

BRIEF REPORT

Abdominal CT in a pregnant woman: Bane or boon?

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Case

A 25-year-old female at 30 weeks of gestation presented with a history of intermittent hematochezia for 2 months. She also had dyspnea on exertion and palpitations. She had a history of six units of blood transfusion in the last 2 weeks. Physical

examination revealed severe pallor. Her hemoglobin was 7.9 gm/dL. Upper gastrointestinal endoscopy was normal. Colonoscopy with terminal ileoscopy showed normal terminal ileum but altered blood in the ascending and transverse colon. Ultrasound abdomen was unremarkable except for gravid

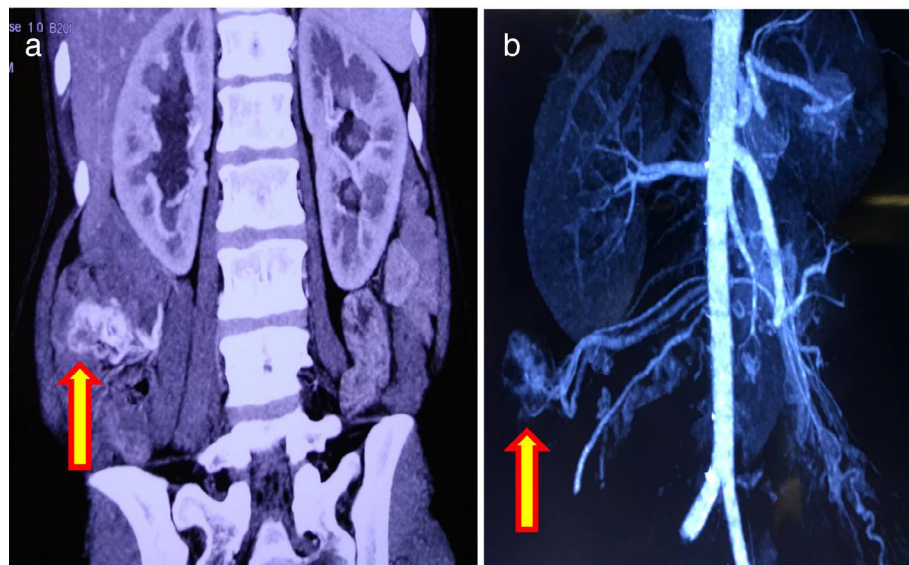


Figure 1 (a) Computed tomography (CT) abdomen and (b) CT angiography showing an area of tortuous vessel with arterial enhancement (arrow) along the mesenteric border of the ascending colon, which showed arterial supply from ileocolic branch of superior mesenteric artery and early draining vein into superior mesenteric vein, suggestive of colonic angiodysplasia or arteriovenous malformation.

uterus. The patient continued to have hematochezia with further requirements of 2 units of blood transfusion while in hospital, and thus, a CT scan was advised. The CT scan with angiography revealed a small area of tortuous vessel with arterial enhancement along the mesenteric border of the ascending colon, which showed progressive enhancement with arterial supply from ileocolic branch of the superior mesenteric artery and the early draining vein into superior mesenteric vein (Fig. 1a,b). These findings were suggestive of colonic angiodysplasia or arteriovenous malformation. She underwent right hemicolectomy, after which her bleeding stopped. Gross examination of the resected specimen showed a 2 × 1.5-cm area of mucosal discoloration with prominent tortuous blood vessels (Fig. S1a, Supporting information). Histopathological examination showed multiple dilated and tortuous blood vessels spurting in the mucosa and a few in the submucosa and also showed lamina propria showing mixed inflammatory infiltrate with submucosal edema and hemorrhage (Fig. S1b). These findings were consistent with angiodysplasia. She delivered a healthy baby 6 weeks later.

Although colonic angiodysplasia is a well-recognized cause of hematochezia in the general population with risk factors that include older age, chronic kidney diseases, and cardiovascular diseases,¹ this is the first-ever report of such a lesion in a pregnant woman. Management options include pharmacotherapy,

endoscopic intervention, angioembolization, and surgery.² An abdominal CT scan, although contraindicated in pregnancy, proved to be a boon for this patient, diagnosing the cause of her gastrointestinal bleed and guiding the definitive therapy.

References

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- 2 Sami SS, Al-Araji SA, Ragunath K. Review article: gastrointestinal angiodysplasia - pathogenesis, diagnosis and management. *Aliment. Pharmacol. Ther.* 2014; **39**: 15–34.

Supporting information

Additional supporting information may be found in the online version of this article at the publisher's website:

Figure S1 (A) Resected specimen showing an area of mucosal discoloration with tortuous prominent blood vessels (arrow). (B) Histopathological examination showing multiple dilated and tortuous blood vessels (arrow) spurting in mucosa and lamina propria showing mixed inflammatory infiltrate with submucosal edema and hemorrhage.