Recent advances in common bile duct stones management

Errawan R Wiradisuria
Indonesian Society of Endo-Laparoscopic Surgeons, Indonesia

Since laparoscopic cholecystectomy was done for the first time by Philippe Mouret (France, 1987), the development of minimally invasive surgery in hepatobiliary system have been progressing, followed by Berci, Phillips (USA, 1991) who has done laparoscopic common bile duct exploration (LCBDE) successfully later on. Abnormal intra operative cholangiogram, unsuccessful attempts at endoscopic stone extraction for large/occluding stones, and intra hepatic stones are the indications for a LCBDE. While contraindications for the procedure, such as inability of the surgeons to perform the necessary maneuvers, absent of indication, instability of the patient, local condition in the porta hepatic made exploration hazardous, diameter of cystic duct less than 4 mm (transcystic procedure) or diameter common bile duct (CBD) less than 6 mm (transcholedochal). Three major options in management of cholelithiasis with CBD stone were open cholecystectomy with CBD exploration, endoscopic sphincterotomy and stone extraction followed by laparoscopic cholecystectomy (two stages) or laparoscopic cholecystectomy and laparoscopic CBD exploration done in one stage. Choice of the treatment was based on patient safety consideration, time efficiency, and cost effectiveness. Surgeons’ competency becomes an important role to determine a successful LCBDE. Availability and preparedness of instruments/equipment included Endoscopic Retrograde Cholangiopancreatography (ERCP) facilities are also the crucial supporting factors. LCBDE in Jakarta was done from August 2004 to July 2016 with 44 cases. Mean age of the patients were 52 years. Mean operation time was approximately 3.5 hours, with mean hospital stay about 5.5 days. Conversion of the operation was caused by impacted stones, massive adhesion (anatomical reason) or instrument failures. Several complication or morbidity after the surgery included retained stone, subphrenic abscess, T-tube insertion leakage, respiratory tract infection, urinary tract infection and superficial wound infection. Recently, the LCBDE become an important alternative choice in treatment of CBD stone, especially in the failure of ERCP/endoscopic stone extraction. LCBDE as a minimal invasive procedure has the advantages with high success rate, low morbidity and mortality rate and faster post-operative period recovery. However, we still need more training and learning curve.

Biography

Errawan R Wiradisuria is the President of Indonesian Society of Endo-Laparoscopic Surgeons and Chairman of Advance Laparoscopic Surgery courses (Asia-Pacific). He has published numerous papers in reputed journals and has been serving as an Editorial Board Member of repute.

errawan.w@gmail.com