

Diagnosing Duodenal Diverticulum

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Background

The duodenum is an uncommon location for diverticula to form, accounting for 22% of diverticula. Although a majority of duodenal diverticula (DD) are asymptomatic, a small percentage develop symptoms such as hemorrhage, diverticulitis, or perforation^[1]. This case highlights the uncommon presentation of a symptomatic DD in an elderly patient resulting in a major upper gastrointestinal bleed (UGIB).

Case

A 75-year-old female with a past medical history of Type 2 diabetes mellitus, hypertension, and obstructive sleep apnea on CPAP presented with a T12 burst fracture, treated with large quantities of NSAIDS. Further work-up uncovered deep vein thromboses (DVT) and a saddle embolus for which heparin anticoagulation was initiated. She subsequently experienced hematemesis and melena, suggestive of an UGIB. Stool occult blood and H pylori antigen tests resulted positive. CBC was significant for a drop in hemoglobin (10.7 to 6.5) and hematocrit (34.1 to 30.7%), requiring 2 units of packed RBC transfusion. An upper endoscopy revealed a large diverticulum in the descending duodenum with a slowly oozing AVM.

Discussion

The duodenum is an uncommon location for diverticula formation (approximately 22%) making it the second most common diverticulum site. Because less than 10% of DD are symptomatic, they are typically diagnosed incidentally^[3]. Of characterized DD, 60% were found in the descending duodenum and 40% in the inferior^[3]. Complications of symptomatic DD include hemorrhage, diverticulitis and perforation, with symptoms mimicking peptic ulcer disease or cholangitis^[2, 3]. Our patient's presentation was atypical due to the location of her diverticulum, development of clinical symptoms and severity of her UGIB. During the endoscopy, her UGIB was successfully cauterized with no further bleeding. Given her complex PMH, a discussion was conducted about initiating anticoagulation therapy for her DVT/PE given her HAS-BLED score of 5. Ultimately the patient and her family decided to focus on palliative care measures. She was ultimately discharged to inpatient rehab.

References

- 1) Moysidis, M., et al. The Challenging Diagnosis and Treatment of Duodenal Diverticulum Perforation. BMC Gastroenterology, 2020.
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