

Letters to the Editor

Subcapsular hepatic hematoma after ERCP (endoscopic retrograde cholangiopancreatography)

Key words: Hepatic hematoma. ERCP. Treatment.

Dear Editor,

Endoscopic retrograde cholangiopancreatography (ERCP) is a minimally invasive technique useful for the diagnosis and treatment of biliary and pancreatic diseases (1).

The appearance of a liver hematoma after performing ERCP is extremely rare, with only 5 cases reported in the literature since 2000, when it was described the first case (2).

We report a case of subcapsular hepatic hematoma that required surgery to control bleeding.

Case report

A 72-year-old woman with diabetes mellitus and hypertension went to the emergency department complaining of mucocutaneous jaundice and dark urine, associated with epigastric pain and right upper quadrant colic during last two days. Physical examination showed right upper quadrant pain without peritonism. Laboratory test revealed bilirubin level of 5.6 mg/dL, GOT 608 IU/L and GPT 720 IU/L as the most important findings. Abdominal ultrasound was performed which showed a dilated common bile duct with choledocholithiasis (22.4 mm) and cholelithiasis. ERCP was performed, confirming the choledocholithiasis and doing endoscopic sphincterotomy removing common bile duct stones.

After 2 hours of the ending of the ERCP, the patient begins with a sudden pain in right hypochondrium. Physical examination showed a right upper quadrant pain with signs of peritonism, tachycardia, tachypnea and hypotension of 95/60 mmHg. Laboratory test revealed bilirubin (3.4 mg/dL), GOT (315 mU/mL), amylase (64 U/L), GPT (450 mU/mL), leukocytes (15.400/mm³), hemoglobin (5.5 g/dL) and creatinine (2.4 mg/dL). Fluid was given with partial hemodynamic response. Computed tomography scan showed free intraperitoneal fluid in both paracolics and pouch of Douglas, a hypodense lesion of ill-defined margins in right lobe and aerobilia in bile duct without pneumoperitoneum (Fig. 1).

Given these findings and the persistence of hemodynamic instability we decided surgery. At surgery we evidenced hemoperitoneum and 8 cm subcapsular liver hematoma partially broken located in liver segments V-VI. We proceeded to evacuate it and local hemostasis with electrocoagulation and Surgicel®, leaving a Jackson-Pratt drainage in the right subphrenic space.

The patient was admitted to the Intensive Care Unit for 48 hours. The patient had no further episodes of bleeding and CT scan control showed no evidence of any collection. The patient was discharged at 4 weeks after surgery.

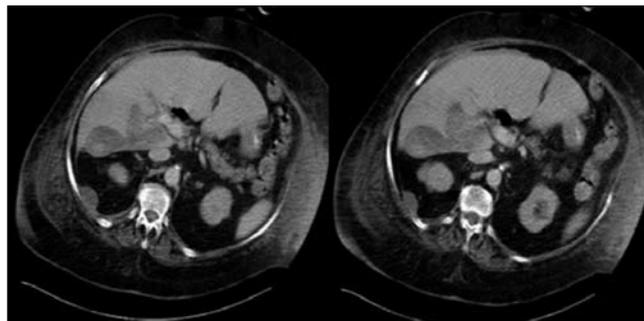


Fig. 1.

Discussion

ERCP is a minimally invasive technique, but that is not free of complications. However, it is associated with a lower mortality compared with surgery on the biliary-pancreatic tree. Pancreatitis is the most common complication, followed by duodenal perforation, hemorrhage and colangitis (2). The complication rate is variable, ranging from 2-12% according to different series (3,4), with a mortality rate between 0.5-1% (5).

The development of subcapsular hepatic hematoma after ERCP is a rare complication with only 4 cases reported in the literature (1,2). The postulated mechanism by which occurs is an accidental puncture of the guidewire into the intrahepatic biliary tree (6).

In most cases described patient management was conservative, being hematoma contained by Glisson's capsule. This should be the treatment of these patients provided they are hemodynamically stable without infections signs. Conservative treatment is transfusion of packed red cells if necessary, pain control and prophylactic antibiotics to prevent infection of the hematoma (1,2,7). In our case, the deterioration of general condition, hemodynamic instability, signs of peritoneal irritation and the finding of free fluid in the abdominal CT forced us to indicate an exploratory laparotomy.

Surgical treatment should consist of adequate drainage of the hematoma and hemostasis of bleeding place, and performing serial CT scans to monitor its evolution, evaluating the percutaneous drainage of any residual collection that may appear. In the case of rebleeding is important to assess the possibility of hepatic artery embolization (7).

In conclusion, hepatic hematoma after ERCP is a rare complication that must be managed conservatively, reserving surgery for cases of hemodynamic instability or poor condition.

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