

ABSCESS AND THROMBOSIS OF THE ROUND LIGAMENT DUE TO CHOLANGITIS A CASE REPORT

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Abstract: The round ligament of the liver is rarely affected by any pathology in adults, therefore the abscess of this ligament is a pathology little described in the world literature, being a rare cause of acute abdomen and presenting a diagnostic challenge.

We report here the case of a patient who was admitted to our service with acute abdominal pain and jaundice, whose diagnosis was determined by computed tomography and laboratory tests. The initial treatment instituted was initially conservative and failed, requiring a surgical approach.

Keywords: round ligament abscess, teres ligament abscess, falciform ligament abscess, cholangitis, cholecystitis, jaundice, Mirizzi syndrome.

INTRODUCTION

The round ligament of the liver is a remnant of the fetal umbilical vein. After birth, the umbilical vein is completely obliterated and is replaced by fibrous tissue. In patients with portal hypertension and/or liver cirrhosis, the round ligament may become patent.

Round ligament abscess is a very rare cause of acute abdomen and can present a diagnostic challenge. Few cases have been reported in the literature. The etiology involves cholangitis, cholecystitis and acute pancreatitis in adults. In all published cases, surgical treatment with resection of the ligament was performed.

In the present article, we report the case of a patient with round ligament abscess probably due to cholangitis that resolved after surgical treatment.

CASE REPORT

A 58-year-old Asian female patient was admitted to the ER in May this year complaining of pain in the upper abdomen, associated with vomiting, jaundice and choloria. On physical examination, she presented pain on palpation in the right hypochondrium and mesogastro.

Laboratory tests showed: BT 9.96 at direct expense, FA 375, GGT 423, TGO 242, TGP 498, AMYLASE 23, PCR 19.3, with no changes in the blood count. Abdominal tomography showed densification of abdominal fat near the distal portion of the umbilical vein, in the right hypochondrium, associated with an increase in the caliber of the vein and suggested a thrombus in it.

He also presented dilation of the hepatic bile duct without any visible obstructive factor during the method. gallbladder without inflammatory signs. Cholangiography was then chosen.

COLANGIO MRI

Thrombosis of the falciform ligament (umbilical vein). Liver with areas of heterogeneous contrast enhancement, more evident in the left lobe, with periportal predominance, likely inflammatory in nature. Gallbladder showing biliary clay. Choledocholithiasis. Discreet diffuse parietal thickening of the internal and extrahepatic biliary tree, as well as the walls of the gallbladder, which may be associated with an inflammatory nature, depending on clinical and laboratory correlation.

ERCP was then performed, which showed cholangitis, dilation of intra and extrahepatic bile ducts, choledocholithiasis, endoscopic papillotomy and removal of the bile duct stone.

She was discharged from hospital 3 days after admission, and was admitted again 10 days after an outpatient follow-up appointment, as she still had jaundice. A new CT scan of the abdomen was performed, showing that thrombosis of the falciform ligament (umbilical vein) and diffuse parietal thickening and mucosal hyperenhancement of the intra- and extrahepatic biliary tree remained, notably in the left lobe and hepatocholedocus, as well as the walls of the

gallbladder, which could be associated with an inflammatory nature (cholangitis). She developed abdominal sepsis and was started on Meropenem. A new ERCP was then requested, which showed dilation of the bile ducts without stones or obstructions.

Due to clinical treatment failure, laparoscopic cholecystectomy was chosen. Intraoperative findings were acute cholecystitis, grade I Mirizzi syndrome and abscess with round ligament thrombosis. Resection of the round ligament was performed due to thrombosis and local abscess. The round ligament was adhered to and blocked by the greater gastric curvature, with bleeding from the right gastroepiploic and the bed of the round ligament, requiring a supraumbilical median incision to access the cavity for hemostasis and resection of the ligament and part of the infiltrated abdominal wall.

Postoperatively, she maintained jaundice and a drain with bilious secretion. A new cholangiography was performed, which revealed residual stones in the distal common bile duct, and she underwent a new ERCP. In the procedure for calculus in the stump of the cystic duct, the option was to insert a plastic biliary prosthesis.

She was discharged on the 13th PO of cholecystectomy, receiving Meropenem via home care, maintaining jaundice and outpatient follow-up.

DISCUSSION

The round ligament of the liver consists of a thin membrane that measures approximately 17 cm and runs from the umbilical scar through the falciform ligament to the portal vein.

Pathologies related to the falciform ligament were first described in 1909 and few cases have been described in the literature since then. Including this report, only 7 cases

were described, which corroborates the rarity of this condition.

They generally occur in the presence of cholecystitis, cholelithiasis and cholangitis. The pathophysiology of these relationships is poorly understood. Bile tract infection or thrombophlebitis can spread through the portal system. In general, the gallbladder veins drain directly into the portal system and the pericholedococcal venous system. Therefore, the mechanism of formation of the suppuration of the round ligament in our patient is probably related to the cholangitis she presented.

Abscess of the falciform ligament must be considered as a rare but important complication of obstruction and infection of the biliary tract. It presents as pain in the upper abdomen, close to the midline.

Diagnosis is made through imaging exams and treatment is normally surgical, however endoscopic drainage of the bile duct and broad-spectrum antibiotics have been shown to be effective, but in our patient's case there was a failure in clinical treatment and calculous obstruction of the bile duct. recurrent biliary disease, which made surgical treatment more prudent.

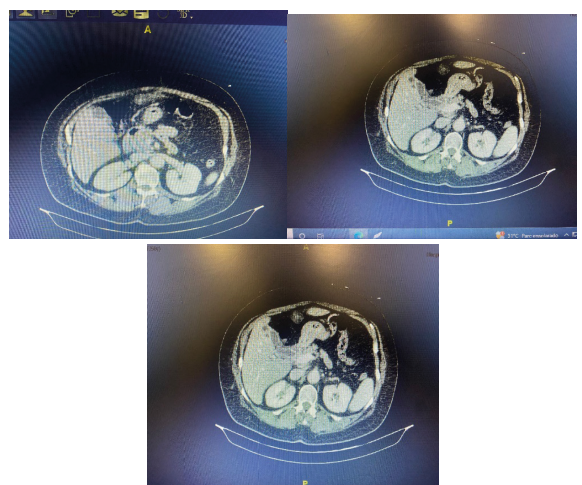


Fig 1. Computed tomography demonstrating thrombosis of the round ligament and infectious signs in the bile ducts

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