

IMAGES IN EMERGENCY MEDICINE

Gastroenterology

Middle-aged man presenting with hematochezia and hematuria

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1 | PATIENT PRESENTATION

A 65-year-old man with a history of hepatocellular carcinoma presented to our emergency department with hematochezia and gross hematuria for 1 day. On arrival, he was tachycardic and normotensive, his temperature was 36.4°C (97.5°F), his pulse rate was 121, and his blood pressure was 106/78 mm Hg. The abdominal examination result was unremarkable. He denied taking any antiplatelet and anticoagulation medication. He had a white blood count of 16,000/mL, Hb of 10.4 g/dL, platelet count of 298,000/ μ L, international normalized ratio of 1.06, and a C-reactive protein level of 5.71 mg/dL. He was appropriately resuscitated. Hematuria was improved after irrigation with a Foley catheter, while a 50-cc blood clot and wall thickening of the right lateral urinary bladder were recorded by a genitourinary specialist. Subsequently, he underwent colonoscopy, and the retention of a very large blood clot in the A-colon was observed, without obvious active bleeding. Through the above evaluation, no definite bleeding lesion was identified, but hematochezia persisted. His Hb dropped from 10.4 to 6.3 g/dL within 24 hours, although tranexamic acid, pantoprazole, and somatostatin were prescribed. A massive transfusion protocol (red blood count, 6 U; fresh frozen plasma, 2 U; and platelet pheresis, 1 U) was initiated, and emergency computed tomography angiography was performed (Figure 1).

2 | DIAGNOSIS

2.1 | Right external iliac artery pseudoaneurysm with arteriocolic fistula

Iliac artery pseudoaneurysm is a rare but lethal cause of gastrointestinal and genitourinary hemorrhage.¹⁻³ These patients often undergo multiple endoscopic workups, but no conclusive findings are reported,

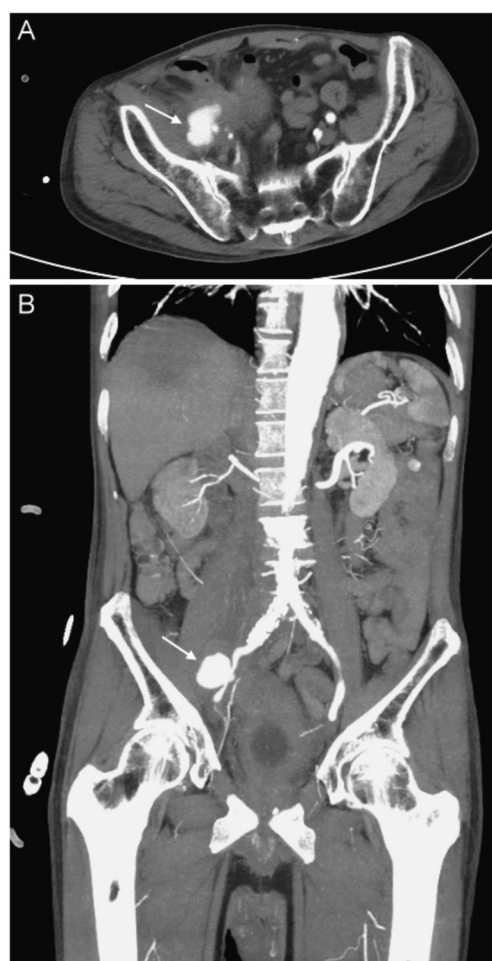


FIGURE 1 CTA (Computed tomography angiography) protocol showing (A) a pseudoaneurysm of $\approx 3.2 \times 2.7$ cm in the right external iliac artery (EIA). (B) Coronal plane of the same patient revealing inflammatory changes of the right psoas muscle, urinary bladder, and nearby terminal ileum (arrows)

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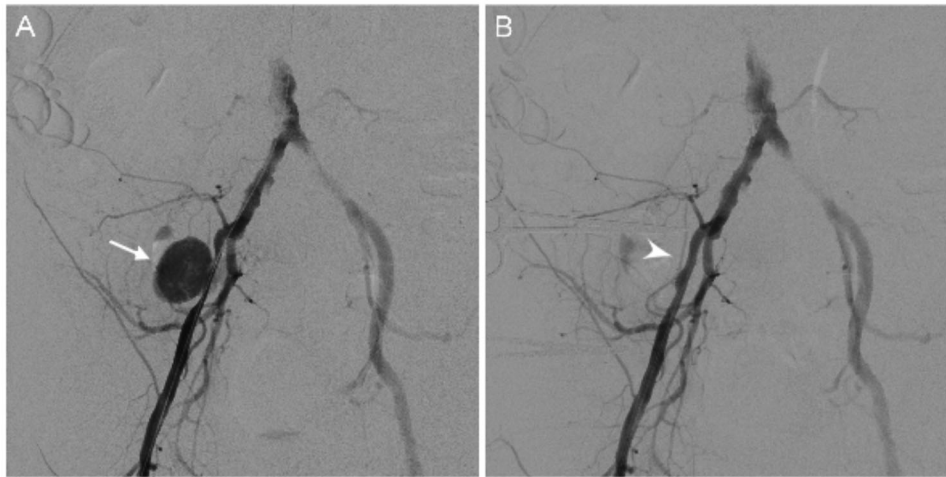


FIGURE 2 Angiography showing (A) a pseudoaneurysm of the right external iliac artery (EIA) (arrow) and (B) the follow-up arteriogram after the deployment of a 7 mm × 50 mm stent graft (arrowhead)

corresponding to a diagnostic challenge and delays of time-sensitive, definite endovascular or operative treatment. Therefore, for patients with gastrointestinal bleeding and risk factors, such as a history of prior vascular intervention, trauma, benign or malignant tumors, inflammation or infection, and atherosclerosis, arterioenteric or arteriocolic fistula must be suspected.⁴ Adequate resuscitation, prompt diagnosis, and immediate proper treatment can be lifesaving.

The patient underwent angiography, and a stent graft was inserted in the right external iliac artery (Figure 2). Hematochezia was successfully stopped, and the patient's hemodynamic status stabilized. He was started on oral diet 3 days later, and no further hematochezia was observed during hospital admission.

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