SPLENIC ARTERY PSEUDOANEURYSM AS A CAUSE OF MASSIVE GI BLEEDING

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Splenic artery pseudoaneurysm (SAP) is a rare complication of both acute and chronic pancreatitis and is often associated with hemodynamically significant GI bleeding. It should remain in the differential diagnosis for any patient with massive GI bleeding.
A 68-year-old male presented with 3 days of black stools and progressively worsening lightheadedness, dizziness, and near syncope. He denied abdominal pain, nausea, vomiting or hematochezia. Social history was notable for the patient having lived in Zambia and Sicily for 18 years prior to moving back to the United States 3 years prior to presentation. The patient denied any prior NSAID use or alcohol use. We were unable to obtain a full medical history due to the patient previously obtaining all care at an outside hospital system. Per patient report, this included at least one prior episode of acute pancreatitis. The physical exam was notable for tachycardia, pallor, a soft non-distended abdomen without tenderness and audible bowel sounds. Initial laboratory work-up was notable for hemoglobin of 7, hematocrit of 21 and a positive stool Guaiac test. He initially underwent upper endoscopy due to concern for Helicobacter Pylori infection from travel to an endemic area. Esophagogastroduodenoscopy (EGD) revealed Los Angeles (1) grade B esophagitis which was thought to contribute to this patient's presentation but did not solely explain the degree of anemia. The decision was then made to undertake preparation for colonoscopy, however during this process, the patient began to experience acute hematochezia and hemodynamic instability requiring several units of packed red blood cells. Urgent computed tomography (CT) of the abdomen revealed a massive (5.7cm x 5.6cm) pseudoaneurysm of the splenic artery with peripheral thrombus formation and concern for fistulization to the stomach. He subsequently underwent proximal/mid-splenic artery coil embolization with interventional radiology with appropriate resolution of hematochezia. The patient was discharged 2 days afterwards with follow-up with general surgery for outpatient splenectomy.

This case illustrates the diagnostic challenge of SAP as a cause of GI bleeding. It can often range in presentation from asymptomatic to significant hemodynamic compromise. In addition to acute and chronic pancreatitis, other common etiologies of SAP include abdominal trauma, post-surgical complications and peptic ulcer disease (2). Approximately 58% SAP provoked GI bleeding is associated with hemodynamic instability (2). CT Abdomen with IV contrast remains the preferred imaging modality for diagnosis though abdominal angiography with potential for subsequent transcatheter embolization can establish a definitive diagnosis if suspicion is high.

1. Sami SS, Ragunath K. The Los Angeles Classification of Gastroesophageal Reflux Disease. Video Journal and Encyclopedia of GI Endoscopy. 2013;

2. Tessier DJ, Stone WM, Fowl RJ, Abbas MA, Andrews JC, Bower TC, et al. Clinical features and management of splenic artery pseudoaneurysm: Case series and cumulative review of literature. J Vasc Surg. 2003;