

Laparoscopic Intraoperative Sonoscopy and Choledochoscopy in Patients with Suspected Choledocholithiasis

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Introduction. The definition of indications for urgent laparoscopic common bile duct exploration (LCBDE) is still a matter of debate.

Aim. The aim of the study is to share the experience with the one stage LCBDE with assistance of intraoperative ultrasonoscopy (IOUSS) and choledochoscopy.

Material and Methods. 320 patients with suspected choledocholithiasis (dilatation of common bile duct > 6 mm, elevated bilirubin levels, biliary pancreatitis and/or cholangitis) were prospectively included; the time period between 2012–2014. IOUSS was done in all, followed by choledochoscopy in cases of choledocholithiasis. Main outcomes were analysed only in patients who underwent choledochoscopy.

Results. Choledochoscopy was done in 99 patients and 57 from them had jaundice, 60 cholangitis, 23 biliary pancreatitis and 51 acute cholecystitis. In 38 patients the procedure was done within 72 hours and in 61 later than 72 hours after admission. LCBDE was performed via transcystic approach in 58 and via transductal approach in 41 patients, median operative time was 80 (IQR = 115–65) minutes vs. 120 (IQR = 138–93) minutes, $p \leq 0.001$. T-tubes were placed in 9 patients. Bile duct clearance was achieved in 94.9%. Postoperative complication rate reached 10.9%. Median hospital stay was 9 (IQR = 14–7) days. One patient succumbed.

Conclusions. LCBDE with assistance of IOUSS and choledochoscopy is a feasible and safe procedure that can be provided in urgently admitted patients with choledocholithiasis.