

Simultaneous gastroscopy and colonoscopy for the diagnosis of gastrojejunal fistula in a 60-year-old man

60 yaşında erkek hastada gastrojejunal fistül tanısında eş zamanlı gastroskopi ve kolonoskopi

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Gastrojejunal fistula is an unusual, late complication of gastroenterostomy. Patients can present with symptoms of a fistula 20 years or more after their original gastric surgery. Establishing the diagnosis of gastrojejunal fistula is difficult because it has nonspecific symptoms on admission. The most frequently used diagnostic tools are barium enema and endoscopy. We herein report the case of a 60-year-old man with gastrojejunal fistula. We performed simultaneous gastroscopy and saw the tip of the colonoscope emerging through the gastrojejunostomy stoma.

Keywords: Gastrojejunal fistula, gastroenterostomy, colonoscopy

INTRODUCTION

Gastrojejunal fistula (GJF) is an unusual, late complication of gastroenterostomy. GJF is generally considered to be induced by a stomal ulcer due to inadequate gastric resection, incompleteness of vagotomy and long afferent loop (1,2). The most frequent symptoms are upper abdominal pain, severe weight loss, diarrhea, halitosis, and sometimes fecal vomiting (3). The diagnosis is most reliably and frequently made by barium enema and gastroscopy (4,5). The treatment of GJF consists mainly of nutritional support with parenteral or enteral hyper-alimentation and resective surgery (5).

CASE REPORT

A 60-year-old man was referred to our hospital because of severe weight loss (10 kg/1 year), diarrhea, halitosis, and feculent vomiting. His history included a distal gastric resection and Billroth II reconstruction for a duodenal ulcer 20 years previously. The laboratory examinations revealed hypoproteinemia, hypoalbuminemia and iron deficiency anemia.

The colonoscopy demonstrated a large ulcer surrounded by hyperemic fragile mucosa at the transverse colon (Figure 1). Next to the ulcer, a hole was recognized (Figure 2). The colonoscope was inserted through the hole, and the gastroscope was introduced simultaneously (Figure 3). Figure 3 shows the gastroscopic view of the colonoscope in the stomach; the colonoscope had been inserted through the fistula tract from the transverse colon.

Gastrojejunal fistül gastroenterostominin nadir ve geç komplikasyonudur. Hastalık operasyondan 20 yıl sonra bile ortaya çıkabilir. Gastrojejunal fistül tanısı hastalığın nonspesifik semptomatolojisi nedeniyle güçtür. En sık tanı araçları baryumlu grafi ve endoskopidir. Biz gastrojejunal fistülü olan ve tanısını eş zamanlı kolonoskopi ve endoskopi ile koyduğumuz bir vakayı sunuyoruz.

Anahtar Kelimeler: Gastrojejunal fistül, gastroenterostomi, kolonoskopi

Surgical treatment, a one-stage procedure with revision gastrectomy, colonic wedge resection, primary closure of the colon, and segmentary jejunal resection, was performed. Restoration of bowel continuity was achieved by gastroenterostomy and jejunojejunostomy. Unfortunately, the patient's clinical condition did not improve after the surgery. Anastomotic leakage was ruled out with methylene blue administration via a nasogastric tube, and there was no leakage through the drains. Transabdominal ultrasound examination was also

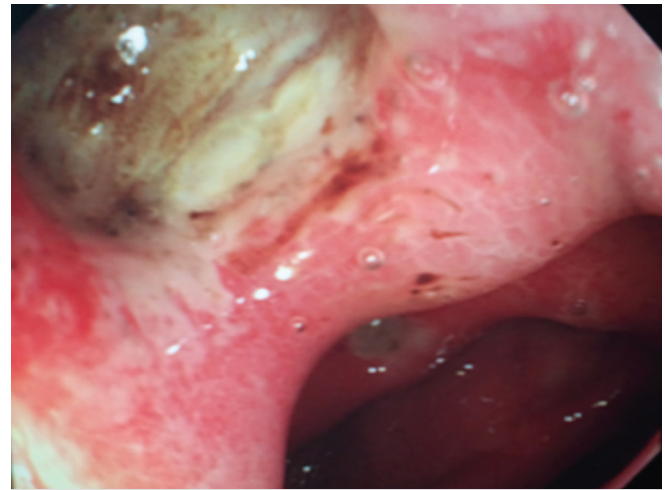


Figure 1. A large ulcer surrounded by hyperemic fragile mucosa at the transverse colon.



Figure 2. Colonoscopy showed a hole and then mucosal folds resembled those of the jejunum.

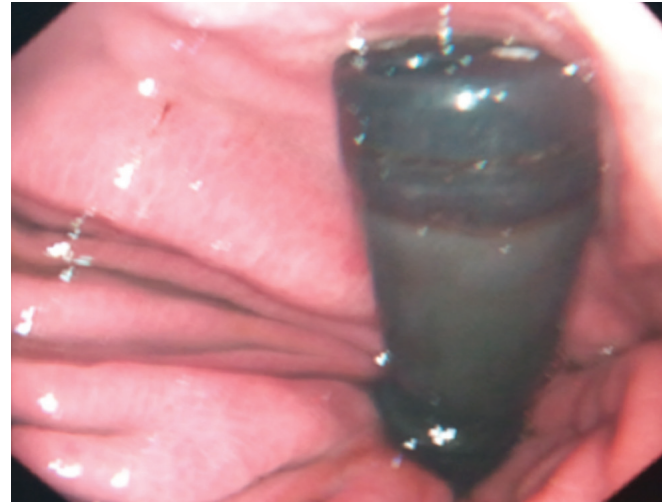


Figure 3. Gastroscopic view of the colonoscope in the stomach, which had been inserted through the fistula tract from the transverse colon.

normal. Pulmonary infiltration was determined, and an antibiotic regimen and respiratory support with endotracheal intubation were performed. However, the patient's clinical status deteriorated, sepsis developed, and the patient died 7 days after the procedure.

DISCUSSION

Gastrojejuno-colic fistula (GJF) is a late, severe complication of a stomal ulcer, which develops as a result of inadequate resection of the stomach or incomplete vagotomy (1). As a result of the recent development of proton pump inhibitors and *Helicobacter pylori* eradication regimens for the treatment of peptic ulcers, the necessity of peptic ulcer surgery has decreased, and the occurrence of GJF has decreased remarkably. However, GJF should be recognized as one of the late severe complications observed after a gastrectomy with Billroth II reconstruction, since this disease may occur even 20 years after the first operation for peptic ulcer (2,3).

Marginal ulcer occurs in 3% of patients post-Billroth II subto-

tal gastrectomy; it occurs in less than 1% if truncal vagotomy is included, but in up to 30% of patients with gastroenterostomy without vagotomy (6,7). Marginal ulcer can be complicated by perforation, hemorrhage and GJF. Diarrhea, weight loss, halitosis, and feculent vomiting subsequent to gastroenterostomy should call attention to possible GJF. Short-circuiting the length of the small intestine, bacterial overgrowth and colonic bacteria spilling over the entire proximal gastrointestinal tract were the reasons for the symptoms. Barium enema is the most accurate examination for establishing the diagnosis of GJF (8). Esophagogastroduodenoscopy and colonoscopy are also helpful, not just for the diagnosis but also to rule out any malignant disease. GJF is usually not negotiable with endoscopes because of its complex routings. In some cases, like ours, the simultaneous use of two endoscopes clearly identified the fistula pathway (9).

In conclusion, GJF, although rare, should be kept in mind when patients with a history of prior gastrectomy with Billroth II reconstruction suffer from symptoms such as diarrhea or fecal vomiting and weight loss.

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