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Clinical Image
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Large Retained Common Bile Duct Stones: Endoscopic, Percutaneous or Laparoscopic Treatment?

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Clinical Image

Retained Bile Duct Stones (RBDS) appear in 2% of cholecystectomized patients, therefore the risk for developing a wide range of clinical scenarios it's always present, including acute cholangitis and pancreatitis [1,2]. RBDS could be classified in accordance their size and the treatment includes endoscopic percutaneous or laparoscopic approach [3-7]. Despite most of patients with RBDS are treated endoscopically, large stones (higher than 20 mm) represents a challenge due to requirements of lithotripsy (mechanical or laser), plastic stents and multiple procedures [2,5]. Percutaneous treatment is also an option, but it's technically demanding. Lithotripsy, large balloon dilation and at least two procedures are necessary [6]. In patients with large RBDS, without surgical contraindications, our chosen option is the laparoscopic approach base on the effectivity of this procedure [7]. We describe a 65 years-old female patient, with a failed ERCP for extracting a large RBDS (Figure 1). An anterior choledocotomy was performing for stone retrieval (Figure 2). Once a missed stones were ruled out employing flexible cholangioscopy, a primary Common Bile Duct (CBD) closure was carried out (Figure 3). The evolution was uneventfully and during 12 months of follow-up, the patient remains asymptomatic.

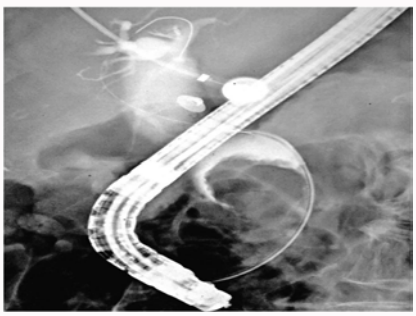

Figure 1: ERCP demonstrating a large RBDS.

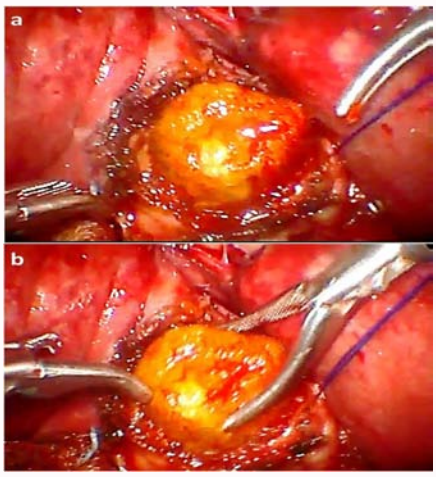

Figure 2: Laparoscopic retrieval of common bile duct stone.

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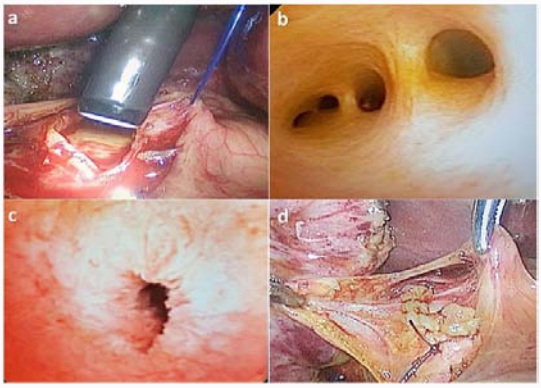

Figure 3: (a) Laparoscopic flexible cholangioscopy; **(b,c):** Intrahepatic and extrahepatic bile duct examination; **(d)** CBD primary closure after laparoscopic exploration.

References

1. Lee DH, Ahn YJ, Lee HW, Chung JK, Jung IM. Prevalence and characteristics of clinically significant retained common bile duct stones after laparoscopic cholecystectomy for symptomatic cholelithiasis. Ann Surg Treat Res. 2016;91(5):239-46.
2. ASGE Standards of Practice Committee, Maple JT, Ikenberry SO, Anderson MA, Appalaneni V, Decker GA, et al. The role of endoscopy in the management of choledocholithiasis. Gastrointest Endosc. 2011;74(4):731-44.
3. Lauri A, Horton RC, Davidson BR, Burroughs AK, Dooley JS. Endoscopic extraction of bile duct stones: management related to stone size. Gut. 1993;34:1718-21.
4. Karsenti D. Endoscopic management of bile duct stones: residual bile duct stones after surgery, cholangitis, and "difficult stones". J Visc Surg. 2013;150(3):39-46.
5. Veld JV, van Huijgevoort NCM, Boermeester MA, Besselink MG, van Delden OM, Fockens P, et al. A systematic review of advanced endoscopy-assisted lithotripsy for retained biliary tract stones: laser, electrohydraulic or extracorporeal shock wave. Endoscopy. 2018;50(9):896-09.
6. Szulman C, Giménez M, Sierre S. Antegrade papillary balloon dilation for extrahepatic bile duct stone clearance: lessons learned from treating 300 patients. J Vasc Interv Radiol. 2011;22(3):346-53.
7. Gupta N. Role of laparoscopic common bile duct exploration in the management of choledocholithiasis. World J Gastrointest Surg. 2016;8(5):376-81.