

Duodenal hematoma with partial SBO after routine EGD in a young female patient with no history of hematologic disorder

Stefan Odabasic | Victoria Reick-Mitrisin | Tushar Khanna | Nabil Sultani | St. Mary Mercy Hospital, Livonia, MI

Introduction

- Duodenal hematomas are a rare complication of endoscopic biopsy most often seen in children and young adults. Common factors include blunt trauma, anticoagulation, Henoch-Schonlein purpura and blood dyscrasias (1).
- They can cause significant morbidity and mortality, including duodenal obstruction, hospitalization and need for intravenous nutrition (1).
- Intraluminal bleeding is typically less severe unless the hemorrhage is large enough to cause hemodynamic instability (2). Intramural hematomas are more commonly associated with complications. Treatment is generally conservative and consists of electrolyte replacement, nasogastric tube suction and total parenteral nutrition (1). If conservative management fails, endoscopic or surgical interventions to relieve the hematoma are required.

Case Presentation

History and Exam

- A 22-year-old female with past medical history of chronic abdominal pain presented to the emergency department 7 hours after an uncomplicated esophagogastroduodenoscopy (EGD) which was done to evaluate ongoing dyspepsia. She complained of abdominal pain, nausea, and vomiting.

Work up and management

- In the ED her vital signs were stable. Labs were remarkable for a mild leukocytosis and elevated total bilirubin.
- CT abdomen/pelvis was concerning for a 4.4x7.5cm duodenal hematoma (Image 1). Repeat EGD showed intramural duodenal hematoma at the biopsy site with no active bleeding (Image 2).
- Patient was managed conservatively with bowel rest and NG tube. She was discharged home with GI follow up and returned to the ED at another hospital four days later for ongoing nausea, vomiting and abdominal pain.

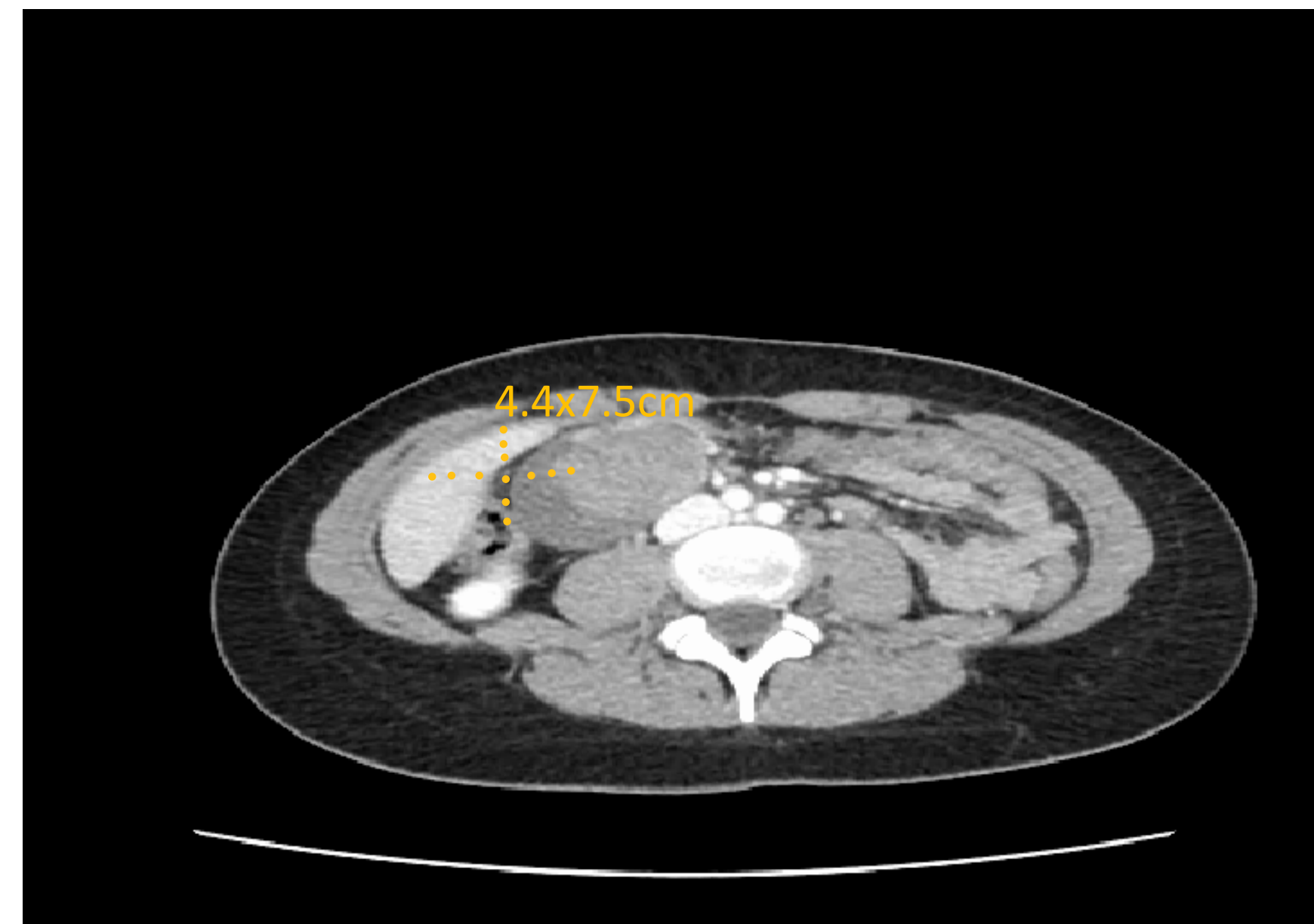


Image 1: CT abdomen/pelvis showing duodenal hematoma

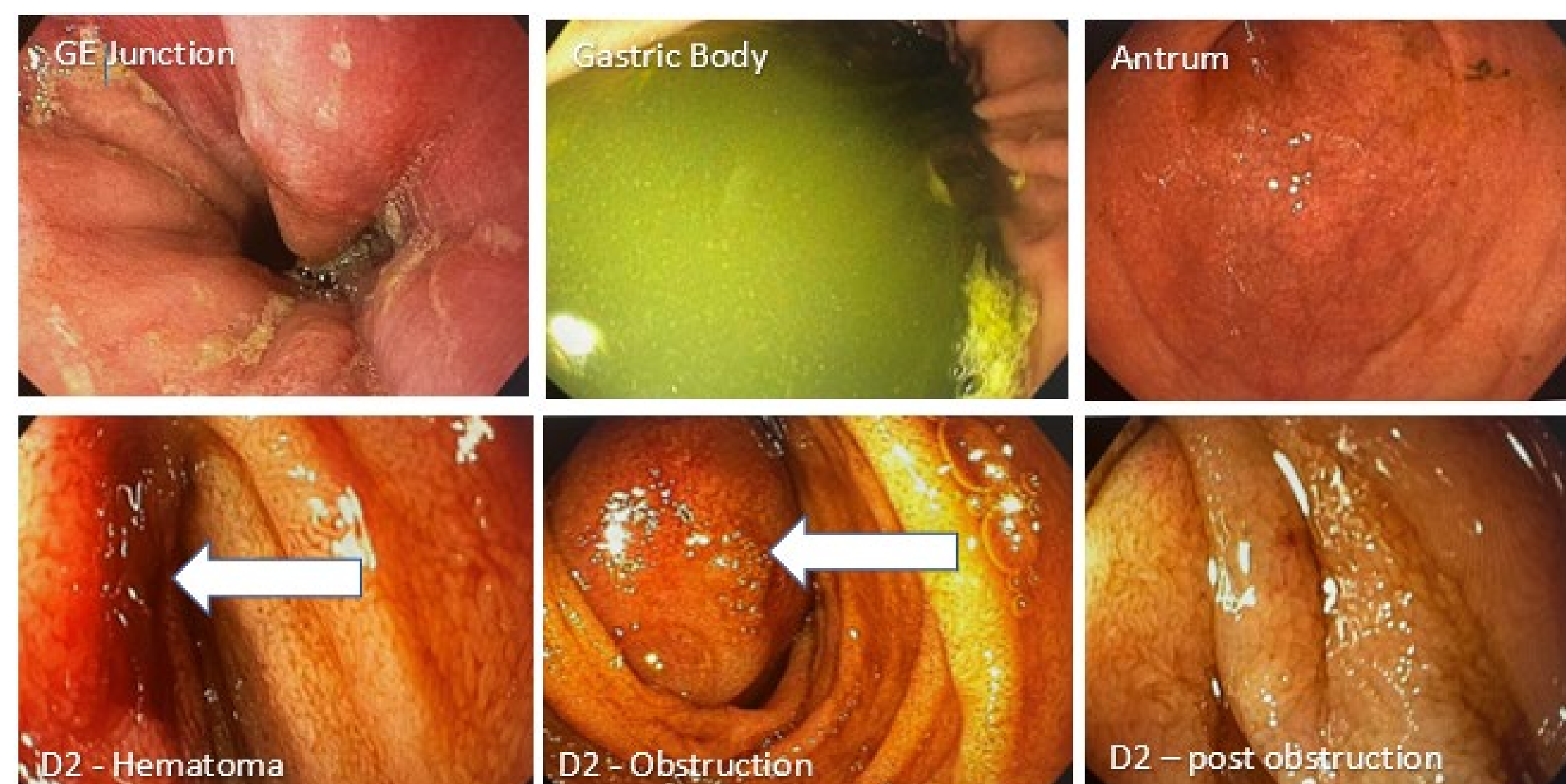


Image 2: EGD images of the intramural hematoma with no active bleeding.

- There was interval enlargement of the hematoma with increasing mass effect on the duodenum with no signs of infection or active bleeding.
- Consideration was given to endoscopic evacuation or percutaneous drainage. The patient improved with conservative management; no invasive therapy was required. She was discharged home again with GI follow up.

Discussion

- Hemorrhages such as this one can lead to intramural accumulation of blood resulting in a hematoma that pulls fluid from the surrounding area by osmotic fluid shift. This forms an intraluminal bulge which can lead to duodenal occlusion causing compression on the pancreatic and biliary ducts causing obstructive jaundice or acute pancreatitis (2).

- Typical symptoms include abdominal pain, nausea and vomiting. This complication is seen predominantly in patients with hematologic abnormalities, which our patient had no history of.
- Managed conservatively most of the time. If conservative management fails, next step is endoscopic or surgical evacuation of the hematoma. This is typically considered after 7-10 days of conservative therapy or if there are worsening complications (1-5). There is better evidence for urgent surgical intervention following blunt trauma (1,6).
- Newer published therapies include ultrasonically guided drainage and balloon dilation (7). Our case illustrates the importance of recognizing rare complications after routine procedures in low-risk patients as well as a need for better therapeutic interventions.

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