

**LAPAROSCOPIC VERSUS OPEN SURGICAL TECHNIQUE
FOR COMMON BILE DUCT EXPLORATION IN
CHOLEDOCHOLITHIASIS**

Thesis

*Submitted for partial fulfillment of M.D. Degree In General
Surgery*

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا

إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

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LIST OF ABBREVIATIONS

ALT	Alanine Amino Transferase
ALP	Alkaline Phosphatase
AST	Aspartate Amino Transferase
CCK	Cholecystokinin
CDD	Choledocho- Duodenostomy
CDL	Choledocholithiasis
CBD	Common Bile Duct
CTC	Computed Tomographic Cholangiography
CDCP	Computed tomographic duodeno- cholangiopancreatography
CT	Computed Tomography
EHL	Electro-Hydraulic Lithotripsy
ERCP	Endoscopic Retrograde Cholangio- Pancreatography
EST	Endoscopic Sphincterotomy
EUS	Endoscopic Ultrasonography
ESWL	Extra-Corporeal Shock Wave Lithotripsy
Fr	French
GGT	Gamma Glutamyl Transferase

GA	General Anesthesia
IDUS	Intra-ductal Ultrasonography
IOC	Intra-Operative Cholangiography
LC	Laparoscopic Cholecystectomy
LCBDE	Laparoscopic Common Bile Duct Exploration
LUS	Laparoscopic Ultrasonography
LFTs	Liver Function Tests
MRCP	Magnetic Resonance Cholangio- Pancreatography
MRI	Magnetic Resonance Imaging
MHz	Mega Hertz
PTC	Percutaneous Transhepatic Cholangiography
TCD	Transcystic CBD exploration
TSP	Trans-Duodenal Sphincteroplasty
US	Ultrasonography

Introduction

&

Aim of the Work

INTRODUCTION

Cholelithiasis, one of the most common medical conditions leading to surgical intervention, affects approximately 10 % of the adult population. Choledocholithiasis develops in about 10%-20% of patients with gallbladder stones and the literature suggests that at least 3%-10% of patients undergoing cholecystectomy will have CBD stones. CBD stones may be discovered preoperatively, intraoperatively or postoperatively. Multiple modalities are available for assessing patients for Choledocholithiasis including laboratory tests, ultrasound, CT scan, ERCP and MRCP (*Freitas et al., 2006*).

The management of CBD stones traditionally required open laparotomy and bile duct exploration. With the advent of endoscopic and laparoscopic technology in the latter half of last century, ERCP and laparoscopic cholecystectomy has become the mainstream treatment for CBD stones and gallstones in most medical centers around the world. However, in certain situations, ERCP cannot be feasible because of difficult cannulation and extraction. ERCP can also be associated with potential serious complications, in particular for complicated stones requiring repeated
