

Duodenal vascular ectasia (DUVE) associated with hematopoietic stem cell transplant

A 63-year-old man post hematopoietic stem cell transplantation (HSCT) developed significant gastrointestinal bleeding with melena and drops in hemoglobin that required multiple blood transfusions. He had received fludarabine and busulfan for pretransplantation conditioning. Esophagogastroduodenoscopy (EGD) on day 89 post transplantation (+89) revealed an antral-limited portal hypertensive gastropathy (PHG) and duodenopathy that involved the bulb and second part of the duodenum; the findings were also compatible with gastric antral vascular ectasia (GAVE) (● Fig. 1). Several subsequent EGDs due to ongoing blood loss all confirmed antral limited PHG. Severe hemorrhagic gastritis and duodenitis consistent with GAVE (● Fig. 2) was seen on day +132. The final endoscopy (day +203) showed GAVE throughout the stomach and duodenum, gastric varices, and small esophageal varices. The genesis of these varices was cryptogenic as there was no evidence of either portal hypertension or a splenic vein thrombosis. Treatment for the patient included intravenous/per oral proton pump inhibitors and one treatment of argon plasma coagulation, which did not affect the ongoing blood loss significantly. A transjugular, intrahepatic portosystemic shunt was placed (day +231) due to recurrent bleeding. Unfortunately, the patient died due to overwhelming sepsis and continued bleeding (day +253). Duodenal biopsies from earlier in the admission were revisited post mortem and felt to be consistent with vascular ectasia (● Fig. 3). We present the second reported case of a patient with GAVE and duodenal vascular ectasia (DUVE) associated with HSCT. GAVE is usually limited to the antrum and rarely involves either the duodenum or jejunum [1,2]. It classically appears as red spots or patches in a linear or diffuse collection endoscopically [3]. Risk factors for HSCT-associated GAVE include male sex and exposure to busulfan in the conditioning regimen [4] both present in our patient. DUVE is rare, even following HSCT, but must be considered in the setting of gastrointestinal hemorrhage.

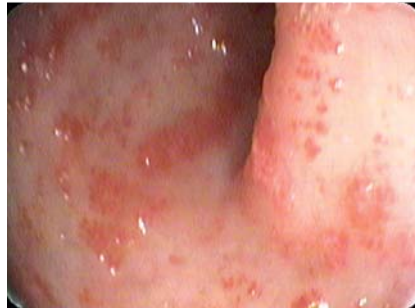


Fig. 1 Vascular ectasia in the duodenal bulb during upper endoscopy post allogeneic bone marrow transplantation day 89.



Fig. 2 Vascular ectasia in the duodenal bulb during upper endoscopy post allogeneic bone marrow transplantation day 132.

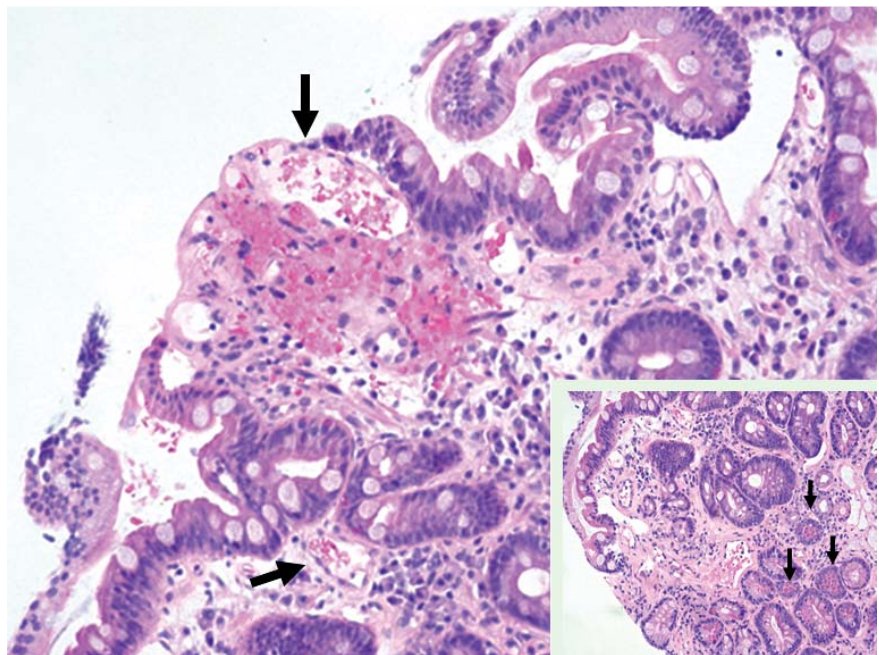


Fig. 3 Duodenal bulb biopsies stained with hematoxylin and eosin, original magnification $\times 100$. Marked dilated capillaries containing blood and adjacent hemorrhage in the lamina propria of duodenum.

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Competing interests: None

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