Isolated Duodenal Variceal Bleeding Caused by Liver Cirrhosis: One Case Report

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Introduction
Isolated Duodenal varices (DV) as a rare manifestation of portal hypertension in the absence of esophagogastric varices. The clinical features of DV include middle-aged men and commonly with a history of liver disease, repeatedly, a large number of acute upper gastrointestinal bleeding with or without esophageal varices. An initial bleed from a duodenal varix often confers a poor prognosis [1]. This is a case of isolated duodenal variceal bleeding.

Case Presentation
The patient is a 58-year-old woman with a personal history of hepatitis B surface and core antibody positivity. She had a medical history of the “tiopronin, antongding, antipyretic analgesics, aspirin” allergy.

Pertinent findings on physical examination: Body temperature 36.5 °C, breathing 18 times/min, pulse 80 beats/min, blood pressure 105/70 mmHg. Conscious, marked conjunctival and skin pallor without scleral icterus. Superficial lymph node enlargement is not touched the body, liver palms positive, no obvious abnormalities in heart and lung auscultation, abdomen soft, no abdominal varicose veins, liver and spleen not palpable, the whole abdomen without tenderness, rebound tenderness and muscle tension, shifting dullness negative, both lower extremities without edema.

Basic laboratory tests reported white cell count 1.44 × 10E9/L, platelet count 48 × 10E9/L, haemoglobin 7.6 gm/dL, haematocrit 17.8%, international normalised ratio 1.4; creatinine 1.8 mg/dL, albumin 22.9 g/L and cholinesterase 2588 U/L, and normal aminotransferases and total bilirubin. AFP: 5.00 ng/ml, hepatitis B surface antigen, hepatitis B e antigen, hepatitis B e antibody, hepatitis B core antibody (+), hepatitis B virus quantitation: 4.66 E + 003I U/ml.

Abdominal CT:
1. Cirrhosis, ascites, splenomegaly; portal hypertension with collateral circulation opening.
2. Intrahepatic multiple small nodular abnormal enhancement film, considered as nodules of liver cirrhosis. section could not be excluded cancerous.
3. Descending part of duodenum diverticulum.

Emergency upper endoscopy revealed no esophageal or gastric varices, but descending part of duodenum see two isolated varicose veins, most large diameter 0.6 cm, red sign positive. We treated two points line those varices with ligation (Figure 1). Bleeding stanched treated by hemostatic the liver protection portal pressure lowering medication and endoscopy. However, she declined further TIPS or surgical treatment to reduce the risk of rebleeding.

After 4 months, the patient was hospitalized because of an acute episode of hematemesis and melenic stools. Presence of hepatic encephalopathy II. The bleeding was stopped, and hepatic encephalopathy was corrected after aggressive medical treatment. An emergency
Upper gastrointestinal bleeding. It is generally regarded as a complication of advanced cirrhosis and portal hypertension. The most common site of variceal bleeding in patients with portal hypertension is esophago-gastric location and other sites called ectopic varices are responsible for 1-5% of cases of variceal bleeding [2,3]. The duodenum is the most common location for ectopic varices. They are most commonly noted in the duodenal bulb followed by the second part of the duodenum [2-4], the individual can affect the entire duodenum [5].

Duodenal varices were first discovered in 1931 by Alberti, the first saw by microscope in 1973, duodenal varices caused by portal hypertension are very rare, the reason is unclear, its occurrence is association with any cause of portal hypertension including cirrhosis and non-cirrhotic. Clinical studies suggest that the mechanism of its occurrence include: 1) Portal

**Discussion**

Variceal bleeding is one of the main factors of upper gastrointestinal bleeding. It is generally regarded as a complication of advanced cirrhosis and portal hypertension. The most common site of variceal bleeding in patients with portal hypertension is esophago-gastric location and other sites called ectopic varices are responsible for 1-5% of cases of variceal bleeding [2,3]. The duodenum is the most common location for ectopic varices. They are most commonly noted in the duodenal bulb followed by the second part of the duodenum [2-4], the individual can affect the entire duodenum [5].

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hypertension, regarding its causes, liver cirrhosis is responsible for 30% of the cases [6]. Collateral circulation between the portal vein and the vena cava open, causing varicose veins. On the other hand, extrahepatic portal vein obstruction cause hypertension, such as portal vein thrombosis, spleen vein occlusion, making the superior mesenteric vein or splenic vein blood through the superior mesenteric vein branches to pancreatic vein, the vein right upper duodenum, pyloric vein and (or) right gastroepiploic vein bypass the obstruction back at the portal vein, it is prone to duodenal varices. 2) Surgical adhesions: Operation caused adhesions between intestinal canal and abdominal wall or other structure can be formed in the side branch of the portal vein to the body vein. Duodenal variceal bleeding is rare, but when it appears, it is massive and difficult to control, it has a high mortality rate, statistical literature can reach 40% [7].

The best diagnostic method so far for locating the varices is digestive endoscopy, although it involves a limitation on the localization of lesions in the submucosal and serous membranes [5]. Some duodenal varices are detected by enhanced CT, selective angiography even laparotomy. Enhanced CT can quickly assess varicose veins, we found it is superior to angiography and magnetic resonance in the diagnosis of paraumbilical and retroperitoneal varicose vessels [9].

The treatment experience for bleeding duodenal varix is less. The main method for treatment including conservative treatment, endoscopic treatment, intervention and surgery. Generally considered better liver function should be preferred surgical treatment; and for liver function is poor, cannot tolerate surgery, endoscopic therapy may be considered or intervention. Endoscopic treatment of varicose veins can quickly locate and accurately fix, including sclerotherapy varicose veins, tissue glue treatment, ligation, and titanium clips therapy. General endoscopic treatment can temporarily stabilize the bleeding, but the recurrence rate can be as high as 50%, thus further reduce portal pressure, control liver cirrhosis is very important. This case occurred hemorrhage within four months after the first bleeding, and progressed rapidly, given she declined further treatment of the underlying cause of variceal bleed. Interventional treatment mainly refers transjugular intrahepatic portosystemic shunt (TIPS), which can effectively reduce the portal pressure, reduce the incidence of rebleeding [10]. Studies have shown that, under limited circumstances or failure in TIPS, angiography hardening/embolism method can be used [11]. For patients with normal heart rate or too fast, beta blockers can also be used to prevent rebleeding [12]. There is no sufficient data to define that which method is most effective for the duodenal variceal bleeding.

The patient is a middle-aged woman, 10-year history of hepatitis B, without antiviral treatment regularly. An acute episode of melenic stools, and followed by hematemesis, the disease progresses rapidly. Admission examination found significant liver palm and other signs of liver disease, CT examination revealed liver cirrhosis, combined liver function, conventional indicators of coagulation system and other routine tests could indicated that liver function was decompensated. The clinic diagnosis was cirrhosis and upper gastrointestinal bleeding. The liver function is not suitable for surgery treatment, active medical treatment improved hemostasis of bleeding, and further endoscopic examination, a clear reason for the bleeding caused by duodenal varices, given ligation, bleeding stopped. However, had not further treatment for the fundamental problem of portal hypertension, the patient occurred rebleeding rapidly repeatedly and massively in the short term, and ultimately death.

Duodenal variceal bleeding, although rare, but acute and has a high mortality. Adequate attention should be given to it in the clinical practice. For patients with a history of chronic liver disease, portal hypertension or other conditions, when gastrointestinal bleeding occurs, in addition to considering the esophagus, gastric varices, but also should pay attention to whether there are ectopic varices. Make a positive examination by endoscopic, CT, angiography and other tests and give timely treatment. It permits us to control the first bleeding before doing other definitive treatments.

References

