



An unusual upper GI bleeding: Angiodysplasia at the hepaticojejunostomy anastomosis

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Abstract

Upper gastrointestinal bleeding (UGIB) is a common condition causing a considerable number of admissions in clinics. The most frequent causes of UGIB are peptic ulcer disease, malignancies, variceal bleeding and Mallory Weiss tears. A 47-year-old male subject was admitted to the emergency service with recurrent episodes of melena. He had been hospitalized several times before, but he was discharged because the endoscopic procedures did not reveal any origin. There has been a history of Whipple surgery for pancreatic adenocarcinoma. When admitted he was tachycardic, melanic stool was noted on rectal examination and his hemoglobin level was decreased. Widespread angioectasia was detected at the borders of the biliary-enteric anastomosis, which was known to have bleeding on upper GI endoscopy. Despite their rare presentation, bleeding from the vascular ectasia near the anastomotic line should be kept in mind in the differential diagnosis of patients with gastrointestinal hemorrhage.

Keywords: angiodysplasia, gastrointestinal bleeding, vascular ectasia, whipple surgery, pancreaticoduodenectomy

1. Introduction

Upper gastrointestinal hemorrhage is a prevalent potentially lethal condition causing a great number of admissions in health services worldwide (1, 2). An upper gastrointestinal (GI) hemorrhage is described as blood loss from proximal GI tract (3). Patients with upper GI hemorrhage usually present with hematemesis (vomiting of blood and/or coffee-ground-like material) and/or melena (black, tarry stools), although hematochezia may be seen in a case of major bleeding and is typically associated with hemodynamic instability even hemorrhagic shock (4). The most frequent causes of upper gastrointestinal bleeding are peptic ulcer disease due to use of aspirin and/or other non-steroidal anti inflammatory drugs (NSAIDs), variceal bleeding, malignancies including gastric cancer and Mallory Weiss tears (5). Comparably uncommon causes are erosive gastritis/duodenitis, esophagitis, Dieulafoy's lesions and vascular ectasia (5). Here, we report a case of a gastrointestinal hemorrhage as a late complication of Whipple's procedure.

2. Case Report

A 47-year-old male subject was admitted to the emergency service with recurrent episodes of melena. He had been hospitalized several times for further examination before, but he was discharged because the endoscopic procedures (3 times gastroscopy, 2 times colonoscopy) did not reveal any origin. There was a history of Whipple surgery (pancreaticoduodenectomy) for pancreatic ductal

adenocarcinoma one and a half years ago. He had received adjuvant gemcitabine and capecitabine treatment, which was completed one year ago after the surgical procedure. Since then he has only been using NSAIDs on demand. When admitted he was tachycardic and his vital values; pulse rate 110 / min, blood pressure 110/80 mmHg, respiratory rate 14 / min, saturation O₂: 96% at room air, respectively. Melanic stool was noted on rectal examination. Hemoglobin level was 8.2 g / dl (normal: 13.5-8 g / dl). Laboratory values were otherwise not remarkable. Intravenous fluid replacement following two units of red cell suspension transfusion was planned in the emergency department. Later, the subject was taken to the gastroenterology service for further assesment and follow-up. An upper GI endoscopy was planned to examine the anastomotic region. Widespread angioectasia was detected at the borders of the biliary-enteric anastomosis, which was known to have bleeding and clots were seen in patches (Fig. 1). No active bleeding was observed. Argon plasma coagulation (APC) could not be performed due to technical issues. Additionally, there were several stones in the common bile duct. Endoscopic Retrograde Cholangiopancreatography was planned after recovery. In the following days, the hemoglobin level did not decrease and melena disappeared.

3. Discussion

Here, we have demonstrated the origin of bleeding by investigating the afferent jejunal loop anastomosis site in a

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patient with a history of Whipples procedure (pancreaticoduodenectomy) (6).



Fig. 1. Angioectasia detected endoscopically at the borders of the biliary-enteric anastomosis

Reviewing previously reported literature, in patients with pancreaticoduodenectomy, source of bleeding may include ectopic varices, pseudoaneurysms, erosions, ulcers, pancreatic fistula and intra-abdominal abscess (6). In our case, only angioectasia were present. In suspected cases of GI bleeding, diagnosis is usually made with endoscopy. In conditions when extended endoscopy is necessary and gastroscopes length is not enough, single-balloon endoscopy (SBE) and double-balloon endoscopy (DBE) and colonoscopy may be beneficial for investigating biliary anastomosis (7). In general, these lesions are treated endoscopically with APC successfully (8). In conclusion, despite their rare presentation, bleeding from the vascular ectasia near the anastomotic line should be kept in mind in the differential diagnosis of patients with gastrointestinal hemorrhage who have a history of Whipple's procedure.

Conflict of Interests

Authors declare that they have no conflict of interest.

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