

LIST OF FIGURES

Figure		Page
(1)	ERCP image showing the biliary tree and the main pancreatic duct and distal stricture.....	3
(2)	ERCP image of patient showing post cholecystectomy leak of contrast	3
(3)	ERCP image in a patient with common bile injury just below the confluence of the right and left hepatic ducts	4
(4)	Bile duct leaks from an aberrant duct of Luschka	4
(5)	ERCP image of patient with postoperative biliary injury due to surgical clip.....	4
(6)	A post-operative distal stricture with shouldering (arrow) seen on percutaneous trans-hepatic cholangiography	4
(7)	Patient with anastomotic stricture after liver transplantation.....	6
(8)	Showing Strasberg classification	7
(9)	Strasberg type C bile duct injury indicating a leak from the right posterior branch	8
(10)	Strasberg type A bile duct injuries indicating a leak from (a) the cystic duct; (b) from the gallbladder bed; this patient ultimately required surgery.....	8
(11)	Strasberg type E4 bile duct injury.....	8
(12)	Stewart –Way classification of laparoscopic bile duct injuries	10
(13)	Percutaneous trans-hepatic cholangiogram with balloon dilation of a postoperative bile duct stricture.....	11
(14)	Ultrasound image of patient with chronic pancreatitis	12
(15)	ERCP image of primary sclerosing cholangitis	13
(16)	Csendes classification of MS	14
(17)	Type I choledochal cyst	16
(18)	Type II choledochal cyst.....	16
(19)	Type III choledochal cyst (choledochocele)	17
(20)	Type IV choledochal cyst (extrahepatic and intrahepatic disease).....	17
(21)	Type V choledochal cyst (intrahepatic, Caroli disease).....	17
(22)	CT image of cancer head of pancreas	21
(23)	CT image of cholangiocarcinoma.....	23

Figure		Page
(24)	Bismuth classification of cholangiocarcinoma	24
(25)	CT image of cancer gall bladder	25
(26)	MRCP showing 2 mm long stricture of the common bile duct with prestenotic dilatation	30
(27)	EUS image showing pancreatic mass and dilated CBD	31
(28)	Percentage of male to female ratios between the two groups	53
(29)	Mean age between the two groups	54
(30)	Comparison between two groups according to diagnosis	55
(31)	Mean of hemoglobin	56
(32)	Mean of platelet count	57
(33)	Mean of White blood cell count	58
(34)	Mean of serum AST between the two groups	59
(35)	Mean of serum ALT between the two groups	60
(36)	Mean of serum albumin between the two groups	61
(37)	Mean total serum bilirubin of both groups	62
(38)	Mean total serum bilirubin of both groups	63
(39)	Mean serum GGT of the two groups	64
(40)	Mean serum ALP of the two groups	65
(41)	Mean prothrombin activity of the two groups	66
(42)	Mean serum creatinine in both groups	67
(43)	Mean serum urea in both groups	68
(44)	Comparison between the two studied groups according to TSR and THSR	70
(45)	Comparison between the two studied groups as regard serum bilirubin (15 days post procedure)	71
(46)	Case (1) inoperable cancer head pancreases managed by ERCP and metallic stent was inserted	72
(47)	Case (2) Distal cholangiocarcinoma confirmed by CT and ERCP	72
(48)	Case (3) Distal CBD stricture mostly benign diagnosed by ERCP	72
(49)	Case (3) Distal CBD stricture managed by plastic stent insertion by ERCP	72

Figure		Page
(50)	Case(1) PTC image of patient with Distal CBD stricture managed by plastic stent insertion.....	73
(51)	Case (2) PTC image of patient with Distal cholangiocpsarcoma diagnosed by CT and managed by metallic stent insertion.....	73
(52)	PTC image of patient with Distal CBD stricture due to Cancer pancreas diagnosed by CT	73
(53)	PTC image of patient with CBD stricture managed by internal –external drain	73
(54)	Comparison between the two groups as regard major complications and 30 day mortality	75
(55)	Comparison between the two groups as regard causes of death.....	77
(56)	Comparison between the two studied groups according to mean hospital stay	78

LIST OF ABBREVIATIONS

AFP	Alpha Feto Protein
ALP	Alkaline Phosphatase
ALT	Alanine Amino Transferase
AST	Aspartate Amino Transferase
CA 19.9	Carbohydrate Antigen 19.9
CBD	Common Bile Duct
CEA	Carcino Embryonic Antigen
CHD	Common Hepatic Duct
CP	Chronic Pancreatitis
ERCP	Endoscopic Retrograde Cholangio- pancreatography
EUS	Endoscopic Ultrasonography
HCC	Hepatocellular Carcinoma
HIV	Human Immune Deficiency Virus
LFTs	Liver functions tests
MRCP	Magnetic Resonance Cholangio Pancreatography
OLT	Orthotropic Liver Transplantation
PSC	Primary Sclerosing Cholangitis
PTD	Percutaneous trans-hepatic drainage
RPC	Recurrent Pyogenic Cholangitis
THSR	Therapeutic success rate
TSR	Technical success rate