Diverticula of the gastrointestinal (GI) tract are commonly found in the colon. Duodenal diverticula are rare (prevalence of <1%), usually asymptomatic, and frequently located in the second portion. Although infrequent, duodenal diverticula can have significant associated morbidity: mechanical obstruction of the common bile duct, pancreatic duct and duodenum, diverticulitis with perforation, abscess, fistula formation, and hemorrhage.\[1]\[1] A handful of cases have been reported in the literature describing patients with duodenal diverticulum presenting as gastrointestinal bleed. Few of these are in the third\[2] or fourth\[3] portions of the duodenum. Diagnosis in these patients may be difficult, as endoscopic visualization may not be possible by using the regular front-view esophagogastroduodenoscope. A side-viewing endoscopic retrograde cholangiopancreatography scope or colonoscope may be required. Imaging using upper GI barium series and/or computed tomography angiography may also be beneficial. Various surgical treatment options have been described previously including open and laparoscopic diverticulectomy.\[4,5]\[5]

Two cases have been reported using combined endoscopy followed by surgery and endoscopy plus interventional radiology guided coiling for diverticular bleed in the second\[6] and third\[7] portions of the duodenum, respectively. Here, we describe the case of an actively bleeding diverticular dieulafoy lesion in the third portion of the duodenum with successful endoscopic hemostasis as a sole intervention modality.

A 76-year-old Caucasian male with hypertension, type II diabetes mellitus, and end-stage renal disease presented to the hospital due to melena for 7 days. He was taking a low-dose aspirin but no anticoagulants. He had no history of prior bowel surgeries or GI bleed, denied any alcohol or tobacco use, or of any nonsteroidal anti-inflammatory drugs. On presentation, he was hemodynamically stable with a blood pressure of 100/70 mmHg, heart rate of 94 beats/min and afebrile with an oxygen saturation of 100% at room air. Blood work showed a hemoglobin of 6.5 g/dL (baseline 9 g/dL), blood urea nitrogen 62 mg/dL (baseline 30–35 mg/dL), platelets of 155,000/mL, serum creatinine of 4.3 mg/dL, INR of 1.4. Imaging with computed tomography scan of the abdomen without contrast showed a duodenal diverticulum with no active extravasation into the GI lumen. Upper endoscopy with adult gastroscope showed normal esophagus, stomach with altered blood and a duodenal diverticulum in the third portion with food debris [Figure 1]. Given the location, a pediatric colonoscope was used next. After the removal of the food particles, an adherent clot was seen at the base of the diverticulum. The clot was dislodged with aggressive irrigation, and subsequently, a bleeding Dieulafoy’s lesion was seen. Successful hemostasis was achieved with two metal clips [Figure 2].

Figure 1: Bleeding Dieulafoy’s lesion inside a duodenal diverticulum

Figure 2: Endoscopic treatment of bleeding Dieulafoy’s lesion inside a duodenal diverticulum
To our knowledge, only one similar case has been reported previously in Japan. An 80-year-old man presented with upper GI bleed. Endoscopy showed a diverticulum in the third portion of the duodenum with an adherent clot. The clot was removed using a hood applied at the tip of the endoscope and a snare. An underlying Dieulafoy lesion was treated endoscopically with hemostasis clips.[8]

**Declaration of patient consent**
The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the Journal. The patient understands that his name and initials will not be published, and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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There are no conflicts of interest.

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