Clinical picture

Unusual cause of bleeding in liver cirrhosis patient

A 42-year-old man presented to the emergency department with 2 weeks history of fatigue and dark tarry stool. He had past medical history significant for primary sclerosing cholangitis with liver cirrhosis, complicated with ascites and small non-bleeding esophageal varices. He denied nausea, vomiting, abdominal pain, weight loss or change in appetite. He also denied excessive use of non-steroid anti-inflammatory drugs (NSAID’s). On presentation he was on spironolactone, furosomide, omeprazole and nadalol. On exam, he appeared pale with stable vitals signs. Skin examination revealed spider angiomata and palmar erythema. Abdomen was non-distended with no abdominal tenderness or organomegaly. There was no asterixis. Initial blood work revealed hemoglobin of 5.8 g/dl (normal 13.5–17.5 g/l) down from his baseline of 13 g/dl. Platelet count was 87/ml (normal 150 000–400 000/ml). Prothrombin time and INR were 15.2 s (normal 9.9–13 s) and 1.8 (normal 0.9–1.2), respectively. His Childs Pugh Score was 7 (Class B), Model of End-Stage Liver Disease (MELD) score was 8. The patient received two units of packed red blood cells and two units of fresh frozen plasma. Continuous intravenous esomeprazole and octreotide were started soon after admission. The patient underwent esophagastroduodenoscopy (EGD). This revealed duodenal bulbar varices without stigmata of bleeding (Figure 1). Endoscopic ultrasound (EUS) showed a submucosal anechoic lesion corresponding to the endoscopic finding in the second portion of the duodenum (Figure 2). Color Doppler imaging revealed a vascular lesion. Patient hemoglobin responded well to blood transfusion and remained stable. Liver vascular ultrasound showed patent hepatic vasculature. Echocardiogram showed normal right ventricular size and function. The patient underwent transjugal intrahepatic portosystemic shunt (TIPS) procedure which resulted in a decrease in the porto-systemic pressure gradient from 23 to 5 mmHg. He was discharged home few days later in a stable condition.

Patients with liver cirrhosis have an increased risk of mortality and morbidity due to their susceptibility

Figure 1. (A) EGD showing duodenal bulbar varices without stigmata of bleeding (arrow). (B) Normal duodena mucosa.

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to a variety of complications. Variceal bleeding is one of the most life-threatening complications in cirrhotics, with mortality up to 30% for each bleeding episode. The prevalence of duodenal varices in cirrhotic patient has been reported at about 0.4%. Bleeding duodenal varices is known to be severe and often life threatening. This prompts early diagnosis and treatment. Although esophageal varices are easily diagnosed with EGD alone, the submucosal location and the lack of red color signs of duodenal varices pose a diagnostic challenge. Any cirrhotic patient with GI bleed should undergo a thorough endoscopic evaluation of the duodenum. When the diagnosis is in doubt, EUS, is a valuable tool in confirming the diagnosis. There are multiple therapeutic options in the management of duodenal varices which include: (i) non-selective beta blockers; (ii) TIPS procedure; (iii) endoscopic management of varices with ligation and glue injection; and (iv) balloon-occluded retrograde transvenous obliteration. However, a case by case management decision has to be made taking into consideration the experience of the physician and available therapeutic options. In our patient, he underwent TIPS with no further bleeding on subsequent follow-ups.

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References
