

ABSTRACT

A PROSPECTIVE STUDY ON THE CLINICAL OUTCOMES IN THE SURGICAL MANAGEMENT OF FAILED ERCP CHOLEDOCHOLITHIASIS – AN INSTITUTIONAL EXPERIENCE

Background: Choledocholithiasis or common bile duct stones (CBDS) may occur in up to 3%–14.7% of all patients for whom cholecystectomy is performed.¹ Different methods have been used for the treatment of CBDS but the suitable therapy depends on conditions such as patient satisfaction, number and size of stones, and the surgeons experience in laparoscopy. Endoscopic retrograde cholangiopancreatography (ERCP) with or without endoscopic biliary sphincterotomy, laparoscopic CBD exploration (LCBDE - transcystic or transcholedochal), or laparotomy with CBD exploration (OCBDE by T-tube, C-tube insertion, Choledochenterostomy or primary closure) are the most commonly used methods for managing CBDS.² The study aims to revisit the pathophysiology and diagnosis of CBDS and compare the different techniques of treatment with a special focus on the various surgical modalities.

Objectives: The study aimed to determine the clinical, radiological and biochemical characteristics of CBD stones, that make them prone to ERCP failure. Another objective was to study the clinical outcomes between the OCBDE + T and OCBDE + CDD/CDJ and LCBDE groups.

Materials and Methods: The study was a prospective, observational study conducted in a tertiary care centre from March 2017 to September 2018, including the first 30 patients with ERCP failed choledocholithiasis.

These patients ($n = 30$) subsequently underwent open or laparoscopic common bile duct exploration for complex biliary stone disease. The 30 patients included in the

study were observed in three different treatment groups, viz. **A) OC+OCBD+/-T; B) OC+OCBDE+CD/CJ/HJ; C) LC+LCBDE.**

Results: The characteristic features of choledocholithiasis, which is prone for ERCP failure based on our study population (n = 30) are multiple (>3), large (>14 mm), proximal 1/3rd, mixed stones with CBD diameter > 14 mm.

There is no difference in the clinical outcomes, radiological, and biochemical clearance of CBD stones, length of hospital stay between Open CBD Exploration with T-tube or Choledochenterostomy and Laparoscopic CBD Exploration, except for the Quality adjusted Life years lost, which is least in laparoscopic CBE exploration patients (p < 0.001).

Conclusion: The ideal management of choledocholithiasis remains controversial, but the treatment for choledocholithiasis must always be tailored to the needs of each patient.

Key words: ERCP failed Choledocholithiasis, Laparoscopic CBD exploration, Difficult CBD stones; Choledochoduodenostomy; Single stage management of choledocholithiasis.

References:

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