Massive Lower GI Bleed from Ascending Colon Diverticulum

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Clinical History:

- 77 year old man with an episode of lower gastrointestinal bleeding (LGIB) believed to be due diverticulosis diagnosed 5 years ago, presented to the ED in the evening with two episodes of bright red blood per rectum (BRBPR) over the prior couple of hours. On arrival in the ED he was hypotensive (BP = 92/74) and tachycardic (HR = 88). His hematocrit (Hct) was 36. In the ED he had two further episodes of BRBPR and his Hct dropped to 29. Overnight he had further episodes of BRBPR and required packed red cells. IR was consulted and a CTA was performed for interventional planning purposes.
Axial and coronal images from a CTA of the abdomen and pelvis during the arterial phase of contrast, showing arterial bleeding from a diverticulum in the ascending colon (arrow).
Axial image from a CTA of the abdomen and pelvis 120 seconds after intravenous contrast injection, showing rapid accumulation of extravasated contrast in the lumen of the ascending colon (arrow).
Catheter angiography (SMA injection) and super-selective injection showing active extravasation from the ascending colon. A superselective angioembolization was performed using a single coil.
After angioembolization, the patient settled clinically. A colonoscopy performed two days later reveal diverticula, but no ongoing bleeding.
Teaching Points:

- CT angiography has a high diagnostic accuracy and is an excellent diagnostic tool for detection and localizing of intestinal bleeding sites\(^1\).

- Superselective angioembolization, with reembolization if necessary, is an effective rescue treatment modality for hemodynamically unstable patients with active LGIB\(^2\).

- Diverticulosis is the most common etiology of acute LGIB in the adult population. Angiodysplasia causes 0-3% acute LGIB, compared to diverticulosis which causes up to 45% of cases\(^3\).

- The reported recurrence rate for conservatively managed acute LGIB varies, but ranges from 9-47% based on prior studies\(^4\).
References


2. Mejaddam AY et al, Outcomes following "rescue" superselective angioembolization for gastrointestinal hemorrhage in hemodynamically unstable patients, J Trauma Acute Care Surg. 2013 Sep;75(3):398-403
