Acute Rectosigmoid Bleed Presenting with Hematochezia and Hematuria due to Post Radiation Rectovesical Fistula

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Clinical History:

- 74 year old male with remote history of prostate cancer treated with radiation.
- He was diagnosed with rectal cancer which was initially treated surgically with subsequent recurrence, status post neoadjuvant therapy.
- His treatment was complicated by breakdown of the rectosigmoid anastomosis leading to a colovesical fistula.
- He presented to the emergency department with massive hematuria and hematochezia.
- Given the unknown source of hemorrhage (GI versus Bladder), known post radiation cystitis and proctitis, as well as colovesical fistula, CTA was chosen as the initial diagnostic study.
Arterial phase image demonstrates active contrast extravasation (arrow) along the left lateral rectosigmoid colon. Note the growing appearance of the extravasated contrast on the 90 sec. delay image.
Sagittal arterial and 90 sec. delay post contrast images, show the active contrast extravasation (arrow). Extravasated contrast flows through the colovesical fistula (arrowhead) to the urinary bladder (star).
Selective injection of middle rectal artery shows early blush of contrast (arrow on the left image) and pooling of extravasated contrast (arrow in the middle image). The right image demonstrates no contrast extravasation after placement of vascular coils.
Teaching Points:

✓ In the majority of patients with acute overt lower GI bleeding (LGIB), initial diagnosis and management is done with colonoscopy within 24 hours (after adequate preparation). Endoscopic hemostasis therapy should be offered if indicated (ACG practice guidelines).

✓ Tagged red blood cell scintigraphy, CTA, and angiography, should be considered in high-risk patients with ongoing bleeding who do not respond adequately to resuscitation and who are unlikely to tolerate bowel preparation and colonoscopy (ACG practice guidelines).

✓ CTA is an appropriate first-line study in hemodynamically stable cases, and angiography in hemodynamically unstable patients, with overt LGIB when colonoscopy cannot be performed (ACR Appropriateness Criteria®).
References


2. ACG Clinical Guideline: Management of Patients With Acute Lower Gastrointestinal Bleeding. Am J Gastroenterol advance online publication, 1 March 2016; doi: 10.1038/ajg.2016.41