

Unusual Case of Acquired Gastrocorporeo-duodenal Fistula with Long Luminal Tract Treated without Surgical Operation

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ABSTRACT

Gastroduodenal fistulas are rare conditions that they occur as either a congenital or acquired condition. The acquired forms usually are associated with peptic ulcer disease; they are mostly located between the gastric antrum and duodenal bulb. We reported the case of 44-year-old male presented with weight loss and melena without any evidence of peritoneal irritation. Endoscopy and CT showed an unusual location of a gastroduodenal fistula between the lesser curvature of the gastric lower body and the duodenal bulb associated with a very large gastric ulcer. The fistula completely closed after one month of medical treatment. Here, the serial endoscopic observations of the unusual case of acquired gastrocorporeo-duodenal fistula and review of literature are reported.

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Key words: Acquired; Gastrocorporeo-duodenal fistula; Endoscopy

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INTRODUCTION

Gastroduodenal fistulas usually are found at the lesser curvature of

the gastric antrum and duodenal bulb; the incidence is about 0.02%^[1]. Both acquired and congenital causes have been reported in patients with gastroduodenal fistulas. If a fistula is acquired, the most common cause is peptic ulcer disease. Here, the serial endoscopic observations of a patient with weight loss and melena are reported; the patient had a very large gastric ulcer and a gastrocorporeo-duodenal fistula with long luminal tract, which was successfully treated by supportive medical care.

CASE REPORT

A 44-year-old man was admitted to the hospital because of 10 kg weight loss over two months and melena. The physical examination revealed no significant abnormality. The laboratory findings included: a white blood cell count of 8330 /mm³, hemoglobin of 9.8 g/dL, hematocrit of 30.6% and CEA of 1.5 ng/mL. The endoscopy showed a very large open ulcer between the lesser curve of the lower body and duodenal bulb (Figure 1). A gastrograffin upper gastrointestinal series also demonstrated a gastrocorporeo-duodenal fistula (Figure 2). A CT scan of the abdomen showed the gastrocorporeo-duodenal fistula with thickening of the antrum in the coronal view (Figure 3). A biopsy was performed on both the gastric and duodenal ulcers and the results revealed *Helicobacter pylori* infected gastritis with no malignancy. Subsequently, the patient was treated with a proton pump inhibitor (PPI). About one month later, the repeat endoscopy and upper gastrointestinal series showed that the previous fistula opening on both the gastric and duodenal side had completely closed. There was no evidence of fistula formation on the endoscopy (Figure 4) and the upper gastrointestinal series (Figure 5).

DISCUSSION

A gastroduodenal fistula or double pylorus usually develops between the distal stomach and duodenal bulb. The finding of a double pylorus is very rare, it has been reported in about 0.02% to 0.04% with a male predominance^[1,2]. This accessory channel can develop congenitally or following penetration of a gastric ulcer into the duodenal bulb^[3]. In most cases, a double pylorus is formed as a result of peptic ulcer disease. In this case, the fistula was unusually located between the lesser curvature of the gastric lower body and duodenal bulb; however, most fistulas are found between the antrum and duodenal bulb^[4]. Fistula closure in general does not occur spontaneously, and surgical intervention should be considered

in cases with refractory symptoms, recurrent ulcers, and other complications. the fistula opening completely closed just after one month of PPI. The majority of patients have no specific symptoms.⁶ However, some have symptoms such as epigastric discomfort, dyspepsia, and upper gastrointestinal bleeding^{4,5,7}. This case shows rare complication of gastric ulcer with a fistula in an unusual location between the lesser curvature of the lower body and duodenal bulb. We demonstrated the aquired nature of gastroduodenal fistula by serial endoscopic examination.

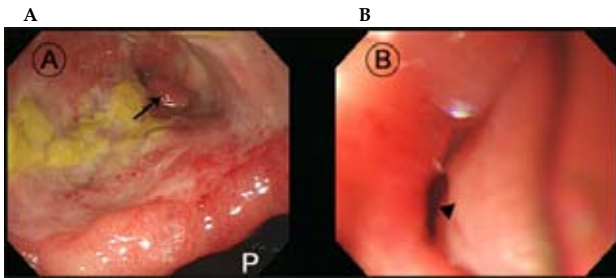


Figure 1 Endoscopic findings (P, normal pyloric ring). A, fistula (arrow) with surrounding ulceration was observed on the lesser curve of gastric lower body. B, At duodenal bulb, fistula opening (arrowhead) could be seen but the scope couldn't be passed.

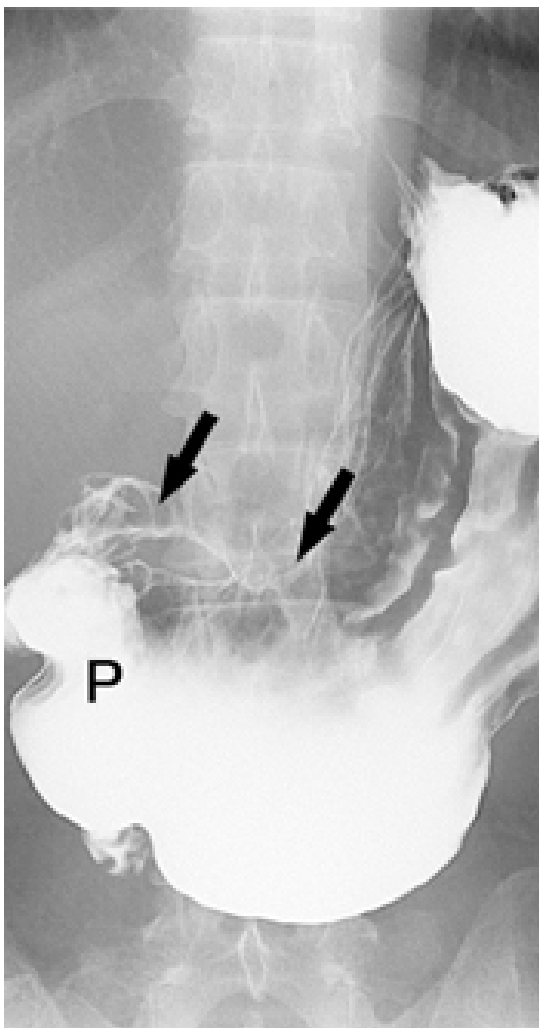


Figure 2 An upper gastrointestinal (gastrografin) series finding (P, pyloric ring). Fistula (arrow) was observed on the lesser curve of gastric lower body. There was no inflammation inside the tract.

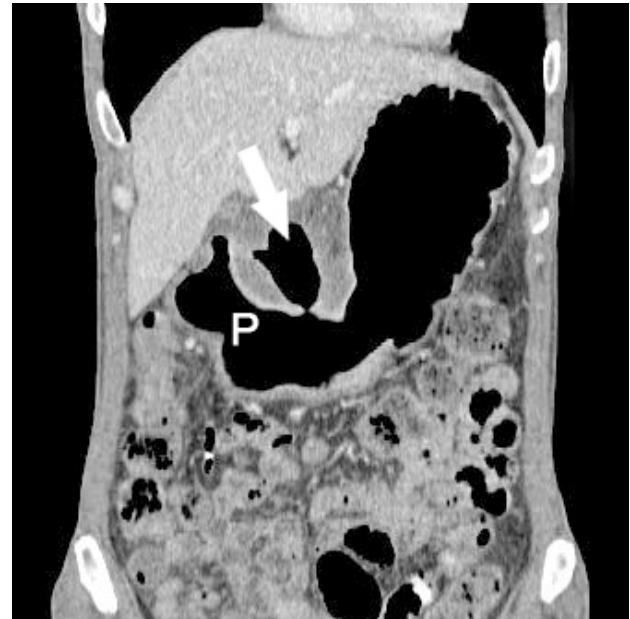


Figure 3 Abdominal CT finding (P, pyloric ring). Gastroduodenal fistula (white arrow) with antral wall thickening was noted at coronal view.

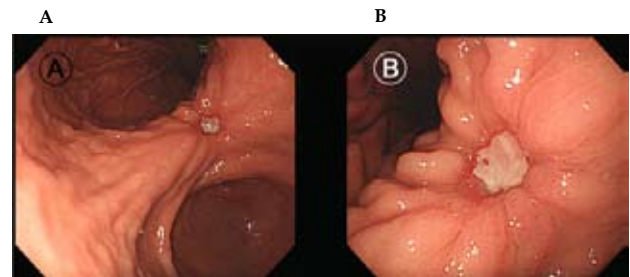


Figure 4 Endoscopic findings. Complete closure of previous gastroduodenal fistula happened after PPI treatment for about 1 month, but remnant gastric and duodenal ulcer with healing stage still remained.

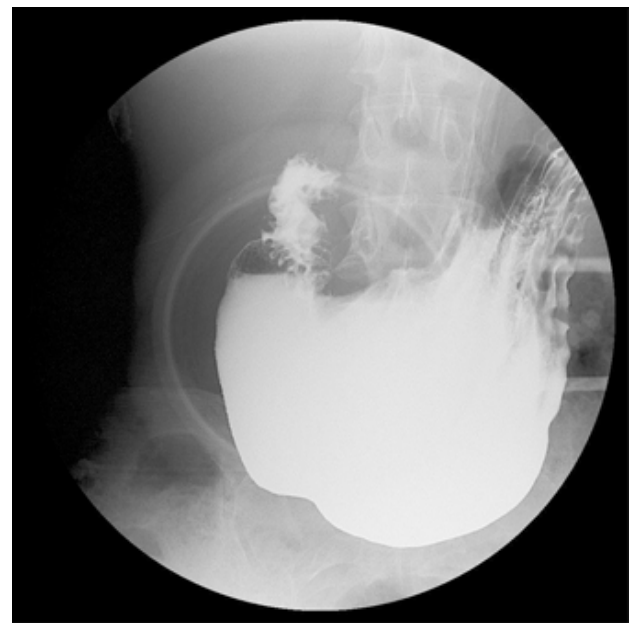


Figure 5 Gastrografin upper gastrointestinal series finding. Complete closure of previous gastroduodenal fistula was noted after PPI treatment for about one month.

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