Hematemesis from ruptured aberrant right hepatic artery aneurysm eroding through the duodenal wall



Fig. 1 Large submucosal mass with ulcer in the duodenal bulb.

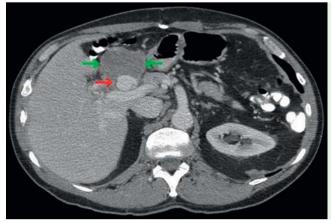


Fig. 2 An oral and intravenous contrastenhanced computed tomography (CT) scan demonstrates a pseudoaneurysm (red arrow) with a surrounding hematoma (green arrows) just above the duodenal bulb and medial to the left lobe of the liver.

A 56-year-old man presented with hematemesis and multiple episodes of melena. He had a history of chronic lymphocytic leukemia and traumatic rupture of the spleen leading to splenectomy and splenic artery embolization 6 years earlier.

Esophagogastroduodenoscopy (EGD) revealed a large submucosal mass (7 × 5 cm) with an ulcerated overlying area associated with clot in the duodenal bulb (**• Fig. 1**). The ulcer was treated with epinephrine (1:10000). A computed tomography (CT) scan of the abdomen revealed a 2.5 × 1.8-cm pseudoaneurysm from an aberrant hepatic artery off the superior mesenteric artery (**• Fig. 2**) along with surrounding hematoma, causing mass effect on the duodenum; this was further confirmed with a CT angiogram (**• Fig. 3** a).

Coil embolization was performed with complete obliteration of the hepatic artery pseudoaneurysm (**Fig. 3 b**). The patient was subsequently discharged home after 4 days of observation.

The patient presented 2 months later with recurrent episodes of melena. A CT angiogram showed no active extravasations. EGD revealed a long segment of coil protruding from the pylorus into the stomach, along with coffee ground materials. There was a large mound-like focal bulge at the superior aspect of the duodenal bulb, with a 6-mm defect without active bleeding, along with the protruding coil (**• Fig. 4**). The patient underwent a distal gastrectomy, Billroth II gastrojejunos-

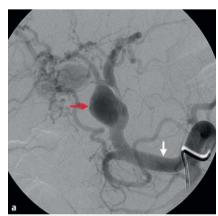




Fig. 3 a An angiogram performed immediately after the computed tomography (CT) scan confirms the pseudoaneurysm (red arrow) arising from a replaced hepatic artery (white arrow) off the superior mesenteric artery.

b Post-embolization arteriogram of the common hepatic artery, demonstrating occlusion of the two large pseudoaneurysms.

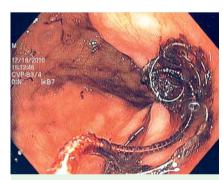


Fig. 4 Long segment of coil protruding from the pylorus into the stomach.

tomy, and ligation of gastroduodenal artery. He was discharged after 5 days of observation and remained well without further episodes of bleeding after 6 months of follow-up.

Hepatic artery pseudoaneurysm is a rare cause of upper gastrointestinal bleeding, and can be life-threatening [1,2]. Angiographic embolization is an effective method of treatment with a reported success rate of 80 – 100% [3]. However, complications from embolization are not unusual, as noted in our case with extrusion of coils through the duodenal wall with potential for re-bleeding. Surgery may be needed in unusual circumstances for more definitive therapy.

Endoscopy_UCTN_Code_CCL_1AB_2AZ_3AD

Competing interests: None

- Y. J. Kim¹, S. K. Satapathy², L. Law², A. Volfson², B. Friedman³, S. Yang², C. Sung³, D. S. Siegel³, B. DeVito⁴
- Department of Internal Medicine, Hofstra North Shore-LIJ Health system at Long Island Jewish Medical Center, New York, USA
- Division of Gastroenterology, Hofstra North Shore-LIJ Health system at Long Island Jewish Medical Center, New York, USA
- Department of Radiology, Hofstra North Shore-LIJ Health system at Long Island Jewish Medical Center, New York, USA
- Division of Gastroenterology, Hofstra North Shore-LIJ Health system at North Shore University Hospital, New York, USA

References

- 1 *Poon R, Tuen H, Yeung C et al.* Gl haemorrhage from fistula between right hepatic artery pseudoaneurysm and the duodenum secondary to acute cholecystitis. Gastrointest Endosc 2000; 51: 491 493
- 2 Lumsden AB, Mattar SG, Allen RC, Bacha EA. Hepatic artery aneurysms: the management of 22 patients. J Surg Res 1996; 60: 345 – 350
- 3 Nicholson T, Travis S, Ettles D et al. Hepatic artery angiography and embolization for hemobilia following laparoscopic cholecystectomy. Cardiovasc Intervent Radiol 1999; 22: 20–24

Bibliography

DOI 10.1055/s-0030-1256736 Endoscopy 2011; 43: E323 – E324 © Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

Corresponding author

S. K. Satapathy, MD

Division of Gastroenterology Hofstra North Shore-LIJ Health system at Long Island Jewish Medical Center 270-05 76th Avenue New Hyde Park New York 11040 USA Fax: +1-718-343-0128