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Cecal Varices Presenting as Anemia: Case Report and Review of the Literature

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Key Words

Varices · Portal hypertension · Cecum · Colon · Liver

Abstract

Since the original description of colonic varices in 1954 [N Engl J Med 1954;250:434–438], fewer than 100 cases have been reported in the literature. Particularly, even fewer cases of cecal varices have been reported. More than 75% of these cases have been due to portal hypertension. Our objective is to contribute a rare case with an uncommon presentation to the medical literature. We present the case of a 53-year-old male with hepatitis C and hepatitis B liver cirrhosis who presented for outpatient colonoscopy. The indication for colonoscopy was bright red blood per rectum and iron deficiency anemia. A significant amount of varices were noted in the cecum and proximal ascending colon. No endoscopic evidence of colonic bleeding was noted. This is the first reported case of cecal varices not presenting with massive lower gastrointestinal bleeding.

Case Report

A 53-year-old Caucasian male was evaluated for bright red blood per rectum with colonoscopy. The patient's past medical history was significant for end-stage liver disease due to hepatitis C and hepatitis B, asthma, and erythropoietic porphyria. The patient had prior episodes of hematemesis which required multiple sessions of esophageal variceal rubber band ligation treatment. He also had a remote history of rectal bleeding. At the time of evaluation the patient complained of bright red blood per rectum for a four month period without clinical evidence of active or massive bleeding. Family history was notable for colon cancer in the patient's father at age 60. His medications included propranolol, lasix, aldactone, lactulose, thiamine, and folate. Pertinent review of symptoms was negative for fevers, chills, weight loss, diarrhea, constipation, melena, weakness, or loss of consciousness.

Physical examination revealed a well-developed, well-nourished male in no acute distress appearing his stated age. Vitals signs were as follows: blood pressure 108/58 mm Hg, heart rate 66/min, respiratory rate 18/min, and temperature 36.9°C. Head and oropharyngeal examinations were unremarkable. There was no scleral icterus. No cervical or supraclavicular lymphadenopathy was palpated. The lungs were clear to auscultation bilaterally. Heart and neurologic examination were unremarkable. Abdominal

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examination revealed hepatomegaly to two inches below the costal margin and splenomegaly. In addition, abdominal examination revealed a 2 × 2 cm umbilical hernia and a right-sided inguinal hernia. Skin examination revealed multiple spider angiomas on the chest. Extremity examination revealed trace pitting edema and 2+ dorsalis pedis pulses. Rectal examination was notable for external hemorrhoids.

Recent complete blood count prior to colonoscopy revealed a hemoglobin of 11.5 g/dl, hematocrit of 34.6%, and a platelet count of 36,000 with a MCV of 81.3. The patient's INR was 1.4 and albumin 3.8. The patient had positive serologies proving both infection with hepatitis B and C. The patient's hepatitis C viral load was undetectable. Recent abdominal ultrasound was notable for hepatomegaly, nodular and heterogeneous in consistency, massive splenomegaly, and ascites. Colonoscopy was significant for internal hemorrhoids as well as cecal and proximal ascending colon varices without any endoscopic evidence of bleeding ([fig. 1](#)).

Discussion

Reported cases of varices have been found in the stomach, small bowel, biliary tree, colon, rectum, and even the site of a surgical ostomy [1–4]. The stomach and the rectum are the most common sites of extraesophageal varices and up to 30% of variceal bleeding may originate from an extraesophageal location [2]. A history of abdominal surgery may predispose a patient to develop varices of the lower gastrointestinal tract [5, 6]. The most common cause of colonic varices is portal hypertension. Other causes include biliary atresia, biliary sclerosis, congestive heart failure, superior mesenteric vein thrombosis, and inferior mesenteric vein thrombosis. A smaller number are of idiopathic origin [7]. Due to the patient's history of esophageal varices as a result of portal hypertensive gastropathy, we also believe the cecal varices were the result of portal hypertension.

This case of cecal and ascending colon varices is presented because of the uniqueness of this anomaly within the colon and most notably the cecum. In the literature, a total of seventeen cases (including this one) of cecal varices have been reported [2, 5, 6, 8–20]. The cases of cecal varices that have been reported have all presented clinically with massive lower gastrointestinal bleeding necessitating urgent management with blood products and surgical or endoscopic intervention. To our knowledge this is the first case of cecal varices reported that has not resulted in massive lower gastrointestinal bleeding. This patient only presented with bright red blood with bowel movements and anemia. He did not demonstrate any episodes of massive gastrointestinal bleeding requiring immediate intervention as in the previous cases reported. Given the colonoscopic finding, we believe that the internal hemorrhoids and not the cecal varices may have contributed to his clinical presentation. By reporting our experience we emphasize that cecal varices are very rare and may also be present in stable patients without massive lower gastrointestinal bleeding.

Because of the paucity of data, the proper management of patients with colonic varices is unknown [7]. Treatment of cecal varices has included colectomy as well as transjugular portal-systemic shunt in cases of varices attributed to portal hypertension. There are no established guidelines for the treatment of extraesophageal varices due to the scarcity of cases reported. Our patient has been treated with a non-selective beta-blocker. He is clinically stable and has no clinical evidence indicating a history of active bleeding from those varices. However, further study is needed to determine whether sclerotherapy, band ligation, or even surgical treatment is effective for bleeding associated with cecal varices. Careful patient follow-up should also be instituted for those who are incidentally noted to have cecal varices but have not bled.

Disclosure Statement

There are no conflicts of interest.



Fig. 1. Varices noted in the cecum.

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