CASE REPORT

GANGRENOUS GASTRITIS: UNUSUAL CAUSE OF UPPER GI BLEEDING

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Chronic Mesenteric ischemia is an episodic hypoperfusion of small intestine due to atherosclerotic narrowing of mesenteric vessels. Typically, patients report postprandial epigastric pain. The association of abdominal pain with eating results in fear of eating and weight loss. Some patients present atypically with nausea, vomiting and/or GI bleeding likely from gut ischemia. We present here a case of 67-year-old male with history of COPD, Coronary artery disease and atrial fibrillation presented with hematemesis and black stools for one day. Patient reports no abdominal pain or weight loss. He was dizzy and nauseous. He was vitally stable and physical exam including abdominal exam was unremarkable except for the rectal exam which revealed black stools. Investigations revealed Haemoglobin of 16.1 and hematocrit of 45, WBCs of 34000 with 83% neutrophils and bicarbonate of 20. Patient underwent EGD for localizing the site of bleeding and showed stomach lumen completely filled with thrombus which prevented the accurate assessment if gastric mucosa. Repeat EGD was recommended and it revealed gangrenous appearing gastritis throughout with multiple clean ulcers which raised the suspicion of vascular compromise. CT angiography abdomen revealed complete proximal occlusion of Superior Mesenteric artery and near complete occlusion of celiac artery. He underwent successful SMA bypass from left iliac to mid SMA with PTFE graft. Symptoms of mesenteric ischemia can be non-specific and can mimic other aetiologies. Clinicians should consider this diagnosis in elderly patient with risk factors of atherosclerosis as early diagnosis reduces complication associated with serious life-threatening disease.

Keywords: Gangrenous Gut; Upper GI; Bleeding; Mesenteric Ischemia; Intestinal Angina

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INTRODUCTION

Chronic intestinal ischemia or intestinal angina is characterized by abdominal pain after meals and weight loss in elderly patients with risk factors for atherosclerosis.[1] Here we present a case of intestinal ischemia in a patient who presented with non-specific symptoms of acute GI bleeding without abdominal symptoms.

CASE

A 67-year-old male with past medical history of COPD, atrial fibrillation on Dabigatran and coronary artery disease presents with hematemesis and black stools for a day. He reports nausea and lightheadedness but no abdominal pain, loss of appetite, postprandial abdominal pain, or weight loss. No prior history of GI bleeding. He is a current smoker with 50-year smoking history. On presentation he had BP of 146/94, pulse 83, temperature 36.6 °C, resp. rate 18. Abdominal exam was unremarkable for tenderness. Bowel sounds were present. Rectal exam revealed black stools. Labs showed haemoglobin of 16.1, hematocrit 45, platelets of 204,000, WBC of 34,000 with 83% neutrophils, bicarbonate 20 and INR of 1.7. EGD revealed stomach lumen nearly filled with subacute thrombus. Cardia revealed extensive gastric ulcer; 5-6 cm in greatest dimension, with a large visible vessel (Figure-2). No active site of bleeding was seen. The patient was started on Pantoprazole. Repeat EGD after 24 hours showed inflamed gangrenous-appearing gastritis throughout with multiple clean ulcers, raising suspicion for ischemia (Figure-3). CT abdomen with contrast showed proximal occlusion of SMA and near complete occlusion of celiac artery (Figure-1). CT also revealed hypertrophic IMA, likely the supply of much of his GI tract. Patient underwent unsuccessful stenting attempt of SMA, but later underwent successful SMA bypass from left iliac to mid SMA with PTFE graft. He was discharged home on aspirin daily along with Pantoprazole.

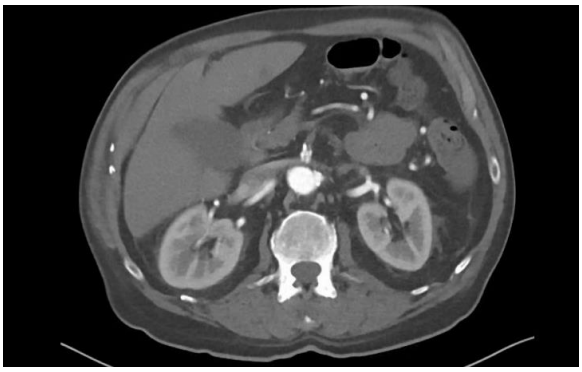

Figure 1: Ct angiography abdomen showing thrombosis of SMA

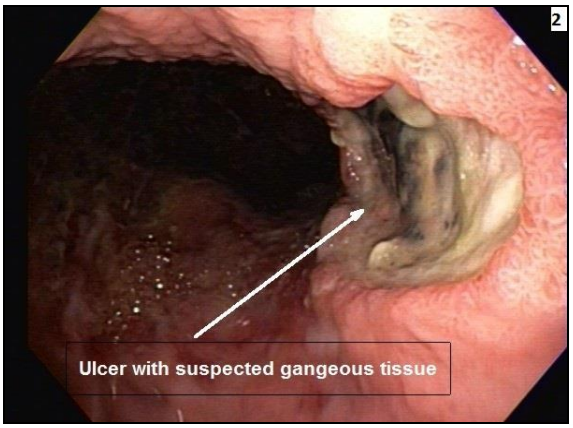

Figure 2: Large ulcerated cardia ulcer with gangrenous tissue in ulcer bed

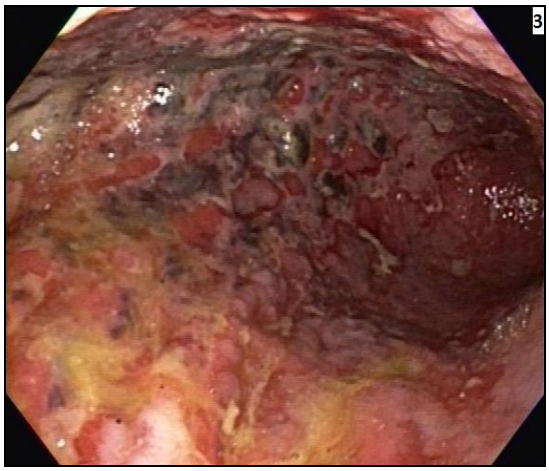

Figure 3: Body of stomach revealing gangrenous tissue

DISCUSSION

Patients with chronic mesenteric ischemia present with recurrent abdominal pain after meals, resulting in fear of eating and weight loss. In a survey of 270 patients, weight loss, postprandial pain, adapted eating pattern, and diarrhoea are associated with chronic mesenteric ischemia. Probability of diagnosis increases to 60% with all four symptoms, and reduces to 13% if none are present[1]. Few patients present with non-specific symptoms of nausea, vomiting and/or lower GI bleeding. This patient was unique in that he had no abdominal pain even with a total occlusion of SMA, possibly due to well-formed collaterals which were seen in his CT angiography abdomen. His upper GI bleeding as a result of gangrenous gastritis resulted from ischemic bowel from total occlusion. Review of literature shows delay in diagnosis ranges from 10.7 months to 15 months in diagnosing chronic intestinal ischemia, resulting in increased complications.[2,3] CT angiography abdomen is more than 90% sensitive and specific in diagnosing it.[4] Duplex ultrasonography of mesenteric vessels is also very sensitive in diagnosing intestinal ischemia and alternative diagnosis should be considered in case of negative study.[5] Endovascular therapy with stenting is the preferred method of revascularization in these patients and have widely replaced open surgical management.[6] The non-specific symptoms and unremarkable physical exam in our patient demonstrate how silently intestinal ischemia can present.

CONCLUSION

Clinicians should have a high index of suspicion in diagnosing intestinal ischemia in elderly patients with risk factors for atherosclerosis as clinical presentation can be misleading. Early diagnosis can prevent morbidity and mortality associated with this serious disease by decreasing the dreadful complication of bowel gangrene as developed in our patient.

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