Conversion of Laparoscopic to Open Cholecystectomy for Extraction of a Common Bile Duct Stone

INTRODUCTION

Gallstone disease is the second most common reason for hospital admissions, although only 15% of patients have related symptoms. One complication is the occurrence of stones in the common bile duct (CBD) resulted from the passage of gallstones through the cystic duct into the CBD. Endoscopic retrograde cholangiopancreatography (ERCP) plus laparoscopic cholecystectomy (LC) is usually performed to treat patients with CBD stones in the vast majority of cases.

CASE PRESENTATION

A 60-year-old man was admitted to the hospital complaining of coliky pain in the right upper quadrant (RUQ) accompanied by jaundice, acholic stools, dark urine and pruritus in the last 2 weeks. Laboratory testing reported leukocytosis, hyperbilirubinemia and mild hepatic cytolysis syndrome. Physical examination was notable only for tenderness in the RUQ. Ultrasonography showed enlarged liver with dilated biliary tree and abdominal CT targeted the presumptive diagnosis of distal cholangiocarcinoma with biliary obstruction and regional lymphadenopathies. Consequently, the patient underwent ERCP in order to confirm the diagnostic, revealing a large stone in the CBD. Papillotomy and mechanical lithotripsy were performed but failed to remove the stone because of its structure and positioning, followed up with biliary stent placement aiming to avoid acute cholangitis. Therefore, abdominal MRI detected a residual 14mm stone at the hepatocystic junction and hepatic cirrhosis pattern. Due to adhesions obscuring the anatomy, the surgical treatment necessitated conversion of LC to open cholecystectomy (OC) and consisted of choledocholithotomy to remove the impacted gallstone. The gallbladder was then excised and the remaining neck portion was used to perform choledochoplasty using a gallbladder patch. The postoperative evolution was uneventful, and the patient was discharged on the 3rd day after surgery.

CONCLUSION

LC has become the gold standard for the surgical treatment of gallbladder disease, but conversion to OC is still inevitable in such cases.