Massive Life-threatening Lower Gastrointestinal Hemorrhage Caused by an Internal Hemorrhoid in a Patient Receiving Antiplatelet Therapy: A Case Report

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A Dieulafoy lesion in the rectum is a very rare and it can cause massive lower gastrointestinal bleeding. An 83-year-old man visited our hospital. He had chronic constipation and had taken aspirin for about 10 years because of a previous brain infarction. He was admitted because of a recent brain stroke. On the third hospital day, he had massive hematochezia and suddenly developed hypovolemic shock. Abdominal computed tomography showed active arterial bleeding on the left side of the mid-rectum. Emergency sigmoidoscopy showed an exposed vessel with blood spurting from the rectal wall. The active bleeding was controlled successfully by an injection of epinephrine and two hemoclippings. On the fourth day after the procedure, he had massive recurrent hematochezia, and his vital signs were unstable. Doppler-guided hemorrhoidal artery band ligation was performed urgently at two sites. However, he rebled on the third postoperative day. Selective inferior mesenteric angiography revealed an arterial pseudoaneurysm in a branch of the superior rectal artery, as the cause of rectal bleeding, and this was embolized successfully. We report a rare case of life-threatening rectal bleeding caused by a Dieulafoy lesion combined with pseudoaneurysm of the superior rectal artery which was treated successfully with embolization. (Korean J Gastroenterol 2012;60:253-257)

Key Words: Gastrointestinal hemorrhage; Dieulafoy lesion; Aneurysm, false; Therapeutic embolization

INTRODUCTION

Rectal bleeding represents 9% to 10% of all causes of lower gastrointestinal (GI) bleeding. The most common causes of massive rectal bleeding include hemorrhoids, anal fissures, and fistulas-in-ano. More unusual causes of bleeding include solitary rectal ulcer syndrome, radiation proctitis, and prostate biopsy. Massive low GI bleeding is often difficult to diagnose and to manage. A Dieulafoy lesion has been widely described in the stomach, but in the rectum is a very rare entity that can cause massive lower GI bleeding. Pseudoaneurysm arising from superior rectal artery is also rare and selective embolization offers a viable option for treatment in patients with massive lower GI bleeding. Herein, we report a rare case of life-threatening rectal bleeding that caused by a rectal Dieulafoy lesion combined with a pseudoaneurysm of superior rectal artery that was treated successfully with selective arterial pseudoaneurysm embolization.
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CASE REPORT

An 83-year-old man had chronic constipation and had taken aspirin for about 10 years because of a previous brain infarction. He was admitted to our hospital because of a recent brain stroke. Aspirin was discontinued and clopidogrel therapy was started. On the third hospital day, he had massive hematochezia and suddenly developed hypovolemic shock. The volume of rectal bleeding was about 1,300 mL. His blood pressure was 80/40 mmHg, pulse rate 134 beats/min, and hemoglobin level 7.7 g/dL. Clopidogrel therapy was discontinued. Initial resuscitation was performed using crystalloid solution and pack red blood cell transfusion. We found only food material via a Levin tube. Abdominal CT angiography showed active arterial bleeding on the left side of the mid-rectum (Fig. 1). Emergency sigmoidoscopy showed an exposed vessel with blood spurting from the rectal wall without mucosal defect, which was consistent with Dieulafoy lesion (Fig. 2A). The active bleeding was controlled successfully by injection of epinephrine (8 mL, 1 : 10,000) and two hemoclippings (Fig. 2B). On the next day, follow-up sigmoidoscopy showed multiple stercoral ulcers with internal hemorrhoid but with no more bleeding (Fig. 2C).

On the fourth day after the procedure, he had massive recurrent hematochezia and his vital signs were unstable. His blood pressure was 86/62 mmHg, and hemoglobin level 8.6 g/dL. Emergency sigmoidoscopy showed an exposed vessel with blood spurting from the rectal wall. After injection of epinephrine (5 mL, 1 : 10,000) and one hemoclipping, the active bleeding was not controlled. The patient was transferred to general surgery for an emergency hemorrhoidectomy because the bleeding could be possible from the internal hemorrhoid. Doppler-guided hemorrhoidal artery band ligation was performed urgently at two sites.

On the third postoperative day, rebleeding occurred. Selective inferior mesenteric arteriography revealed an arterial pseudoaneurysm in a branch of the superior rectal artery. Concerned about complicating the ischemic proctitis, we su-

![Fig. 1. Abdominal pelvic CT findings (enhanced image). Contrast-enhanced axial (A) and coronal (B) CT images showing contrast extravasation from the left side wall of the mid-rectum (arrows), which was suggestive of active arterial bleeding.](image)

![Fig. 2. Endoscopic findings. (A) Emergency sigmoidoscopy showed an exposed vessel with blood spurting from the rectal wall with an internal hemorrhoid. (B) The active bleeding was controlled successfully after injection of epinephrine and two hemoclippings. (C) On the next day, follow-up sigmoidoscopy showed multiple stercoral ulcers with internal hemorrhoid but no further bleeding.](image)