## A Case of Gastric Ulcer With Mucosal Bridge

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**ABSTRACT:** Endoscopic images of the mucosal bridge with gastric ulcer are unusual. The mucosal bridge is presumed to have changed to a special form based on repeated development of gastric ulcer. The clinical course of mucosal bridge is unclear.

KEYWORDS: Gastric ulcer, gastrointestinal bleeding, mucosal bridge

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A 73-year-old man was transported by ambulance to our hospital with a chief complaint of tarry stool. He had a history of gastric ulcer 2 years earlier. The previous ulcer had been found at the gastric angle, and the biopsy showed regenerative pyloric gland mucosa with no malignancy. At that time, he had undergone eradication therapy for Helicobacter pylori. Laboratory analysis showed a hemoglobin level of 6.4g/dL and his systolic blood pressure had decreased to 80 mm Hg. Computed tomography of the abdomen revealed irregular thickness of the gastric wall (Figure 1). We suspected upper gastrointestinal bleeding and performed endoscopic examination. However, achieving detailed observation proved difficult because of the large amount of residue. He received blood transfusion and an intravenous dose of proton pump inhibitor after administration. After 1 week, on reexamination, gastric ulcer accompanied by mucosal bridge was observed at the gastric angle (Figure 2A and B). He left the hospital in remission, tarry stool had disappeared. We planned reexamination and biopsy, but he newly developed pyothorax and was hospitalized again. Unfortunately, his condition deteriorated with the development of pyothorax,

and we abandoned further examination and biopsy. He transferred hospitals and he is alive.

Several reports have described the so-called double pylorus, which forms a fistula in the duodenum due to ulcers in the antral area, but presentations such as in our case are very rare. Nojima et al<sup>2</sup> reported mucosal bridge in patients complicated



**Figure 1.** Computed tomography of the abdomen reveals irregular thickening of the gastric wall (arrow).

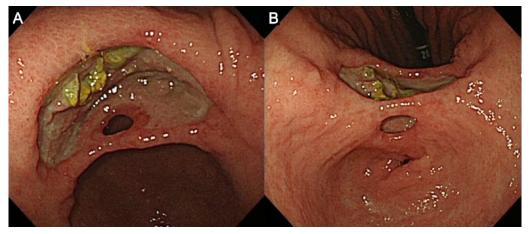


Figure 2. Endoscopic examination shows an ulcer with mucosal bridge at the gastric angle: (A) straight view and (B) retroflex view.

with Behçet disease, and Mai et al<sup>3</sup> and Obrador et al<sup>4</sup> reported cases of gastric mucosal bridge, but few other cases have been reported. This case is presumed to have changed to a special form based on the repeated development of gastric ulcer. Little is known about the clinical course of mucosal bridge. Repeated endoscopy seems important.

### **Author Contributions**

TK conceived and designed the experiments, wrote the first draft of the manuscript, contributed to the writing of the manuscript, agreed with manuscript results and conclusions, jointly developed the structure and arguments for the paper, made critical revisions, and approved the final version. TK, RM, YK, and MT analyzed the data. All authors reviewed and approved the final manuscript.

#### **Disclosures and Ethics**

As a requirement of publication, the authors have provided to the publisher signed confirmation of compliance with legal and ethical obligations, including but not limited to the following: authorship and contributorship, conflicts of interest, privacy and confidentiality, and (where applicable) protection of human and animal research subjects. The authors have read and confirmed their agreement with the ICMJE authorship and conflict of interest criteria. The authors have also confirmed that this article is unique and not under consideration or published in any other publication, and that they have permission from all rights holders to reproduce any copyrighted material. Any disclosures are made in this section. The external blind peer reviewers report no conflicts of interest.

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