Diseases of the Colon & Rectum

Case Reports

# Massive Lower Gastrointestinal Bleeding From Idiopathic Ileocolonic Varix: Report of a Case

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**Idiopathic varices of the entire colon are very rare. We report on a 64-year-old patient with massive lower gastrointestinal hemorrhage from an extensive ileocolonic varix. Diagnosis was established by colonoscopy. The patient underwent an emergency ileocolectomy with satisfactory results. This rare case shows the importance of colonoscopy in the evaluation of patients with lower gastrointestinal hemorrhage and reminds us that sometimes the diagnosis is not what we expect. Recognition of this abnormality is important because varices may be the cause of massive lower gastrointestinal hemorrhage. [Key words: Idiopathic colonic varices; Gastrointestinal bleeding; Familial colonic varices]**

Lower gastrointestinal bleeding (LGIB) is a frequently encountered and potentially serious clinical challenge.[1] Endoscopy, radionuclide imaging, and radiology (angiography) are used as primary diagnostic tools. In recent years, a multitude of therapeutic, especially endoscopic, procedures to manage gastrointestinal hemorrhage have been described.[2] The main causes of LGIB are diverticula, vascular ectasia, colitis, neoplasia, and proctal lesions.[3]

Varices of the colon are a rare cause of LGIB, usually associated with liver cirrhosis or portal venous obstruction.[4,5] However, in a small group of patients they are idiopathic and it seems they result from congenital vascular abnormalities.[6,7]

We report on a patient who presented with massive bleeding from an idiopathic colonic varix.

## CASE REPORT

A 64-year-old male with intermittent episodes of rectal bleeding in the preceding five months was admitted at the emergency room with massive hematochezia. On examination the pulse rate was 120 beats per minute and blood pressure was 130/80 mmHg. Examination of the abdomen was normal. There was bright red blood on rectal examination. Hemoglobin was 6.1 g/dl and mean corpuscular count was 18 percent. Hepatic liver tests and coagulation were normal. Upper nasogastric aspirate had bile with no signs of blood.

After resuscitation we performed an urgent unprepared colonoscopy, which revealed one large colonic varix extending from the rectosigmoid transition to the cecum. During the procedure the patient developed active bleeding from several points in the varix, accompanied by severe hypotension and tachycardia (Fig. 1). The patient underwent an emergency laparotomy and simultaneous abdominal ultrasonography to exclude liver disease and portal hypertension.

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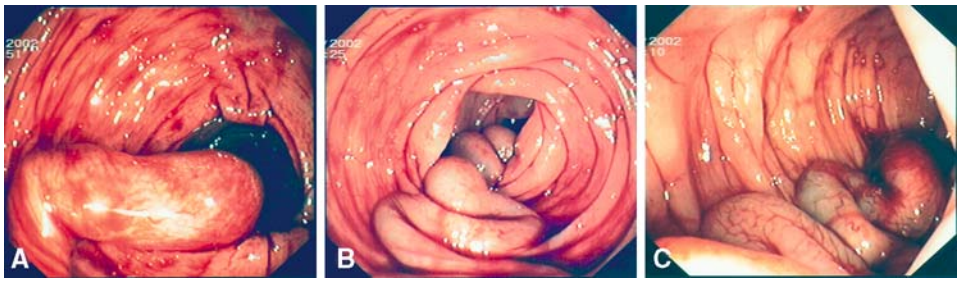


**Figure 1.** A. Colonic varix in the rectum-sigmoid transition. B. Colonic varix in the descending colon. C. Colonic varix in the ascending colon.

**Figure 2.** Large vessel in the wall of the colon.

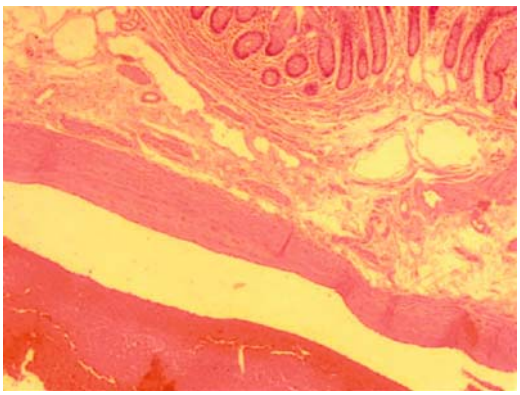

**Figure 3.** Large vessel in the submucosa (hematoxylin and eosin; ×40).

Ileocolectomy with ileorectal anastomosis was the treatment of choice. During surgery, a dilated and tortuous varix was observed from the rectosigmoid transition until the distal ileum, approximately 50 cm from the ileocecal valve. No other splanchnic vascular abnormality was observed.

Histopathology revealed an ileocolonic varix with partial thrombosis (Figs. 2 and 3). The patient was discharged on Day 8 and no subsequent hemorrhagic episodes occurred.

## DISCUSSION

Lower gastrointestinal bleeding is a frequent cause of hospital admissions.[1] Severity and acuity ranges from mild occult bleeding to severe overt hemorrhage with shock indicating the decision for immediate surgery or interventional procedures.[8] LGIB seems to be self-limiting in 80 percent of cases. The two major causes of significant LGIB are colonic diverticula and vascular ectasia. Varices of the colon are usually a consequence of portal hypertension or portal venous obstruction.[4,5,7] Idiopathic varices of the colon are very rare as only 31 cases having been reported in the literature.[4–7,9–25] Before concluding that they are true idiopathic colonic varices, we must exclude significant liver disease and portal venous obstruction.[7] In 19 of the reported cases, there is a familial aggregation of uncertain significance. Our patient was a lone case.

It seems that idiopathic colonic varices represent a significant inborn vascular anomaly.[7,9] These malformations are classified as vascular ectasia in the subgroup of cavernous hemangiomas.[23]

Colonic varices usually present with recurrent or massive rectal bleeding as in our case. At the time of diagnosis, the age range is between 18 and 75 years.

The presence of a varix throughout the entire colon and part of the ileum without detectable cause was reported in only nine patients.[10–12] Liver disease and portal venous obstruction were excluded on the basis of a clinical evaluation, normal liver tests (clotting times, serum albumin, and hepatic enzymes), normal upper abdominal ultrasonography that showed a normal portal vein flux, and surgical findings that did not reveal any vascular abnormalities other than the ileocolic varix.

Selection of diagnostic and therapeutic maneuvers often depends more on local expertise and availability than on an algorithm approach.[26] Originally, ileocolonoscopy was considered to be of no value in acute LGIB based on poor visibility, potential for complications, and theoretic concerns about the adverse effects of purging the colon in the setting of active gastrointestinal bleeding. A recent meta-analysis on the role of ileocolonoscopy as the primary

diagnostic method in acute LGIB quotes 69 percent (48–90 percent).[25] Endoscopically, colonic varices appear as bluish serpiginous vessels.[13] Another possibility is to perform a splanchnic angiography. Abdominal angiography is able to detect small and large bowel bleeds as low as 0.5 to 1 ml/minute. Data on diagnostic yield of mesenteric angiography are contradictory and based on uncontrolled studies.[26] Severe complications have been reported in up to 9.3 percent of examinations.[27] In the acute LGIB, the implementation of urgent colonoscopy may be decreasing the use of angiography as the primary diagnostic examination.

Treatment of LGIB from colonic varices depends on the magnitude of the hemorrhage. In cases of massive bleeding or when it is associated with persistent anemia, surgery is the first option.

Prognosis for patients with idiopathic colonic varices is good, in contrast to colonic varices secondary to portal hypertension and cirrhosis.

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