

Recurrent bleeding of parastomal varices: Case report

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Bleeding of parastomal varices is an unusual complication of portal hypertension. We report a case with recurrent parastomal variceal bleeding who had chronic liver disease secondary to autoimmune hepatitis and who had undergone abdominoperineal resection for rectal cancer. She presented four episodes of parastomal variceal bleeding in one month and was successfully treated with combined polidocanol and cyanoacrylate glue.

Key words: Autoimmune hepatitis, parastomal varices, bleeding, cyanoacrylate, polidocanol

Rekürren kanayan parastomal varis: Olgu sunumu

Parastomal varis kanaması portal hipertansiyonun nadir bir komplikasyonudur. Bu makalede rektum kanseri nedeniyle abdominoperineal rezeksiyon yapılan ve otoimmün hepatit nedeniyle gelişmiş kronik karaciğer hastalığı olan bir olguda gelişen rekürren parastomal varis kanaması sunulmaktadır. Hastada ayda dört defa gelişen parastomal varis kanaması kombine polidokanol ve siyanoakrilat yapıştırıcı uygulaması ile tedavi edildi.

Anahtar kelimeler: Otoimmün hepatit, parastomal varis, kanama, siyanoakrilat, polidokanol

INTRODUCTION

Bleeding of parastomal varices can be seen in portal hypertension patients with colostomy or ileostomy (1-3). Bleeding of these varices is a life-threatening problem for these patients. Recurrent parastomal variceal bleeding carries a 3-4% risk of mortality (4,5). No definite treatment strategy for bleeding of parastomal varices has been proposed. Treatment options for bleeding of parastomal varices are compressed dressings, suture ligation, sclerotherapy, angiographic embolization, revision of the stoma, and surgical operations that reduce the portal hypertension (1,3-5).

We report the case of a 42-year-old female patient with prior abdominoperineal resection for rectal cancer in whom recurrent bleeding from parastomal varices was successfully treated with combined adhesives and sclerosants.

CASE REPORT

A 42-year-old female with a history of cirrhosis due to autoimmune hepatitis was admitted to the emergency unit for bleeding from her ostomy site. She had undergone abdominoperineal resection for rectal cancer four years ago. Parastomal varices occurred one year after the surgery (Figure 1A). Over a four-year period, the recurrent bleeding episodes resulted in anemia and patient discomfort. Some conservative treatment modalities like local compression and blood and fresh frozen plasma replacements did not reduce the severity of the bleeding. Projectile type bleeding was seen at the parastomal site occasionally (3 or 4 times per month) (Figure 1B). The varices were noted on the mucocutaneous junction of the colostomy site. Her blood pressure was 90/60 mmHg and pulse rate was 84 per minute. Hemoglobin was 7.3 g/dl,

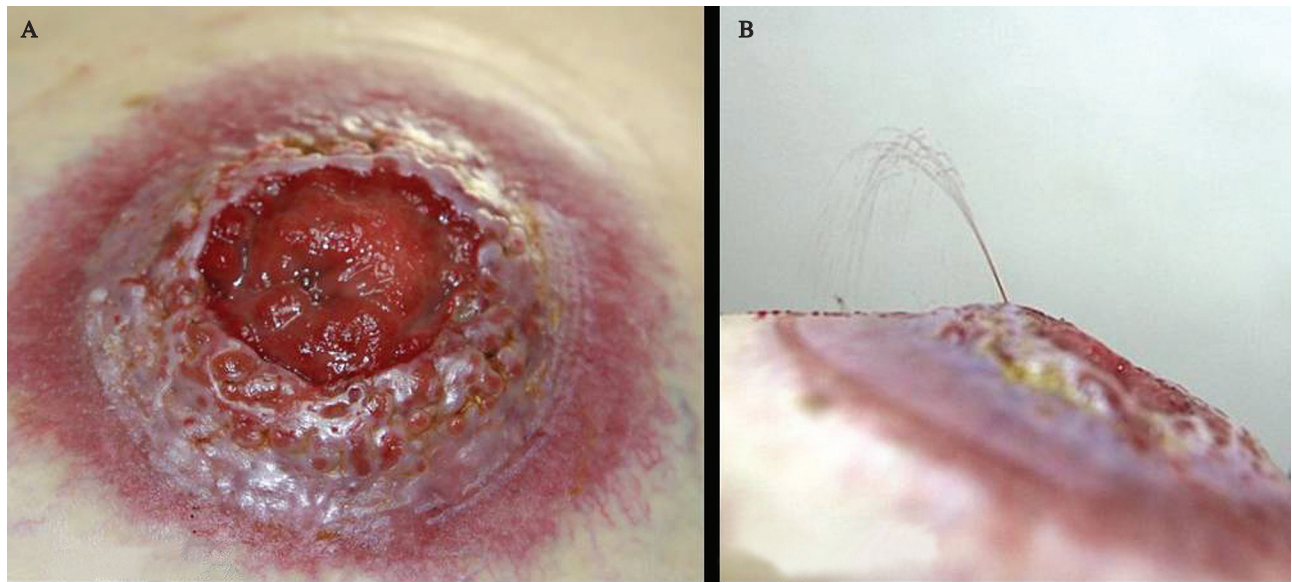


Figure 1. **A.** The skin was discolored and bluish around the circumference of the stoma. **B.** Projectile bleeding of parastomal varices.

hematocrit 23% and platelets 66,000/ μ L. Albumin was 2.15 g/dl, total bilirubin 6.48 mg/dl, aspartate aminotransferase 47 IU/L, alanine aminotransferase 57 IU/L, prothrombin time 13.2 sec with international normalized ratio (INR) of 1.1, and activated partial thromboplastin time 31.8 sec. She was transfused with three units of packed red blood cells. The patient was started on propranolol 40

mg daily. Abdominal computed tomography angiographic scan revealed that the inferior mesenteric vein entered in to the colostomy site and communicated with the inferior epigastric vein. As a result, a portosystemic shunt developed (Figure 2A, 2B). During the hospitalization, the patient had two episodes of parastomal varices bleeding. Direct compression failed to control the bleeding.

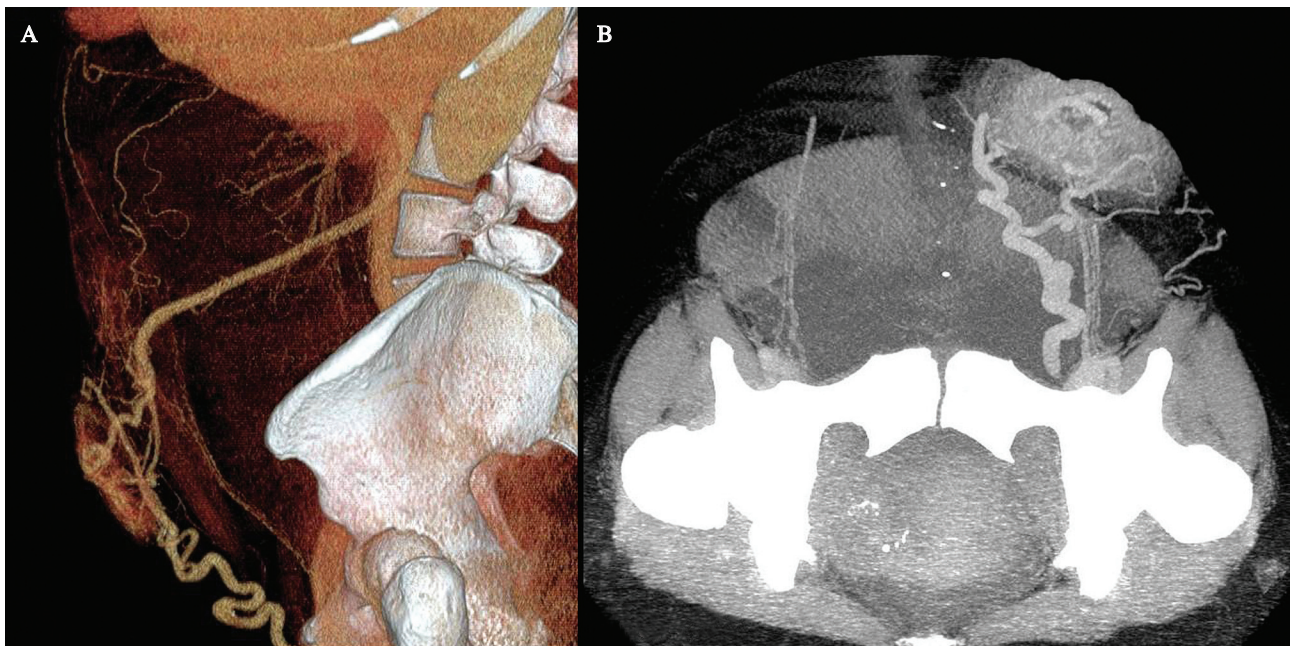


Figure 2. **A.** Computed tomography angiographic scan demonstrated the connection between the inferior mesenteric and inferior epigastric vein. **B.** Contrast-enhanced computed tomography demonstrated the inferior mesenteric vein lying in to the colostomy site as well as dilated veins in the abdominal wall around the stoma.

The combination of percutaneous 10 ml polidocanol (1% Aethoxysklerol-Kreussler, Germany) intravariceal injection and topical cyanoacrylate (Glubran 2, Italy) application were performed. At the three-month follow-up, the patient remained well without further episodes of parastomal bleeding.

DISCUSSION

Varices of stoma were first described by Resnik et al. in 1968 (6). Varices of stoma formation are seen in up to 50% of patients with enterostomies and portal hypertension (7). Increased portal pressure causes expansion of collateral channels between the high-pressure portal and low-pressure venous system. This event may occur between the portal venous system of the bowel and the subcutaneous systemic circulation at the stoma site (3). Bleeding may be seen due to erosions on varices or local trauma (8,9). Local measures are effective in initial hemostasis, but the patient may be frequently admitted to emergency for rebleeding.

Injection sclerotherapy was used for control of bleeding from parastomal varices; however, it has some complications, like mucosal ulceration and peristomal skin necrosis (2,10). Stoma relocation is another method for preventing recurrent bleeding. However, general anesthesia and laparotomy worsen the prognosis. Additionally, these operations may cause prolonged hospitalization. Success with percutaneous cyanoacrylate glue injection treatment for parastomal varices bleeding was reported (11). Cyanoacrylate was applied topically in our case since some complications due to

cyanoacrylate injection, such as pulmonary emboli splenic infarct and central nervous system disorders, have been reported (12). We preferred injection of polidocanol as a sclerosant, which is used to treat varicose veins, to support the effects of the topical cyanoacrylate (13). No complication was seen in our patient.

Surgery for portal decompression may be one of the methods used to prevent the recurrent bleeding. However, shunt operations have high morbidity and mortality. Local treatment methods may be preferred for the treatment of the initial bleeding episodes. However, over time, projectile bleedings from varices may be seen, as in our case. Transjugular intrahepatic portosystemic shunt (TIPS) and embolization for the management of variceal bleeding are the other treatment alternatives (7). Mesenteric venous embolization has been reported for the treatment of stomal varices, but the portal vein thrombosis may be fatal if this complication occurs in patients (14). All of those methods are more invasive and more complex compared with other local treatment methods. In some reports, the efficacy of beta-blocking agents for prevention of rebleeding was discussed and reported to be successful for a period of time (15).

In conclusion, the optimal treatment for bleeding of parastomal varices remains controversial, but combined polidocanol and cyanoacrylate treatment could be an alternative local therapy option. However, further studies with more cases and longer duration of observation will help to evaluate the results of polidocanol injection and topical cyanoacrylate application.

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