ACQUIRED DOUBLE PYLORUS PRESENTING AS A GASTROINTESTINAL BLEEDING

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INTRODUCTION

Gastroduodenal fistula (GDF) also known as double pylorus is a rare condition that can be congenital due to gastrointestinal duplication abnormality or more commonly secondary to peptic ulcer disease (1). It has been reported in 0.001% to 0.4% of upper gastrointestinal tract endoscopies and seems to be predominate in male (2). The pathogenesis of acquired double pylorus is not completely clarified but authors suggest that it occurs generally when a peptic ulcer erodes and creates a fistula between the duodenal bulb and the gastric antrum (3). A nearly hundred reported cases have been described all over the world (4). The majority of reported case was about an incidental endoscopy finding (5). Here, we demonstrated an acquired double pylorus, probably due to pre pyloric ulcer revealed by a gastrointestinal bleeding.

CASE REPORT

A 65-year-old male without medical past history was hospitalized for sudden onset of hematemesis. He does not suffer from any symptom except indigestion and he denied taking medication especially non steroidal anti-inflammatory drug (NSAID). Patient had a long history of tobacco. Physical exam showed paleness, no tenderness, nor hepatosplenomegaly nor palpable mass. No signs of hemodynamic or neurologic failure were seen.

Blood test showed hemoglobin count of 10 g/dL, white blood cell count of 8000 cells/µL and platelet count of 250000 cells/µL. Him prothrombin time, liver and renal function test were within normal limits. After admission, he was put under Intravenous proton-pump inhibitors (PPi) associated with resuscitation measures. No another episode of hematemesis was noted. Emergent endoscopy showed two channels in the pylorus region. In one of the channel, a 7 millimeter ulcer with adherent clot classified IIb according to FORREST was found (Figure 1 and 2). Chronic gastritis associated to Helicobacter pylori infection without malignancy was described by pathologist. Follow-up endoscopy after 14 days of concomitant quadruple therapy switched by PPi during 6 weeks showed a healing ulcer associated to the image of double pylorus.

DISCUSSION

Pathogenesis and etiology of GDF are unclear until our days. Moreover, likelihood of developing an acquired DP seems to be more frequent if patient is taking NSAIs and if peptic ulcer disease is due to helicobacter pylori infection (6). Our patient did not report NSAID use during initial finding of pre pyloric antral ulcer. However, another condition may lead to gastroduodenal fistula as gastric neoplasm, postoperative fistulaization, foriegn body ingestion and rarely Inflammatory bowel disease or be associated as systemic diseases, diabetes, cirrhosis and chronic obstructive pulmonary disease (7,8). Regarding mechanism of formation of GDF, accessory pyloric channel is probably created as a result of penetration of peptic ulcer from stomach to first part of duodenum by means of re-epithelialization (9). Furthermore, this condition is generally asymptomatic; however, symptoms may range from simple indigestion to complication as gastrointestinal bleeding (10). Our patient summarizes a history of gastrointestinal bleeding and GDF which be an unusual complication of peptic ulcer disease. In terms of management, GDF generally does not require surgical or endoscopic management unless no improvement in symptoms with medical therapy or in case of recurrent bleeding, obstruction or perforation(11).

In conclusion, despite advance in management of peptic ulcer disease, complications remain frequent. Association of some complications is unusual especially in our case which summarizes gastrointestinal bleeding and GDF. Medical and endoscopic management seems to be sufficient, and then patients may need surgical intervention if GDF becomes symptomatic.

Author contributions: All authors contributed to this manuscript.

Ethical statement
Our work has been approved by ethics committee of our hospital.

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