

Introduction

- Dieulafoy's lesions (DLs) are a rare cause of gastrointestinal (GI) bleeding, accounting for an estimated 2% of all acute GI bleeding cases [1]
- DLs are often found in the stomach and esophagus with rectal DLs being uncommon and only accounting for ~2% of reported DLs [2]

Case Presentation

- A 75 year old male in the ICU developed massive hematochezia
- At time of GI consultation, patient was hypotensive to 81/43 mmHg and the rectal examination demonstrated a significant amount of bright red blood
- Laboratory results showed a hemoglobin drop from 13.8 g/dL to 8.4 g/dL over four days despite four units of packed red blood cells transfused in-between
- Computed tomography angiogram suggested contrast pooling/bleeding, with no definite source identified (Figure 1)



Figure 1. Increased density material within the rectum suggesting of contrast pooling/bleed.

Colonoscopy Results

- On examination of the rectum, a blood clot with a small point of mucosal attachment was noted without any apparent ulcerations or erosions of the surrounding mucosa (Figure 2a, 2b)
- Epinephrine was injected at the periphery of the blood clot, which was subsequently removed with a snare and revealed a raised nipple-like artery suggestive of a rectal DL (Figure 3a)
- A hemostatic clip was placed as a secondary modality for hemostasis (Figure 3b)

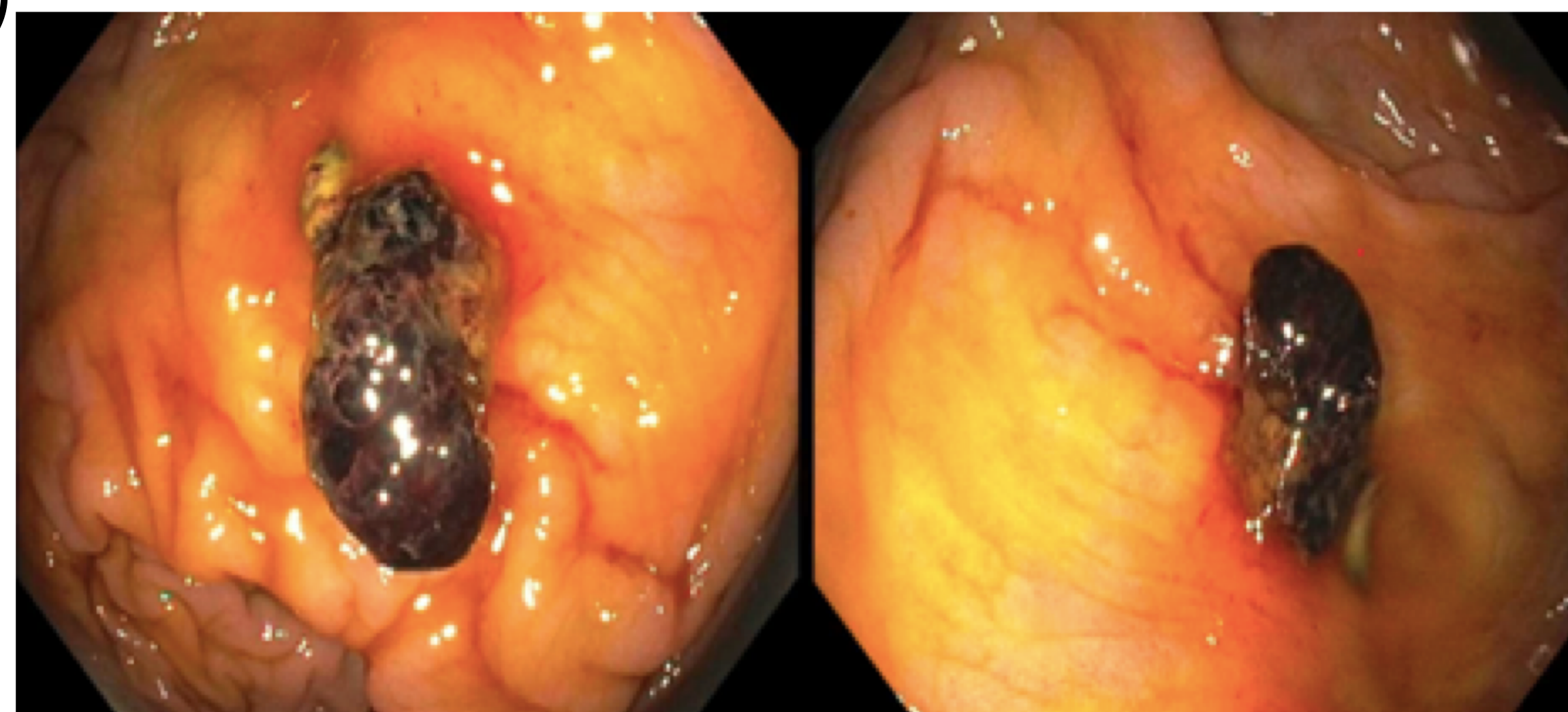


Figure 2. Adherent blood clot with a point of mucosal attachment

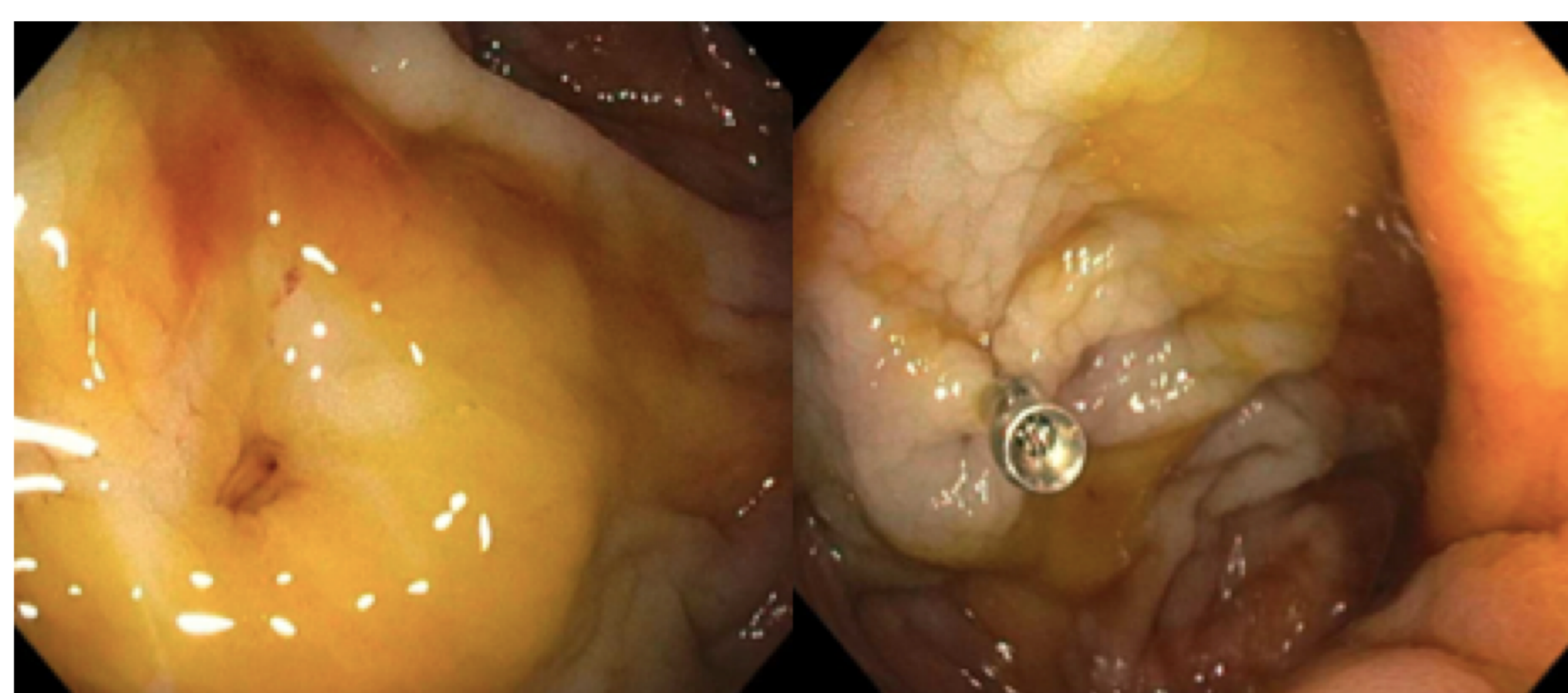


Figure 3a: Successful removal of adherent clot after hemostasis with epinephrine injection (4 ml of 1:10000). **Figure 3b:** Successful placement of a hemostatic clip.

References

1. Baxter M, Aly EH. Dieulafoy's lesion: current trends in diagnosis and management. *Ann R Coll Surg Engl.* 2010;92(7):548-554.
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3. Stark ME, Gostout CJ, Balm RK. Clinical features and endoscopic management of Dieulafoy's disease. *Gastrointest Endosc.* 1992;38(5):545-550.
4. Inayat F, Hussain A, Yahya S, et al. Rectal Dieulafoy's lesion: a comprehensive review of patient characteristics, presentation patterns, diagnosis, management, and clinical outcomes. *Transl Gastroenterol Hepatol.* 2022;7:10. Published 2022 Jan 25.

Discussion

- DLs are a rare but important cause of GI bleeding due to the severity of bleeding it often induces if left untreated
- DLs are most commonly found in the stomach, with rectal DLs representing a rare occurrence [1]
- Endoscopic criteria for diagnosis of DLs are as follows:
 1. Active arterial oozing or intermittent, micro-pulsatile bleeding from a minor (<3mm) mucosal defect, with no ulceration or erosion of the surrounding mucosa
 2. Visual evidence of a raised nipple-like artery
 3. An adherent blood clot with a tiny visible point of mucosal attachment [3]
- Treatment has been described with electrocoagulation, epinephrine injection, sclerotherapy, band ligation, and vessel clipping [4]
- Band ligation and hemostatic clips have demonstrated superior primary hemostasis [4]

Conclusions

- Due to the intermittent nature of the bleeding and the minimal mucosal defect, diagnostic evaluations remain limited
- Physicians should maintain a high suspicion index for rectal DLs
- Once identified, these lesions can be successfully treated with 2 modalities of hemostasis