LETTER TO THE EDITOR

Hemorrhage from the inferior epigastric artery malformation into the external intestinal fistula as an atypical complication of Crohn’s disease

Dear Sir,

Severe lower gastrointestinal bleeding is a rare complication of Crohn’s disease, occurring in 0.9% to 6% of cases. Most bleeding episodes originate from colonic ulcers or ulcerated areas within the mucosa.1

In most cases, hemorrhage from the inferior epigastric artery is into the abdominal wall or retroperitoneal space.2,3 Only two cases of bleeding into the intestine and life-threatening hemorrhage due to injury to the inferior epigastric artery following ileostomy construction appearing as massive bloody diarrhea have been reported in the literature.4,5 One case of intraperitoneal hemorrhage from IEA has been reported.5

We present the unique case of life-threatening spontaneous hemorrhage into the external intestinal fistula from the arteriovenous malformation within RIEA. The erosion of vascular wall by intestinal juice could be a direct hemorrhage cause.

A 41-year-old woman was referred to the surgery due to severe gastrointestinal bleeding and hypovolemic shock. She had 20 years history of Crohn’s disease complicated with a number of intestinal fistulas. She underwent right hemicolecction at the age of 19 years and partial sigmoidectomy at the age of 28 years. She had been previously treated with infliximab and adalimumab. Physical examination revealed massive hemorrhage into the external intestinal fistula located in the right side of the abdomen and cachexia (BMI = 16.8 kg/m²). The results of laboratory investigations revealed anemia (hemoglobin 4.5 g/dl, hematocrit 14.2%), thrombocytopenia (61×10³/μL), and increased level of C Reactive Protein (CRP 157.9 mg/L). Computed tomography angiography, angio-CT and Color Doppler ultrasound are also useful for diagnosis of the inferior epigastric hemorrhage includes: angiography, angio-CT and Color Doppler ultrasound. Angiography and Color Doppler ultrasound are also useful for therapy.

In our patient, surgery could be associated with a high risk of morbidity or mortality. The risk was associated with sepsis and other complications of Crohn’s disease such as inflammation and intestinal adhesions within the abdominal cavity. Therefore, minimally invasive procedure was the treatment of choice. Percutaneous ultrasound guided IEA ligation has not been described yet in the literature.

In conclusion, gastrointestinal bleeding may be a life-threatening complication of Crohn’s disease. Hemorrhage from vascular malformation should be considered if the bleeding source is not found during gastrointestinal endoscopy. It may be successfully controlled by minimally invasive procedures.

References

Figure 1  (a) Computed tomography angiography showing an arteriovenous malformation arising from the right inferior epigastric artery; (b) Color Doppler ultrasound demonstrating the presence of blood flow in the right inferior epigastric artery before ligation; (c) Color Doppler ultrasound demonstrating the absence of any flow in the right inferior epigastric artery after ligation.

Beata Jabłońska*
Andrzej Lekstan
Paweł Lampe
Department of Digestive Tract Surgery,
Medical University of Silesia, Katowice, Poland.
*Corresponding author.
E-mail address: bjablonska@poczta.onet.pl
(B. Jabłońska).

Joanna Pilch-Kowalczyk
Department of Radiology, Medical University of Silesia,
Katowice, Poland.

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