An unusual case of ectopic variceal bleeding treated with percutaneous intervention

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To the Editor,

Variceal bleeding is one of the important complications of portal hypertension. Ectopic variceal bleeding is a rare condition and is approximately only % 1-5 of all variceal bleedings (1). Ectopic varices can bleed severely and bleeding origin could not be detected with endoscopic examinations. Ectopic varices have been reported to develop in various organs such as duodenum, colon, gallbladder, uterus, vagina, urinary bladder, and peritoneum or at the sites of previous bowel surgery including stomas and trans-anastomotic porto-portal varices (2). However ileal varices between superficial varices on abdominal wall and mesenterica superior branch have not been known after cesarean operation. In our case ectopic varices were seen at cesarean section region which superficial venous collateral link to ileal varices due to portal hypertension. Our case also was successfully treated with percutaneous coil embolization and glue injection using venous approach.

A 46-year-old woman with cirrhosis due to autoimmune hepatitis admitted to gastroenterology department with complaints of severe hematochezia and melena. In the physical examination, severe hypotension, tachycardia, cesarean section scar and superficial collateral veins on the supra-pubic area were detected. Laboratory studies on admission revealed the following ; serum hemoglobin concentration, 6.1 g/dl ; platelet, 102.000 / ; L. Her liver function was graded, as child- pugh C.

Despite blood transfusions, patient's symptoms did not improve and she underwent emergent upper and lower endoscopy and abdominal computed tomography (CT). Endoscopic examination failed to detect any active bleeding. CT also failed to identify the source of bleeding, but showed liver cirrhosis, splenomegaly with mild ascites, collateral veins from superior mesenteric vein to anterior abdominal wall veins and edematous changes at the bowel (Fig. 1a). Based on these findings, mesenteric variceal bleeding was suspected and we planned Retrograde Trans-venous Obliteration (RTO) by delivery pushable coil (Tornado[®] Embolization Micro-coils[™] Platinum, COOK Medical Inc. USA) and mixtures of N-Butyl Cyanoacylate (NBCA) with Lipiodol to embolize the mesenteric varices after obtaining informed consent



Fig. 1a, b. — (a) Computed tomography demonstrated that common portosystemic colleterals on suprapubic area and submucosal ileal venous loops, widespread acide between. (b) Venography imaging showed that hepatofugal flow, dilatation of ileal branch of superior mesenteric vein and subcutaneous collateral venous on the anterior abdominal wall.

from the patient. A small incision was performed to a subcutaneous abdominal vein under local anesthesia and a micro-puncture set was inserted under ultrasonography guidance. Under the floroscopic monitoring, contrast medium was manually injected through the micro-catheter and collateral veins from the superior mesenteric vein to superficial abdominal veins in the region of cesarean section (Fig. 1b) were observed. Coil embolization was performed at the ileal branch of superior mesenteric vein and then NBCA was injected slowly via the outer catheter (Fig. 2). There were no tarry tools after this intervention. During the follow-up, no bleeding or progression of the varices was observed and the patient was discharged free of symptoms.

Bleeding mesenteric varices is a rare but a potentially life-threatening condition, which is difficult to diagnose (3,4). RTO of mesenteric varices with coil embolization and injection of NBCA was successfully performed to control bleeding mesenteric varices in the present case. However these findings must be confirmed by further large randomized studies to define safety and efficacy of the described technique more clearly.

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Percutaneous intervention



Fig. 2. — Pushable coiller and NBCA were applied in the ileal branch of superior mesenteric vein.

References

- FREED J.S., SCHUCHMACHER P.H., BLUESTONE L., FANO A. Massive colonic variceal bleeding secondary to abnormal splenocolic collaterals : report of a case. *Dis. Colon Rectum*, 1978, 21 : 126-127.
- HELMY A., AL KAHTANI K., AL FADDA M. Updates the pathogenesis, diagnosis and management of ectopic varices. *Hepatol. Int.*, 2008, 2: 322-334.
- HASHIMOTO Y., AMANO H., FUKUMOTO A. et al. Percutaneous transhepatic sclerotherapy for recurrent bleeding ileal varices diagnosed by capsule endoscopy and computed tomography during percutaneous transhepatic venography. *Hepatology Research*, 2013, 43: 436-40.
- LEBREC D., BENHAMOU J. Ectopic varices in portal hypertension. *Clin. Gastroenterol.*, 1985, 14: 105-21.