Treatment of hemorrhage after endoscopic ultrasonography guided pancreatic pseudocyst-gastric anastomosis

Longwei Fang¹ Senlin Hou² Lichao Zhang³

¹Department of General Surgery, The Second Hospital of Hebei Medical University, Shijiazhuang, China;
²Department of Biliary and Pancreatic Endoscopic Surgery, The Second Hospital of Hebei Medical University, Shijiazhuang, China;
³Department of Biliary and Pancreatic Endoscopic Surgery, The Second Hospital of Hebei Medical University, Shijiazhuang, China

The corresponding author is Lichao Zhang. His email is f18833233807@163.com

Keywords: Endoscopic ultrasonography guided pancreatic pseudocyst-gastric anastomosis. Hemorrhage. Hemostasis.

Dear Editor,
Large symptomatic PPs that cannot be absorbed by themselves need intervention. Endoscopic ultrasonography (EUS) guided PP drainage is considered the preferred choice due to its minimally invasiveness and low recurrence rate(1). However, EUS-PP drainage is associated with certain bleeding risk compared to surgical drainage. Prompt diagnosis and appropriate management is the important. We report a rare case in our center.

Case report
The patient was a 34-year-old female who was admitted to hospital for loss of appetite for 5 months, upper abdominal distension and pain for 4 days. MRCP suggested that a pancreatic pseudocyst may be present. EUS needed to be performed. The endoscopic needle puncture point was the closest position
between the PP and the gastric walls. Doppler study was performed to ensure no vascular structure was in the needle passage. Finally, a double pigtail plastic stent was placed between the stomach and the PP over the guide wire. A nasal cystic tube was placed into the PP. Five days after treatment, the patient suddenly developed hematemesis, and the hemoglobin decreased by 8g / L (normal 115-150g / L). Therefore, EUS examination and gastroscopy were performed for emergency hemostasis. The EUS found that the double pigtail plastic stent had fallen off, and the uneven echo in the cyst, it was also found to bleed blood around the nasal cystic tube. Gastroscopy was used to remove the nasal cystic tube, and find 1 active bleeding point in the depression of the gastric wall, and hemostatic clips to stop bleeding. Two days after hemostasis, the hemoglobin continued to decline, considering the remaining active bleeding, so interventional embolization was used. The hemoglobin rose gradually after the treatment.

Conclusion
Most patients is 48 hours, that is, delayed bleeding. This case is this type, although hematemesis is first symptom, the hemoglobin has dropped. We think that it is related to the following conditions: 1. The corrosiveness of pancreatic juice causes vascular inflammation and then forms pseudoaneurysm in the cyst, after puncture, the aneurysm ruptures with the decrease of intra-cyst pressure. 2. Wear and tear of stent at puncture site or cyst; 3. Corrosion of gastric vessels or pseudoaneurysms by pancreatic juice; 4. Vascular malformed, malformed vessels are often difficult to avoid, this case is vascular malformed when we interventional embolization after the failure of endoscopic hemostatic clip.(2)(3) As treatment, patients with stable condition can choose conservative or medical treatment, but hemoglobin should be monitored. If it continues to decrease or patient reports repeated melena or hematemesis, endoscopic or interventional radiology should be immediately selected.

References


Pseudocyst was seen inhomogenously hypoechoic, and double pigtail plastic stent was vanished. (fig.1) The arrow indicated the bleeding point. (fig.2) The bleeding point was located under the sunken mucosa. (fig.3), and the hemoglobin still decreased within two days after the application of the hemostasis clip (fig.4), and the interventional embolization was applied again.