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Title

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Journal

Proceedings of UCLA Health, 25(1)

Authors

Ovsiowitz, Mark

Sassi, Kareem

Publication Date

2021-03-04

CLINICAL VIGNETTE

An Unusual Cause of Lower Gastrointestinal Bleeding

Mark Ovsowitz, MD and Kareem Sassi, MD

Case Presentation

A 29-year-old female presented to the Emergency Department with bright red blood per rectum. The bleeding started three days prior and was initially described as smaller amounts of blood. This progressively increased to five to six loose bowel movements with blood and clots. The evening prior to presentation. She fainted while sitting on the toilet. She denied abdominal pain, nausea, vomiting, change in appetite or weight loss. She had no significant past medical, surgical or family history. Her vital signs at presentation included blood pressure of 98/45 with pulse of 62. Her abdomen was soft and non-distended, with normal bowel sounds. Digital rectal exam revealed stool mixed with red blood. Her initial hemoglobin was 9.3 and INR was 1.1. The remainder of the laboratory evaluation was unremarkable. She was admitted for upper endoscopy and colonoscopy. Upper endoscopy revealed a small hiatal hernia, and was otherwise unremarkable. Colonoscopy revealed a large cluster of prominent engorged blood vessels in the transverse colon, with one focal area of spontaneous oozing of fresh blood. The area was irrigated with water, and the bleeding stopped after two to three minutes, without further intervention. The patient underwent MR angiogram of the abdomen and pelvis, which did not show any significant abnormalities. The patient improved clinically, hemoglobin remained stable, there was no further bleeding, and she was discharged home.

One week later, the patient was seen for follow up in the office. She was feeling well and denied any recurrent bleeding. Based on the concern that the colonoscopy findings were consistent with colonic varices, she underwent abdominal ultrasound with Dopplers, which was normal. One month later, she was readmitted to the hospital with recurrent hematochezia. Hemoglobin was 12.0 at the time of admission, and she was hemodynamically stable. CT angiogram of the abdomen and pelvis showed dilated transverse colon vessels, most conspicuous on the venous phase, likely correlating with the varices seen on colonoscopy. The patient then underwent transjugular liver biopsy with hepatic venous pressure gradient measurements, to evaluate for portal hypertension. The biopsy results and hepatic venous pressure gradient were normal. Based on these findings, the diagnosis of idiopathic isolated colonic varices was made, and the recommendation was to proceed with embolization by Interventional Radiology as an outpatient. The patient is still considering whether or not to proceed with this recommendation. She has been feeling well

for the past few weeks and has not had any further episodes of bleeding.

Discussion

Although there are numerous causes of lower gastrointestinal bleeding, colonic varices is considered to be a very uncommon etiology. These dilated vessels are located in the submucosa and are often associated with portal hypertension. However in this case, there was no portal hypertension. Idiopathic isolated colonic varices, not related to portal hypertension, are extremely rare. The incidence of colonic varices in patients with portal hypertension is only 3.4%.¹ The overall incidence of colonic varices regardless of etiology is 0.07%.² The most typical presentation of colonic varices is hematochezia, which can frequently be a large volume of blood loss. Due to the potential for significant blood loss, it is important to correctly identify this condition. In other scenarios bleeding may be intermittent and recurrent.³ The mechanism of bleeding may be related to passage of hard stool or possible stretch of the mucosa caused by the varices themselves.⁴ Diagnosis is most often made at the time of colonoscopy. However, MR angiography and CT angiography may also assist with the diagnosis.⁵

Treatment options are varied, based upon the volume of blood loss, hemodynamic stability, and recurrent symptoms. One of the more conservative approaches, is treatment with osmotic laxatives in an effort to avoid hard stools and mechanical trauma to the varices. However, this is only a potential temporizing measure and is not considered long term definitive therapy. Sclerotherapy, percutaneous transhepatic obliteration (PTO), variceal embolization, transjugular intrahepatic portosystemic shunt (TIPS), balloon-occluded retrograde transvenous obliteration (BRTO), and colonic resection have all been reported as potential treatments for colonic varices.⁶⁻⁸ This case was due to idiopathic isolated varices, with recommended local embolization by Interventional Radiology.

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