (yellow arrow) on the greater curvature of the middle gastric body, suggesting the submucosal expansion of the former tumor to the gastric wall. (B) Barium swallow radiography confirmed markedly swollen folds of the gastric wall (arrows), suggesting the invasion to a deeper submucosal layer or muscle layer.

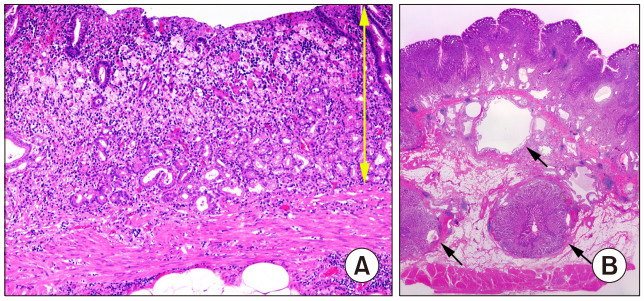

FIG. 2. Histopathological examination of the resected stomach (H&E). (A) The depressed lesion was diagnosed as intraepithelial moderately differentiated tubular adenocarcinoma and poorly differentiated adenocarcinoma. An arrow indicates the mucosal layer. (B) The submucosal tumor-like lesions showed multiple cystic dilatation of the heterotopic gastric glands extending into the submucosa (arrows), consistent with hypertrophic gastritis with gastritis cystica profunda without signs of malignancy.

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tion may have been useful for accurate preoperative diagnosis.[5]

In conclusion, concurrent GCP can be the cause of overdiagnosis of gastric cancer as shown in this case, thus it is important to consider GCP as the differential diagnosis of SMT-like lesions of the stomach. Although rare, cautious preoperative assessments are needed for such paracancerous lesions.

CONFLICT OF INTEREST STATEMENT

None declared.

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