

Challenge A *Diverticular Bleeding*

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🔍 Introduction

Colonic **diverticular bleeding** is the most common cause of acute LGI bleeding. Colonoscopy is recommended as the initial diagnostic modality. Although, the detection rate of the bleeding is variable as it is a challenging diagnosis

📖 Case Description

A 67 yo Man with a history of hypertension and diabetes mellitus, presented to our emergency department with 4 episodes of painless hematochezia of 1 day duration. The patient was hemodynamically unstable. Initial hemoglobin 12.5 g/dL dropped to 7.9 g/dL. A computed tomography (CT) scan showed intraluminal active arterial extravasation in the proximal transverse colon with scattered colonic **diverticula**. After IV resuscitation and blood transfusions, a selective and subselective angiography of the celiac axis and the superior mesenteric artery showed no evidence of active hemorrhage. Subsequent colonoscopy using a CF-HQ190L with an attached cap was performed, after oral preparation with 4L of polyethylene glycol 3350. Multiple **diverticula** with medium openings were seen in the whole colon. **Diverticula** were washed and examined very carefully. One **diverticulum** in the transverse colon was noted with a visible clot. **The base of the diverticulum was injected with epinephrine 1/10000 which inverted the diverticulum and exposed the culprit vessel. 3 endoclips were applied with successful hemostasis.** The patient was followed and showed no recurrent hemorrhage. A repeat non-contrast CT showed the clips at the site of previous active extravasation

🗣️ Discussion

Colonic **diverticular bleeding** accounts for 20.8 to 41.6% of LGI bleeding. After resuscitation, colonoscopy is recommended as an initial diagnostic modality. Although the detection rate of the bleeding varies from 6% to 42%. Detecting stigmata of recent bleeding is challenging, but improved if performing the colonoscopy urgently, within 24 h, with oral lavage solutions, by expert endoscopists who have performed > 1,000 colonoscopies, and with the use of disposable distal attachments and water-jet systems. Therapeutic endoscopic options include clipping, epinephrine injection, band ligation or conservative management. **Injecting the diverticulum with saline with or without epinephrine will invert the diverticulum and expose the inside including a clot or visible vessel and make hemostasis easier.** This represents a **new technique** in **diverticular bleeding** control

