Hepatocellular carcinoma infiltrating the duodenum presenting as hematemesis

A 54-year-old man, a diagnosed case of hepatocellular carcinoma (HCC) of the left lobe of the liver who was managed with left hepatectomy, presented 7 months after surgery with hematemesis and melena. The patient was taking over-the-counter non-steroidal anti-inflammatory drugs for relieving joint pain because of osteoarthritis. Upper gastrointestinal (GI) endoscopy revealed a bluish colored elevated lesion in the first part of the duodenum (Figure 1); the possibility of a duodenal ulcer with an adherent clot was considered. However, on careful evaluation no underlying ulcer base could be found. Close endoscopic inspection showed that the elevated lesion resembled a polypoidal fleshy mass that was friable and bled on contact with biopsy forceps. An endoscopic biopsy was thus ruled out and the patient was managed conservatively with blood transfusion and proton pump inhibitors.

Contrast-enhanced computed tomography (CECT) of the abdomen revealed a recurrence of tumor formation in segment VIII of the liver and metastatic lesions in segment VI of liver, with duodenal infiltration (Figure 2). Ultrasound-guided fine needle aspiration cytology (FNAC) from the tumor confirmed it to be a recurrence of HCC. Gastrointestinal bleeding did not reoccur during the hospital stay and the patient was discharged.

This case describes gastrointestinal bleeding resulting from invasion of the duodenum by HCC. Endoscopic examination revealed a resemblance to a duodenal ulcer with an adherent clot. The diagnosis was arrived at by a closer endoscopic inspection, as well as CECT of the abdomen.

Upper GI bleeding is not a common manifestation of HCC, the frequency being 1.5%–10%. Common causes of bleeding in this area are variceal bleeding, and hemobilia caused by rupture of the tumor into the biliary tree. Although direct invasion by HCC of neighboring organs, such as the colon, stomach, and duodenum by HCC may occur, GI bleeding resulting from duodenal invasion is rarely reported.