



# Diffuse Idiopathic Colonic Varices: Demonstration Using Multiplanar Reconstructions from Triphasic Computed Tomography

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A 37-year-old male presented to the emergency department following an episode of melena. He had no abdominal pain or any significant weight or appetite loss. No changes were observed in his bowel habits. He was healthy and did not take any regular medication. His family history and general physical examination findings were unremarkable. Laboratory examinations showed anemia with a hemoglobin level of 8.5 (normal range, 12-15) g/dl, hematocrit of 29.8% (normal range, 37-48%), and red blood cell count of 3.35 (normal range, 4.5-6.3) ml. All parameters analyzed in other laboratory tests, including the coagulation profile, liver function tests, and hepatitis serology, were within normal ranges. An appropriate fluid infusion and one unit of packed red blood cells were administered. Esophagogastroduodenoscopy and colonoscopy were performed on the next day. Colonoscopy revealed dilated submucosal varicose veins throughout the colon and fresh blood in the cecum (Figure 1a and b). The terminal ileum was normal. Esophagogastroduodenoscopy did not reveal any pathology.

A triphasic computed tomography (CT) scan with multiplanar reconstructions was performed and revealed diffuse colonic varices that were most prominent in the ascending colon and cecum (Figure 1c-e). No evidence of portal hypertension, hepatic fibrosis, cirrhosis, or vascular thrombosis was noted. The patient had no recurrent rectal bleeding and remained hemodynamically stable over the following 4 days. He was discharged with conservative treatment.

Colonic varices are extremely uncommon and typically associated with portal hypertension due to liver cirrhosis, portal vein thrombosis, or hepatic vein thrombosis. Myeloproliferative disorders, protein C or S deficiency, antithrombin III deficiency, and factor V Leiden are other common causes.<sup>1</sup> The presence of diffuse colonic varices without any known etiology is called idiopathic colonic varices. It is a sporadic disease, and approximately 50 cases have been reported till date.<sup>2</sup> They usually present with lower gastrointestinal hemorrhage of varied severity or occult bleeding with chronic anemia.<sup>3,4</sup> The presence of colonic varices and possible etiologies of varices such as portal hypertension can easily be detected or ruled out on triphasic CT scans, specifically using reconstruction techniques. The detection of colonic angiodysplasia on CT angiography is a key differential diagnosis of the disease, particularly in the elderly population. As an arteriovenous malformation, colonic angiodysplasia is characterized by localized punctate regions of vascular enhancement in the colonic wall, an early antimesenteric vein filling, and an enlarged supplying mesenteric artery on CT angiography.<sup>5</sup> It can be conservatively treated in most cases; however, segmental or total colon resection may be necessary in cases with uncontrolled massive bleeding, depending on the patient's condition.<sup>6</sup>



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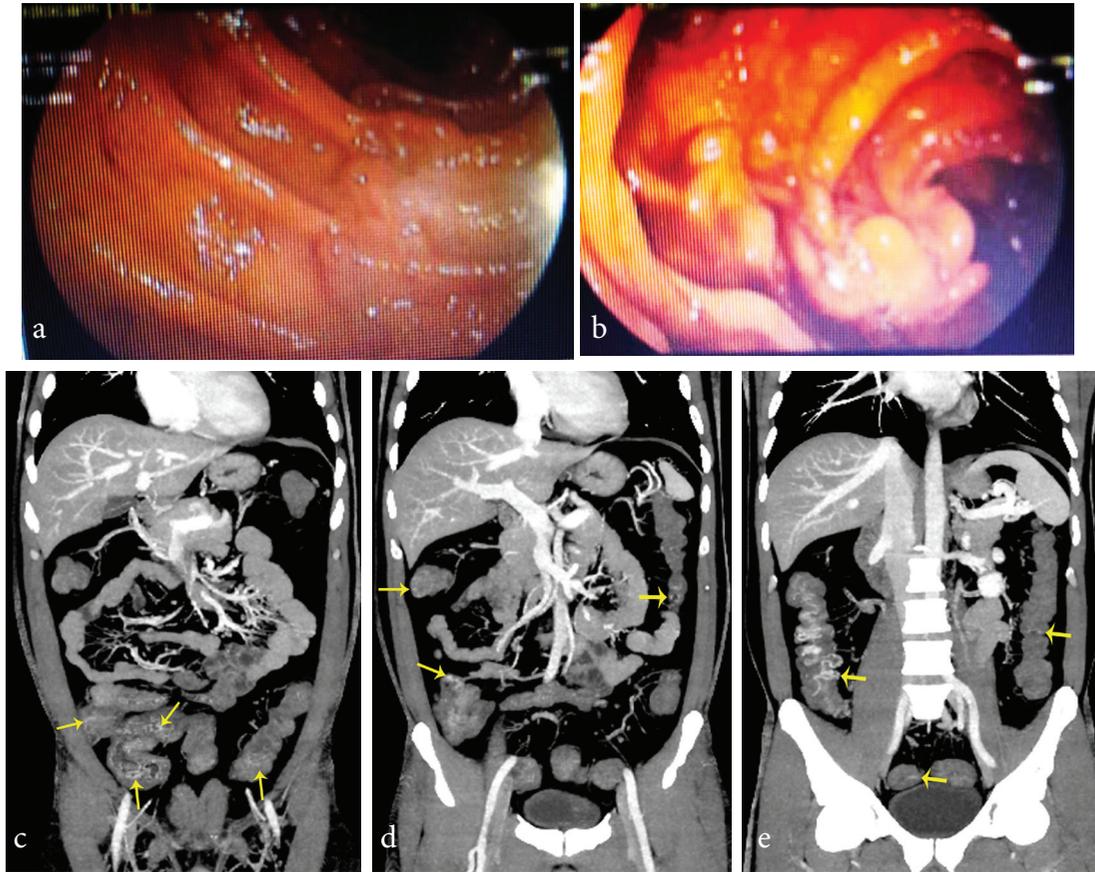


FIG. 1. (a and b) Images demonstrate submucosal varices on colonoscopy. (c-e) Coronal reformatted images from a triphasic CT scan demonstrate dilated submucosal veins in the colonic segments (arrows).

CT, Computed tomography

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