A 54-year-old woman with a past medical history of total splenectomy 37 years ago presented to the emergency department (ED) after she developed a pre-syncopal episode at home. She had a large tarry bowel movement earlier and reported feeling dizzy and weak. Her home medications included aspirin/butalbital/caffeine and NSAIDS for migraine headaches.

In the ED her blood pressure (BP) was 80/60 mm Hg, heart rate (HR) of 130, afebrile and she was saturating 100% on non-rebreather. She was noted to be pale, having cool and clammy extremities and a melanotic stool which was guaiac positive. The laboratory studies showed hemoglobin (HG) of 7.0 with a hematocrit (HCT) of 21.4, normal coagulation profile and normal electrolytes.

Two 18G peripheral IV access was established. She received 4 liters of normal saline, 2 units of typed and cross-matched packed red blood cells (PRBCs), and 4mg protonix intravenously (IV). A nasogastric (NG) tube was placed and return of frank blood was visible. She was transferred to Medical Intensive Care Unit (MICU). She became short of breath and ABG showed Ph 7.27, CO2 25 mm Hg, O2 77 mm HG, bicarbonate level of 11 meq/L on 94% room air.

Massive hematemesis ensued. She was intubated and sedated. HG after 2 units of PRBCs was 5.9. A right intravascular catheter and an arterial-line were placed. An emergent esophago-gastro-duodenoscopy (EGD) showed a giant clot in the fundus of the stomach. (Figures A)

Irrigation and suctioning could not clear the clot. Pylorus and duodenum appeared clear with no active bleeding. She was started on protonix drip. Soon after the EGD, she started vomiting frank blood around her nasogastric tube. Interventional Radiology (IR), Gastroenterology (GI) and General Surgery (GS) were contacted. A massive transfusion protocol was initiated. She received 14 units of PRBCs, 5 units of fresh frozen plasma, 5 units of platelets, 2 units of cryoprecipitate and 2 doses of 3 grams of intravenous calcium gluconate intravenously in the MICU. The IR found active bleeding in the fundus of the stomach from the left gastric artery which was embolized. (Figures B, C)

**Figure A.** An emergent esophago-gastro-duodenoscopy (EGD) showed a giant clot in the fundus of the stomach.

**Figures B and C.** The IR found active bleeding in the fundus of the stomach from the left gastric artery which was embolized.
Following the procedure, the patient continued to bleed profusely and was taken to the operating room for exploratory laparotomy. She underwent wedge resection of the stomach, which was left open with retention sutures in place. During this procedure a 5 cm invasive tumor was found which was resected and sent to the pathologist. The specimen was reported by the pathologist as “an ectopic spleen with large vessels in the ectopic surface of the stomach.”

(Figures D, E) The patient was transferred to the Surgical Intensive Care Unit post-operatively. The patient recovered and was discharged after she remained stable.

DISCUSSION

Splenosis must be considered in the differential diagnosis of patients with a history of splenic trauma and splenectomy who present with one or more masses of unknown etiology or bleeding from an unknown site.¹ Splenosis can cause symptoms of hematemesis, pleurisy, symptoms similar to myocardial infarction, gastrointestinal bleeding when auto-implantation occurs in the small bowel or the stomach, flank pain and hydronephrosis from ureteral compression, and pelvic or abdominal mass.

The mechanism behind auto-transplantation initiated with the splenic rupture involves mainly seeding of damaged splenic pulp into the adjacent cavities.² Scintigraphy using heat damaged Tc-99m-labelled autologous RBCs is a reliable noninvasive diagnostic method of choice in this rare condition and may allow to avoid unnecessary abdominal surgery.²

References


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