



Diffuse idiopathic varices in the colon characterized by lower gastrointestinal bleeding

Seçkin Akkücüük, Akın Aydoğan, İlhan Paltacı, Muhiyittin Temiz

ABSTRACT

Colon varices are very rare lesions that usually present as secondary to portal hypertension. Idiopathic colon varices are even rarer, and should be considered especially in the etiology of massive lower gastrointestinal bleeding. Forty-five year old male presented to our hospital with complaints of recurrent rectal bleeding for one week and severe anemia. The patient was transfused with 4 units of blood. His colonoscopy revealed diffuse submucosal varices. The tests performed for investigation of etiology did not reveal any portal pathology. The patient did not experience another episode of active bleeding during follow-up and was discharged with conservative recommendations. Idiopathic colon varices are rare but should be considered in the differential diagnosis of patients presenting with massive rectal bleeding. Conservative approach is first line of treatment, reserving segmental or total colectomy only for ongoing hemorrhage.

Key Words: Rectal bleeding, colon varices, idiopathic

INTRODUCTION

Colonic varices (CV) and lower gastrointestinal bleeding related to these lesions are relatively rare, and are usually secondary to portal hypertension. The etiologies of CV due to portal hypertension include cirrhosis, biliary atresia, biliary sclerosis, congestive heart failure, and splenic vein thrombosis. In very rare cases, the etiology of CV could not be determined. This group named idiopathic colonic varices (ICV) has been described in the literature, albeit less frequently. Idiopathic colonic varices may be characterized by recurrent and sometimes significant bleeding (1-3). In this report, we present, along with a discussion of the relevant literature, a patient who had a history of recurrent massive bleeding and was diagnosed with diffuse varicose veins of the colon.

CASE PRESENTATION

A 44-year-old male patient was admitted for evaluation of intermittent rectal bleeding. The bleeding usually began during bowel movements and was painless. He had previously been diagnosed with and treated for hemorrhoidal disease with similar complaints, in another center. When admitted to our clinic, he stated that the rectal bleeding was going on for the last 3 days, with no bleeding in the last 24 hours. The patient was constipated for many years. He has been using alcohol several times a week for about 20 years, and smoked 5 cigarettes per day. The abdominal examination was unremarkable. On rectal examination, hematochezia mixed with stool was detected. The complete blood test revealed hemoglobin level 5.17 g/dL, hematocrit 15.4%, and platelet count 194 000/ μ L. There were no biochemical abnormalities. Fluid resuscitation and blood transfusion were started. After four units of blood transfusion, the patient underwent colonoscopy, and large submucosal varicose veins were observed throughout the whole colon (Figure 1). An upper gastrointestinal endoscopy was performed for the presence of gastric and esophageal varices to rule out portal hypertension, and no pathologies were detected. He was negative for hepatitis serological tests and the liver enzymes were within normal limits. Color Doppler ultrasonography of the portal system was normal. Computer tomography of the abdomen did not show any mass lesions that compressed the vascular structures and all the major vessels appeared normal. No pathologies were detected in any of the cardiac examinations and investigations. In light of these findings, the patient was considered to have idiopathic varices. The patients did not have any recurrent rectal bleeding and remained hemodynamically stable for the following 7 days, thus conservative treatment was preferred rather than surgery. He was started on oral iron preparations and oral laxatives, and was discharged. The patient did not experience any bleeding during the past 6 months.

Department of General Surgery,
Mustafa Kemal University
Faculty of Medicine,
Hatay, Turkey

Address for Correspondence Seçkin Akkücüük

Department of General Surgery,
Mustafa Kemal University
Faculty of Medicine,
Hatay, Turkey
Phone: +90 326 227 61 61
e-mail:
seckinakkucuk@gmail.com

Received: 06.09.2012
Accepted: 12.09.2012

©Copyright 2014
by Turkish Surgical Association
Available online at
www.ulusalcerahidergisi.org



Figure 1. Diffuse submucosal varices throughout the entire colon on colonoscopy

DISCUSSION

Rectal bleeding constitutes an important group of patients admitted to general surgery and gastroenterology clinics. Although it varies by age group, the most common causes of rectal bleeding are diverticulosis, vascular ectasia, colitis, cecal ulcers, neoplasia, hemorrhoids and anal fissures (3). Bleeding due to colonic varices are rare, and are usually associated with portal hypertension (75%) (1-3). The other causes of varicose veins in the colon include splenic vein thrombosis, congestive heart failure, mesenteric vein thrombosis, external compression, and tumor invasion (4, 5). Idiopathic colonic varices are even rarer. Recurrent rectal bleeding may sometimes be life threatening (1, 6).

The mechanism of colonic variceal bleeding is usually thought to be the trauma during the passage of hard stool. In addition, varices themselves can stretch the mucosa and reduce the circulation, thus weakening the vessel wall and causing bleeding (1, 6).

The diagnosis of idiopathic colonic varices is established by detection of varices on colonoscopy, and by proof of the absence of factors that can lead to varicose veins. However, the hypotensive status of the patient during colonoscopy might lead to a reduction in vessel volume, and the varices might be overlooked (3, 7). In our study, we applied the necessary evaluations to rule out pathologies that could predispose to varicose veins, such as portal hypertension, intra-abdominal mass, and thrombosis of major vascular structures. When varices are detected during colonoscopy, accidental biopsy or carelessly implementation of endoscopy procedures can lead to severe bleeding (5).

Idiopathic colonic varices are more common in males and in the 4th decade. Idiopathic colonic varices are often detected throughout the whole colon, and they can be distinguished from varicose veins occurring due to other causes by this feature. Non-idiopathic colonic varices generally show a segmental distribution (1).

There is no standard choice for the treatment of idiopathic colonic varices, still conservative approach is more appropriate. Segmental or total colon resection may be necessary in cases of uncontrolled massive bleeding. As part of conservative treatment, if the patient presents with anemia without requirement for transfusion or if anemia persists despite transfusion, iron supplements may be recommended. In patients with a history of constipation, the intestinal contents should be kept soft with recommendations of a dietician and oral laxatives (1, 3, 6). Our patient was started on oral iron preparations and lactulose treatment due to a hemoglobin level of 9.5 g/dL after 4 units of red blood cell transfusion and constipation.

No etiologic causes for the colonic varices were detected despite all evaluations, and the patient was managed conservatively with a diagnosis of ICV. He did not experience any episodes of bleeding during the last 6 months, and he is still under follow-up.

CONCLUSION

Idiopathic colonic varices are rare, but are important since they can be fatal due to severe bleeding. It should be considered in the differential diagnosis of patients who present with rectal bleeding and the etiology cannot be determined. It should also be noted that emergent segmental or total colectomy may be required.

Informed Consent: Written informed consent was obtained from patient who participated in this case.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept - S.A.; Design - S.A., A.A.; Data Collection and / or Processing - İ.P., M.T., S.A.; Analysis and / or interpretation - S.A., A.A., İ.P., M.T.; Literature Review - S.A., A.A.; / Writer - S.A., A.A.; Critical Review - M.T.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study has received no financial support.

REFERENCES

1. İbiş M, Arhan M, Kekilli M, Taş, A, Sezgin S, Özin Y. An unusual cause of lower gastrointestinal bleeding; a case of idiopathic colonic varices. *Akademik Gastroenteroloji Dergisi* 2009; 8: 49-51.
2. Abraham-Igwe C, Patel R. Idiopathic colonic varices: A case report. *Endoscopy* 2002; 34: 680. [\[CrossRef\]](#)
3. Krishna RP, Singh RK, Ghoshal UC. Recurrent lower gastrointestinal bleeding from idiopathic ileocolonic varices: a case report. *J Med Case Rep* 2010; 4: 257. [\[CrossRef\]](#)
4. Francois F, Tadros C, Diehl D. Pan-colonic varices and idiopathic portal hypertension. *J Gastrointest Liver Dis* 2007; 16: 325-328.
5. Han JH, Jeon WJ, Chae HB, Park SM, Youn SJ, Kim SH, et al. A case of idiopathic colonic varices: a rare cause of hematochezia misconceived as tumor. *World J Gastroenterol* 2006; 12: 2629-2632.

6. Keren D, Rainis T, Stermer E, Goldstein O, Lavy A. Extensive idiopathic colonic varices in a young patient. *Dig Dis Sci* 2005; 50: 1175-1176. [\[CrossRef\]](#)
7. Iredale JP, Ridings P, McGinn FP, Arthur MJ. Familial and idiopathic colonic varices: an unusual cause of lower gastrointestinal haemorrhage. *Gut* 1992; 33: 1285-1288. [\[CrossRef\]](#)