A 58 year old male who underwent orthotopic liver transplantation in 2009 for nonalcoholic steatohepatitis induced cirrhosis and hepatocellular carcinoma presented with acute onset of hematochezia. The colonoscopy performed showed red blood in the entire colon and no blood in the terminal ileum. Overnight, the patient developed acute onset hematemesis requiring an emergency upper endoscopy. The upper endoscopy showed one cratered duodenal ulcer that was 13 mm in its largest dimension in the duodenal bulb (Fig. 1). The area was successfully injected with epinephrine for hemostasis. Gold probe cautery was attempted but the patient started to have arterial spurting that precluded visualization. The patient was sent to interventional radiology for embolization. He underwent a celiac angiogram that demonstrated active bleeding near the anastomosis of the hepatic artery. Further advancement of the catheter into the hepatic artery demonstrated active bleeding near the common hepatic artery anastomosis and a false aneurysm was found (Fig. 2). After hepatic artery embolization, the patient did not develop graft loss or biliary stricturing of his transplanted liver despite the embolization procedure.

Gastrointestinal bleeding is a detrimental complication in post liver transplant patients. Few reports have described gastrointestinal bleeding from the hepatic artery in this group of patients. Hepatic artery pseudoaneurysm (HAP) is a rare complication with incidence ranging between 0.3% to 2% after liver transplantation and usually presents with intra-abdominal or gastrointestinal bleeding within 2 months after transplantation [1]. In many cases, there is evidence of an intra-abdominal infection, or bile-containing drainage often precedes the rupture of a pseudoaneurysm [2]. No active infection was found in our patient to contribute to the rupture of the HAP.

In conclusion, in our patient a duodenal ulcer was found as the source of bleeding and this could have eroded in the extrahepatic artery due to postoperative adhesion of the hepatic artery to the duodenal wall.

References