6th International Congress of Hepato-Pancreatico-Biliary and Liver Transplant Surgery

In collaboration with

Anesthesia and Intensive Care Departments, National Liver Institute, Menoufia University

PRE-CONGRESS WORKSHOP

Hand-On Course

APRIL 29 - 30, 2018

National Liver Institute, Menoufia University, Sheben El-Kom, Egypt

Core Scientific Meeting

MAY 1-2, 2018

Grand Nile Tower Hotel

CAIRO, EGYPT

NEW CHALLENGES IN

Hepato-Pancreatico-Biliary and Liver Transplant Surgery and Anesthesia

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WELCOME ADDRESS

Dear Colleagues,

On behalf of the organizing and scientific committees, it is a great pleasure and honor to welcome you to attend the 6th International annual Congress of Hepato-Pancreatico-Biliary, Liver Transplant Surgery, Anesthesia and Intensive care Departments, National Liver Institute, Menoufia University, which will be held in May 1-2, 2018, at Grand Nile Tower Hotel Hotel, Cairo, Egypt.

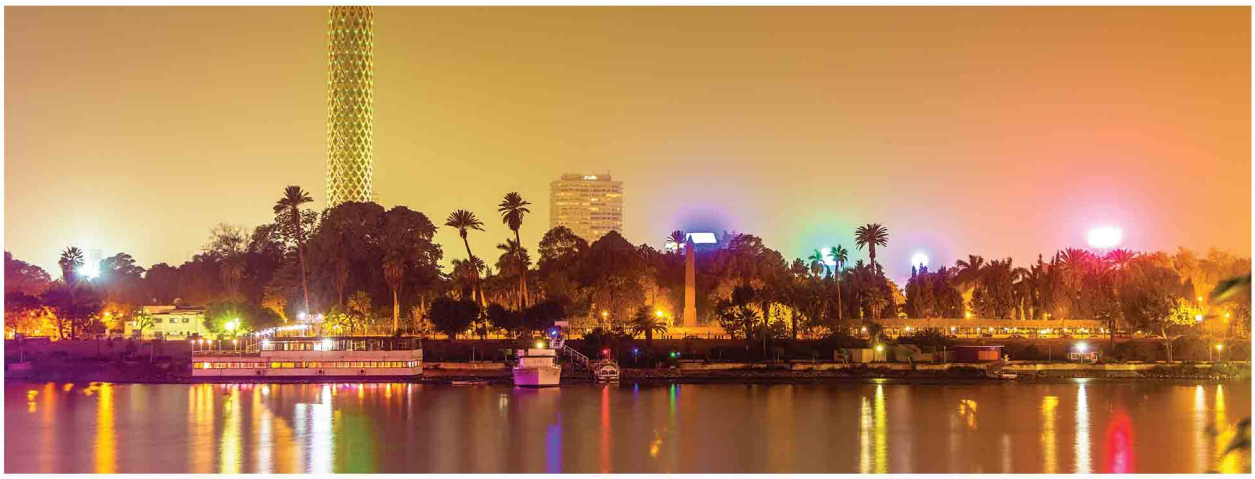
We are witnessing an eager development in surgical techniques in the management of liver, pancreatic and biliary diseases. Therefore, the main theme of this congress will be new challenges in hepato-pancreatico-biliary and liver transplant surgery in integrated and multidisciplinary way.

The conference aims to provide a latest scientific knowledge of current development, future changes and consensus forum in the field of HPB diseases through state of art lectures, round table discussions, debatable issues and free paper presentation to maximize patient care.

It also includes a pre-congress Hand-on course in Laparoscopic Pancreatic Surgery for benign and malignant lesions and Laparoscopic Bilio-enteric anastomosis with international eminent professors in the field of laparoscopic Hepato-Pancreatico-Biliary surgery.

We look forward to see you in May 2018 in Cairo for what we expect will be highly knowledgeable meeting.

Prof. Ibrahim Abdel-Kader
Secretary of the Congress



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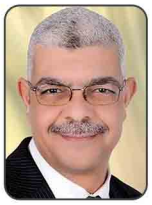

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PRE-CONGRESS WORKSHOP HANDS-ON COURSE

Basic Laparoscopic Learning through Simulation (LTS) and Laparoscopic Hernia Repair Surgery	
Venue	Department of Hepatopancreaticobiliary (HPB) Surgery, 4th Floor, New Building National Liver Institute, Menoufia University, Shiben El-Kom, Egypt

SUNDAY, APRIL 29, 2018		
09:00 - 10:00	Registration	
10:00 - 10:30	Lecture (1): Laparoscopic Access Techniques: Past ,Present & Future Emergent	Ibrahim Abdel-Kader
10:30 - 11:00	Lecture (2): Laparoscopic Hernia Anatomy	Amr Mostafa
11:00 - 11:30	Lecture (3): Types of Laparoscopic Inguinal Hernia Repair	Hossam Soliman
11:30 - 12:00	Coffee Break	
12:00 - 13:00	LTS Practical 1	
13:00 - 14:00	LTS Practical 2	
14:00 - 15:00	Lunch	
15:00 - 17:00	Live Surgery : Laparoscopic Inguinal Hernia Repair	
17:00 - 17:30	Coffee Break	
17:30 - 18:00	Videos and closing remarks	

MONDAY, APRIL 30, 2018	
10:00 - 11:00	LTS Practical 1
11:00 - 12:00	LTS Practical 2
12:00 - 12:30	Coffee Break
12:30 - 14:30	Live Surgery : Laparoscopic inguinal Hernia Repair
14:30 - 15:30	Lunch
15:30 - 17:30	Live Surgery : Laparoscopic inguinal Hernia Repair
17:30 - 18:00	Coffee Break
17:30 - 18.00	Videos and closing remarks

CORE SCIENTIFIC PROGRAM
TUESDAY, MAY 1, 2018 (FARHATY BALLROOM)

10:00 - 11:40
LIVER TRANSPLANTATION (SESSION I)

Chairpersons		
Abdel-Rahman Fouda	Ayman Salah	Dieter Broering
Essam Salah	Ibrahim Marwan	Khaled Amer
Mureo Kasahara	Tarek Ibrahim	

10:00 - 10:15	16 years' experience in Living donor liver transplantation in Egypt	**Rafaat R. Kamel** Ain Shams University
10:15 - 10:30	ABO Incompatible pediatric liver Transplantation in Japan	**Mureo Kasahara** Japan
10:30 - 10:45	Stented Vs. Stentelss Biliary Reconstruction in LDLTx.	**Amr Abdel-Aal** Ain Shams University
10:45 - 11:00	Difficult Situations in LDLT: Case presentation	**Mohamed Fathy** Ain Shams University
11:00 - 11:15	Comparison between different technique for double portal vein reconstruction in right lobe LDLTx	**Mohamed El-Shobary** Mansoura University
11:15 - 11:30	Experience and Difficulties in Liver Transplantation at NLI	**Hossam Soliman** NLI, Menoufia University
11:30 - 11:40	Hypercoagulation in Liver Transplantation	**Khaled Yassen** NLI, Menoufia University

11:40 - 12:00
STATE OF THE ART LECTURE (I)

Chairpersons		
Amr Abdel-Aal	Ibrahim Abdel-Kader	Mohamed Fathy

11:40 - 12:00	Liver Transplantation and Portal vein thrombosis	**Dieter Broering** Germany

12:00 - 12:30
OPENING CEREMONY

12:00 - 12:30	The speech of the secretary of the conference.
	The speech of the Vice President of the Conference.
	The speech of the President of the Conference.
	The speech of the Dean of the National Liver Institute.
	The speech of the Vice president of Menoufia University.
	The speech of the president of Menoufia University.

10:00 - 12:30 ULTRASOUND WORKSHOP
(AKHNATON BALLROOM)
Under Supervision of Mohamed Hamada (Anaesthesia Department Al Azhar University)

In Ultrasound Guided Regional Anaesthesia and Pain Management workshop	• **Upper and Lowe Limb Blocks** • **Truncal Blocks** • **Pain Interventions**

Mohamed Hamada	(Al Azhar University)	**Sanaa El- Sawy**	(Zagazig University)
Ahmed El-Sawy	(Al Azhar University)	**Amr Abdel-Fattah**	(Al Azhar University)

Coordinators	**Ahmed Bedawy** Helwan University	**Mahmoud Gamal** NLI, Menoufia University
	Menna El-Shafie NLI, Menoufia University	**Nagwa Ibrahim** NLI, Menoufia University

12:30 - 13:00	**Coffee Break**

13:00 - 14:30
LIVER SESSION I (SESSION II)

Chairpersons		
Ahmed El-Kased	**Alaa Khalil**	**Amr Helmy**
Hany Shoreem	**Helmy Abaza**	**Hisham Abdel-Dayem**
Khaled Abou El-Ella	**Yahia Zakaria**	

13:00 - 13:15	**Management of Clinical Trials**	**Hisham Abdel-Dayem** NLI, Menoufia University
13:15 - 13:30	**Liver Resection Vs. LDLT for HCC in Child A and B Patients**	**Ahmed Sultan** Mansoura University
13:30 - 13:45	**Functional Imaging of Hepatic Malignancies**	**Mohamed Hassany** NLI, Menoufia University
13:45 - 14:00	**Pathological Challenges in the Diagnosis of Hepatocellular Carcinoma**	**Nermin Ehsan** NLI, Menoufia University
14:00 - 14:15	**HCC Occurrence and Recurrence post direct acting antivirals**	**Mohamed El-Gazzar** NLI, Menoufia University
14:15 - 14:30	**Caudate Lobe Resection: Case Presentation**	**Islam Ayoub** NLI, Menoufia University

14:30 - 16:00

PANCREAS SESSION (SESSION III)

Chairpersons		
Amr Sadek	Basem Hegab	Gamal El-Ebeidy
Gamal Mousa	Hisham Reyad	Hussein Okasha
Maher Osman	Mohamed El-Shobari	Osama Hegazy

14:30 - 14:45	Pancreaticoduodenectomy: Pearls, Perils, and Pitfalls	**Maher Osman** NLI, Menoufia University
14:45 - 15:00	EUS Staging of solid pancreatic tumors	**Hussein Okasha** Cairo University
15:00 - 15:15	Determining resectability in pancreatic tumors: Review of 70 cases	**Ashraf Zakaria** Cairo University
15:15 - 15:30	Locally advanced pancreatic tumor…..Is curable??? .. case presentation	**Taha Yassen** NLI, Menoufia University
15:30 - 15:45	Portal and mesenteric vein resection during pancreaticoduodenectomy and total pancreatectomy	**Hazem Zakaria** NLI, Menoufia University
15:45 - 16:00	Comparative study between duct to mucosa and invagination pancreaticojejunostomy after PD: A Randomized controlled Trail	**Ahmed Nabih El-Ghawalby** Mansoura University

16:00 - 17:30

IATROGENIC BILE DUCT INJURIES (PANEL I) (SESSION IV)

Moderator	**Ibrahim Abdel-Kader** (NLI, Menoufia University)

Panelists		
Alaa Radwan	Atef Abdel-Ghany	Ayman Hassanein
Emad Esmat	Khaled Safwat	Khaled Zaki
Maher Osman	Mohamed El Warraky	Yousry Taher

14:30 - 16:40	ANAESTHESIA & INTENSIVE CARE SESSION (AKHNATON BALLROOM)		
Chairpersons	**Essam Abdel-Fattah** NLI, Menoufia University	**Hatem Amin** Menoufia University	**Soheir Soliman** Tanta University
Coordinators	**Nagwa Ibrahim** NLI, Menoufia University	**Mahmoud Gamal** NLI, Menoufia University	

14:30 - 14:50	**Intensive Care readmission of live donor liver transplant recipients; Incidence, Causes & outcome**	**Gamal Ellewa** Ain Shams University
14:50 - 15:20	**Antibiotherapy in liver transplantation**	**Amr Yassen** Mansoura University
15:20 - 15:40	**Opioid Free Anaesthesia**	**Mohamed Abdel-Latif** Cairo University
15:40 - 16:00	**Ethical Issues related to LDLT (Trust, Discipline versus Risk and Harm)**	**Fawzia Aboul-Fetouh** Cairo University
16:00 - 16:20	**Nutrition in liver patients undergoing surgery**	**Magdy Khalil** NLI, Menoufia University
16:20 - 16:40	**Suggamedex in liver Institute**	**Khaled Yassen** NLI, Menoufia University **Mahmoud Gamal** (MSc)

17:30	**Lunch**

09:30 - 11:00

LIVER SESSION II (SESSION V)

Chairpersons		
Amr Mostafa	Hisham El-Ghazaly	Hossam Soliman
Mohamed Abdel-Wahab	Mohamed Bahaa El-Din	Mureo Kasahara
Soliman M. Soliman	Taha Yassen	

09:30 - 09:45	Is there is place for resection in HCC Nowadays in Era of Liver Transplantation & intervention radiology	**Mohamed Abdel-Wahab** Mansoura University
09:45 - 10:00	Controversy in management of CRLM	**Mohamed Bahaa El-Din** Ain Shams University
10:00 - 10:15	Conversion Surgery in Patients with CRLM	**Ahmed Sowilam** Tanta University
10:15 - 10:30	Colorectal Liver Metastasis: Do we Still Have a Role for cure?	**Naser Abdel-Bary** Menoufia University
10:30 - 10:45	Radiologic Intervention of Colorectal Liver Metastasis	**Mohamed El Warraky** NLI, Menoufia University
10:45 - 11:00	Systemic Therapies for Hcc: 2018 Update	**Mohamed El boray** Al Azhar University

09:00 - 10:00 STATISTICS SPSS

(AKHNATON BALLROOM)

Sayed Amr

Coordinator	**Nagwa Ibrahim** NLI, Menoufia University

11:00 - 11:30

STATE OF THE ART LECTURE (II)

11:00 - 11:30	How to established a successful Liver Transplantation Program	**Mureo Kasahara** Japan

11:30 - 13:30
LRLTx in 17 Years: Is It Time for DDLTx (Panel II) (SESSION VI)

Moderator	Tarek Ibrahim (NLI, Menoufia University)

Panelists		
Adel Hosny	Ahmed Hazem	brahim Marwan
Magdy Amin	Mahmoud El-Metiny	Mohamed Abdel-Wahab
Mohamed Bahaa El-Din	Mohamed Fathy	Mostafa El-Shazly
Mureo Kasahara	Osama El-Malt	Yasser Hatata

Interlocutors		
Amr Mostafa	Basem Hegab	Hany Shoreem
Hossam Soliman	Ibrahim Abdel-Kader	Khaled Abou El-Ella
Mohamed Ismail	Mohamed Taha	Osama Hegazy
Taha Yassen		

10:00 - 13:00 AIRWAY WORKSHOP (AKHNATON BALLROOM)		
Course Director	Ezz El-Din Fekry	Mohamed El-Fikky
Coordinators	Ahmed Bedawy Helwan University	Nagwa Ibrahem NLI, Menoufia University

ADVANCED AIRWAY MANAGEMENT WORKSHOP		
Station 1	Video-Laryngoscopes	Abdel-Azim Hegazy Mohamed Gaber
Station 2	Extra-glottic airway devices	El-Sayed Setohy Sameh Hassan
Station 3	Adult & Pedia FOB intubation (oral & nasal)	Talaat Abdel-Halim Osama Allam
Station 4	Lung & Airway ultrasound	Mohamed El-Feky Ahmed Mosad
Station 5	Invasive airway	Tarek Abdel-Salam

Time: 10:00 - 13:00 (35 min/ station)
To achieve best outcome, the workshop will accommodate 30 candidates only, (candidates: instructor ratio is 6:1 per station)
Stors Company
Sonosite Ultrasound

13:30 - 14:00	Coffee Break

14:00 - 15:30

BILIARY SESSION (SESSION VII)

Chairpersons		
Abou Bakr Mohie El-Din	Alaa Radwan	Hassan Shaker
Khaled Abou El-Ella	Mohamed Abou Shady	Mohamed Taha
Nabil Shedid	Osama El-Khadrawy	Yousry Taher

14:00 - 14:15	Surgical Role in management of cholangiocacinoma	**Khaled Abou Elella** NLI, Menoufia University
14:15 - 14:30	Remant G.B. and cystic duct stump stone after cholecystectomy :Tertiary Multicentric Experience	**Alaa Radwan** Sohag ,University
14:30 - 14:45	Dilemma in lower CBD biliary strictures (indeterminate stricture), diagnostic considerations, and approach	**Amr Mostufa** NLI, Menoufia University
14:45 - 15:00	Specialist early and immediate repair of post-laparoscopic cholecystectomy bile duct injuries is associated with an improved long-term outcome	**Bassem Hegab** NLI, Menoufia University
15:00 - 15:15	Management of biliary injury following blunt abdominal trauma in a tertiary referral center	**Osama Hegazy** NLI, Menoufia University
15:15 - 15:30	Validation of the modified technique of closure of bile duct stump in Living donor Hepatectomies	**Hany Shoreem** NLI, Menoufia University

14:00 - 15:00 NON INVASIVE MONITORING WORKSHOP

(AKHNATON BALLROOM)

Coordinator	**Nagwa Ibrahim** NLI, Menoufia University	**Mohamed Osman** NLI, Menoufia University

Non-invasive Monitoring during Major Surgery	**Khaled Yassen** NLI, Menoufia University

CORE SCIENTIFIC PROGRAM
WEDNESDAY MAY 2, 2018 (FARHATY BALLROOM)

15:30 - 17:00

General HPB (SESSION VIII)

Chairpersons		
Amany Abdel-Maksoud	Amr Mostafa	Basem Hegab
Hosam Soliman	Hussein El-Amin	Ibrahim Boghdady
Maher Osman	Samera Azzeet	

15:30 - 15:45	**The surgeon's Role in Antibiotic Stewardship**	**Magdy Khalil** NLI, Menoufia University
15:45 - 16:00	**Assessing Surgical risk for patients with liver diseases**	**Mohamed Akl** NLI, Menoufia University
16:00 - 16:15	**NAFLD: What the Clinician need to know?**	**Ibrahim Boghdady** Menoufia University
16:15 - 16:30	**Cadaveric donor surgical management, organs preservation innovation and UK liver allocation Scheme**	**Ahmed El-Shawadfy** NLI, Menoufia University
16:30 - 16:45	**Patterns of liver cells microscopic changes during liver ischemia and ischemia reperfusion injury in animal model**	**Wael Tawfik** Mansoura Insurance Hospital
16:45 - 17:00	**Toward a personalized medicine at NLI through cooperation between surgery, pathology & Bio repository units**	**Samera Azzat** NLI, Menoufia University

15:00 - 16:00 ANAESTHESIA & SURGERY POSTER SESSION

(AKHNATON BALLROOM)

Anaesthesia Chairpersons		
Esam Abdel-Fattah NLI, Menoufia University	**Tarek El-Komy** Military Hospital	**Tarek El-Saeed** Al Azhar University

Surgery Chairpersons		
Amr Sadek NLI, Menoufia University	**Gamal Mousa** Tanta University	**Hisham Reyad** Assiut University
Osama Hegazy NLI, Menoufia University	**Taha Yassen** NLI, Menoufia University	

17:00	**Lunch**

BILIARY RECONSTRUCTION IN LIVING DONOR LIVER TRANSPLANTATION

Ahmed Swelam, Mohammad Hamdy Abo-Ryia, Osama ElKhadrawy, Gamal Moussa, Sherif ElGarf, Marc Antoine Allard, Eric Vibert, Daniel Cherqui, Denis Castaing, René Adam.

Introduction: Liver transplantation (LT) has become the treatment of choice in patients with end stage liver disease (ESLD) and hepatocellular carcinoma HCC. However, more recently, successful LT for various indications has resulted in a relative shortage of cadaveric organs. To overcome these limitations, one of the possible options have been demonstrated using living donor liver transplantation LDLT. Biliary complications remain a major cause of morbidity after LDLT and have been the "Achilles' heel" of LDLT. Regardless the improvements of immunosuppresion, organ preservation, intra operative management, and refinements of surgical technique, the incidence of biliary complications is varying from 11% to 40%. Assessment of the biliary anatomy and identification of normal variants are challenging points in the donor selection process and surgical planning in LT.

Biliary anatomy is variable and a conventional branching pattern of the CBD into right and left ducts is only present in 57% to 60% of the normal population

Aim of the work: The aim of this study is to assess the outcome of different techniques of biliary reconstruction and their impact in LDLT in patients with ESLD and HCC.

Patients & Methods: This was a prospective study that was carried out at HPB, Paul Brousse Hospital, South Paris University, France during the period from January 2012 to August 2016 and included 40 patients who underwent LDLT using either right or left lobe liver graft.

Results: Overall incidence and risk factors of biliary complications •Ten patients (25%) developed biliary complications. ➢Biliary fistula 6 patients (15%) ➢biliary stricture 5 patients (12.5%). ➢One patient developed both biliary fistula and stricture leading to overlapping between both complications.

Management of biliary complications: Biliary fistula (6 Pts): • Two patients presented early during the presence of intra-abdominal drain and required prolonged drainage. • Three patients presented late and required sonar guided drainage with culture and sensitivity of the drained bile. • Only 1 patient who was presented with both bile fistula and stricture was managed by conversion of duct to duct D-D anastomosis to roux-en-Y-hepaticojejunostomy RYHJ.

Biliary stricture (5 Pts): • Three of them were D-D anastomosis and improved with repeated endoscopic dilatation and stenting. • one patient was RYHJ and improved with percutaneous transhepatic stenting. • One patient who was presented with both bile fistula and stricture was managed by conversion of D-D anastomosis to RYHJ.

Conclusion: D-D anastomoses seems to be more advantageous, as: ➢they do not damage the physiology of the biliary tracts. ➢ do not cause an ascending infection. ➢ can be performed faster

➢they allow for subsequent ERCP. ➢Concerning the technique to be employed and the suture material to be used, our preference is absorbable monofilament suturing materials as being superior, as they prevent inflammation and fibrosis. In our work, we used absorbable 6/0 PDS sutures, with the interrupted suture techniques for most of our anastomoses.

➢The topic of placing trans-anastomosis biliary stents is controversial with initial series reporting apparent reduction in biliary complications. However; the incidence of biliary complications in the studies which adopted the concept of stenting in all cases showed no great difference in comparison with those studies which preserve stenting for small duct caliber only.

(BILIARY) TIPS AND TRICKS FOR BILIARY CANNULATION IN ERCP

Authors: Dr. Zakarya Shady
Affiliation: Al Azhar Faculty of Medicine
Presenting Author: Dr. Zakarya Shady

Selective biliary cannulation is the corner stone in the procedure of ERCP. Endoscopist should have a working hypothesis for every case starting with classic cannulation with papillotoms ending with the decision of referral to surgery or percutanous drainage. Priorities would come first and working under optimum conditions is the golden solution for successful and safe procedure. This lecture exhibits variable methods for selective biliary cannulation including cases with altered anatomy, multiple pancreatic cannulation, using of precut sphiceterotomy or fistulotomy and in special situations like diverticulae. Einstein said (Imagination is more important than knowledge), this saying could be a good example when applicating it on methods used for selective biliary cannulation.

COMPARISON OF ELECTRICAL CARDIOMETRY AND TRANSOESOPHAGEAL DOPPLER FOR HAEMODYNAMIC MONITORING DURING LIVING DONOR LIVER TRANSPLANTATION

Nagwa Ibrahem Mowafy, Eman Sayed Ibrahem, Nagwa Mohamed Doha, Ashraf Mohamed Moustafa, Khaled A. Yassen, Anaesthesia Departments of Liver Institute[1] and Faculty of Medicine, [2] Menoufia University, Shebeen Elkom City, Egypt

Background and goal of work: Left cardiac output can be calculated non-invasively with Electrical Cardiometry (EC) utilizing thoracic electrical bioimpedance or minimal invasively with Transesophageal Doppler (TED) measuring descending aorta blood flow. Aim is to compare EC to TED regarding cardiac output (CO), ability to guided fluid administration and monitor haemodynamics during transplantation.
Methods: A prospective randomized study with Ethics Committee approval, Pan African Clinical Trial Registry (PACTR201701001990415). 47 adults (3 excluded): EC gp, (n=22) and TED gp (n=22) Following anaesthesia, TED probe (CardioQ, Deltex, UK) was passed orally into mid-esophagus. Cardiometry skin sensors were applied simultaneously. (ICON, Osypka, Germany). In EC gp Anaethesist were blinded to TED and vice versa. 6 m l/ kg/h Ringer's acetate, and only 3 ml/kg Albumin 5% boluses when stroke volume variation (SVV) (%) in EC > 10% or corrected flow time (FTc) (msec) in TED < 350 msec. Rotational thromboelastometry guided blood products.
Results: Comparable age, weight, graft body weight ratio, operative time, blood products consumption, MELD score 14.5 [13.0-15.0] vs. 14.0 [12.0-15.0], p=0.54).
An overall good degree of reliability between EC and TED CO (440 pairs) (Intra-class correlation =0.928, 95% CI (0.913-0.941), p<0.001. with an overall mean bias difference (95% confidence) (n=396) of 0.697 (0.6616-0.7323), p<0.001 (Bland and Altman)
Median (IQR) EC CO was constantly higher than TED CO (l/min). After induction 7.55 [6.70-8.50] vs. 6.80 [6.10-7.50], p<0.001, anhepatic: 7.60 [7.20-8.50] vs. 6.75 [6.35-7.50], p<0.001, reperfusion: 7.90 [7.10-8.60] vs.7.25 [6.50-7.85] p<0.001, end surgery 8.40 [8.00-8.80] vs.7.70 [7.25-8.20] p<0.001, respectively. Both CO increased after reperfusion (Repeated measure ANOVA, p<0.001).
FTc, SVV and central venous pressure (CVP) were comparable. In EC vs. TED. 5500 [5200-6000] vs. 5525 [5200-6000] ml, p=0.81 of Crystalloids and 800 [600-1000] vs. 850 [800-1000] ml, p=0.2 of Albumin 5% were infused, respectively.
FTc negatively correlated with SVV (440 pairs)□Kendall tau correlation (□□□= -0.321, p<0.001, and both not in correlation with CVP. Diathermy interfered with both and TED probes required repositioning.
Conclusion: The agreement between CO measured by EC and TED is acceptable. Both were able to monitor trend changes and guide fluid administration. The consistently lower TED CO compared to EC CO invites further investigations.

CRITICAL VIEW OF SAFETY IN FUNDUS-FIRSRT DIFFICULT LAP CHOLECYSTECTOMY. CASE VIDEO PRESENTATION

Authors: Dr Wael Tawfik
Affiliation: MANSOURA HEALTH INSURANCE HOSPITAL
Presenting Author: Dr Wael Tawfik

The following video shows Critical view of safety in fundus-firsrt difficult lap cholecystectomy Critical view of safety was first described by Steven Strasberg in Washington University in 1995, then it become part of Culture of safety in cholecystectomy (COSIC).
It is important to identify the structures at the Calot's triangle at the time of cystic duct isolation and no structure should be divided before the clear dissection of the cystic duct and artery. Retrograde ("fundus first") dissection is frequently used in open cholecystectomy and known as a safe procedure during difficult cholecystectomies because it minimizes the risk of damage to the structures in or around Calot`s triangle. Although feasible in laparoscopic cholecystectomy (LC) it has not been widely practiced. LC is most simply carried out using antegrade dissection with a grasper to provide cephalad fundic traction.
Reasons for doing fundus first method are: dense adhesions at Calot's trianglein, stones in Hartmann's pouch with short cystic duct, small contracted gall bladder and Mirizzi's syndrome Fundus first (Dome down approach) LC is becoming an option with experienced laparoscopic surgeons to deal with difficult anatomy at Calot's triangle, thereby reducing rate of complications as vascular and biliary injuries and decrease the rate of conversion to open choleystectomy that leads to the loss of advantages of this minimally invasive procedure and significantly increases the length of hospital stay as well as its cost.

EARLY SURGICAL PROCEDURES POST LIVING DONOR LIVER TRANSPLANTATION: DIFFICULTIES, CAUSES & OUTCOME

Islam Ayoub, Hany Shoreem, Hossam El-Din Soliman, Ahmed Sallam, Taha Yassien, Osama Hegazy, Sherif Saleh, Emad Hamdy, Tarek Ibrahim, Khaled Abou El-Ella
Hepato-pancreato-biliary surgery department, National Liver Institute, Menoufia University

Background: Different situations post Living Donor Liver Transplantation need early surgical intervention
Methods: From April 2003 to April 2015, 240 patients had undergone LDLTx at the National Liver Institute, Menoufia University. Early surgical procedures in the first hospital stay in such patients were evaluated. Mortality was analyzed using Kaplan-Meier survival curve.
Results: Twenty five patients needed early surgical interventions in the first hospital stay after LDLTx.
External Biliary diversion and peritoneal lavage for biliary leak accounts for the major indication for early surgical intervention (9 patients (36%)). Followed by the vascular complications in the form of Hepatic artery thrombosis and portal vein thrombosis 7 patients (28 %). Wound dehiscence, intestinal perforation, bleeding resulting from pigtail insertion for intra-abdominal collection drainage represent the other indications.
Conclusion: Rapid surgical intervention in such immunocompromised patients is important to achieve fair outcome. Postoperative anticoagulant therapy is one of the major obstacles in early surgical intervention.

HYPERBILIRUBINEMIA POST-LIVING DONOR LIVER TRANSPLANTATION (LDLTX) IS AN OMINOUS SIGN FOR EARLY SURVIVAL

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Background: Jaundice is a common sequel of LDLTx, etiological factors of post-LDLTx jaundice are multifactorial and varies according to the time of occurrence, so we study the etiological factors of persistent hyperbilirubinemia post-LDLTx and its impact on early survival.
Methods: From April 2003 to December 2011, 150 patients had undergone LDLTx at the National Liver Institute, Menoufia University, factors affecting persistent hyperbilirubinemia after LDLTx were evaluated by univariate and multivariate analysis. Mortality was analyzed using Kaplan-Meier survival curve.
Results: - 84 patients (56%) of the patient who had undergone LDLTx, developed hyperbilirubinemia. Factors of persistent hyperbilirubinemia represents that vascular complications accounts for the majority of causes of hyperbilirubinemia post-LDLTx (23 cases ~ 27%), followed by postoperative sepsis which accounts for 16% (14 cases). - Bile leak occurred in 15 cases (18.9%). - Small for size accounts for 15% of the cases with hyperbilirubinemia. - Acute cellular rejection occurred in 7 cases (8%). - Ischemia reperfusion injury occurred in 3 cases (3.6%). - Multivariate analysis of factors of hyperbilirubinemia revealed that recipient gender, actual graft recipient weight ratio (GRWR) less than one, multiple hepatic venous anastomosis, acute cellular rejection & duct to duct biliary reconstruction were independent risk factors. - Incidence of hyperbilirubinemia in the perioperative period decreases patient survival as 53 cases (63%) of patients who had developed hyperbilirubinemia, eventually died.
Conclusion: Hyperbilirubinemia post-LDLTx indicates poor outcome and poor survival. Early management of hyperbilirubinemia improves the outcome. Avoidance of steatotic grafts, small for size & GRWR < 1 improves the incidence of early post-LDLTx Jaundice.

IMPACT OF PREOPERATIVE ENDOSCOPIC BILIARY DRAINAGE ON POSTOPERATIVE OUTCOME AFTER PANCREATICODUODENECTOMY

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Background: The aim of this study was to identify the impact of preoperative biliary drainage (PBD) prior to pancreaticoduodenectomy (PD) on postoperative outcome.
Methods: The data of patients who underwent PBD from February 2009 to February 2017, was retrospectively studied. Comparison was done between 2 groups of patients with and without PBD according to preoperative, operative and postoperative data.
Results: PD was done in 158 patients with periampullary lesions. In group A (with PBD), 76 patients (48.1%) were included while 82 patients (51.9%) were included in group B (without PBD). The incidence of postoperative complications was higher in group A, with significant statistical difference in major postoperative complications (P=0.04). Positive intraoperative bile culture was higher in group A (p=0.06) The infectious postoperative complications was higher in group A like; intraabdominal abscess formation (P=0.07) and wound infection (P=0.04). Hospital stay was significantly longer in group A (P=0.05), and hospital mortality but without statistical significant difference (P=0.08). High preoperative bilirubin level (>15mg/dl) was not a risk factor for major postoperative complications (P=0.12).
Conclusion: Patients with PBD had a significant higher incidence of postoperative complications mainly of infectious ones and should be done only in selected patients not as a routine prior PD.

IS IT POSSIBLE TO PREDICT LIVER STEATOSIS IN LIVER TRANSPLANTATION USING LIVER TO SPLEEN ATTENUATION RATIO AND BMI

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Introduction: Severe macrovesicular steatosis (MaS) in liver graft is widely considered as a contraindication for liver transplant.This study aimed to assess the value of liver to spleen (L/S) ratio measured on CT scan and donor body mass index (BMI) to predict severe MaS
Patient and Method: From January 2012 to August 2015. L/S ratio was measured in 213 brain death donors by local radiologists.Liver biopsy was systematically performed during procurement,allowing histological evaluation of steatosis.Severe MaS was defined as a percentage of steatosis > 60%validated by expert pathologist
Results: severe Mas was found in 6 (3%).L/S ratio was significantly associated with severe MaS (area under curve AUC :0.80) L/S <0.9 best predict severe MaS .The donor BMI was also associated with severe MaS(AUC :0.79) with an optimal curoff value 30kg/m2. The donor age and sex as well as liver function test were not associated with significant MaS.On multivariate analysis L/S ratio<0.9 (RR:15.4[2.03-305.6]p=0.01)and BMI >30kg/m2(RR:6.49[1.13-50.4] p=0.03)remained independent predictors of sever MaS.the resulting probability of severe MaS was respectively 0%,2%,5%,and24% in the absence of any factor, in the presence of BMI>30kg/m2 only ,in the presence of L/S ratio< 0.9 and in the presence of both predictors .
Conclusion: L/S <0.9 and BMI >30kg/m2 predict severe macrovesicular steatosis.Liver biopsy before procurement should be considered in donors presenting both factors

MALIGNANT OBSTRUCTIVE JAUNDICE IN THE NCI CAIRO UNIVERSITY REVIEW OF 232 PATIENTS

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Background: Obstructive jaundice is a common problem in the medical and surgical gastroenterological practice. Malignant obstructive jaundice can be caused by cancer head of pancreas, periampullary carcinoma, carcinoma of the gall bladder and cholangiocarcinomas.
Objective: to review the etiological spectrum of malignant obstructive jaundice in NCI Cairo university during a period of 3 years (2008 till 2010).
Patients and methods: retrospective study including 232 patients who presented with malignant obstructive jaundice between (2008 to 2010) Data were collected from the biostatistics and cancer epidemiology department.
Results: out of 232 patients; 156 (67.2%) were male and 76 (32.8%) were female; the median age of the study population was 49 years (range 19_80years). The commonest cause of malignant obstructive jaundice was pancreatic head cancer, 72% (167/232), followed by the ampullary carcinoma 15% (36/232) The last cause was cholangiocarcinoma12.5% (29/233) Regarding the commonest symptom; clay colored stools (98.7%) was more frequent in patients with malignant disease whereas abdominal pain (97.7%) was 2 common symptom.
Conclusion: Obstructive jaundice is more common among males and cancer head of pancreas is the commonest malignancy.US, ERCP and CT-Scan are important diagnostic modalities for evaluation of patient with obstructive jaundice with ERCP having the additional advantage of being therapeutic as well.
Keywords: Obstructive jaundice, ERCP, Ca Head of pancreas, Ca gall bladder.

MILTEFOSINE LIPID NANOCAPSULES FOR SINGLE DOSE ORAL TREATMENT OF SCHISTOSOMIASIS MANSONI: A PRECLINICAL STUDY

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Background: The antischistosomal activity of miltefosine (MFS), was recently reported in the mouse model with comparative advantage over praziquantel in being effective against all developmental stages of the parasite. However, the necessity of a multiple dosage regimen of 20 mg/ kg for five successive days may preclude promotion as a praziquantel alternative for schistosomiasis. The objective of this study was to achieve a single 20 mg/ kg oral dose treatment of schistosomiasis mansoni in mice by incorporating MFS in lipid nanocapsules (LNC), relatively new nanovectors showing promise in oral drug delivery.
Methodology / Principal Findings: Six MFS-LNC formulations were prepared by a phase inversion method. Further, LNC decreased MFS-induced hemolysis. All formulations significantly enhanced antischistosomal activity in mice compared to MFS solution. Maximum effects were obtained with MFS-LNC incorporating CTAB as positive charge imparting agent or oleic acid as membrane permeabilizer. A Reduction in worm load attained 86.7 and 88.5 % respectively. These findings combined with ameliorated liver pathology and electron microscopic images of the extensively damaged worm tegument provided strong evidence for enhanced efficacy.
Conclusions / Significance: Presentation of MFS as LNC allowed for a single 20 mg/kg oral dose treatment of schistosomiasis manosoni in mice.

OUTCOMES OF LIVING DONOR LIVER TRANSPLANTATION FOR PATIENTS WITH PREOPERATIVE PORTAL VEIN PROBLEMS

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Background: Portal vein thrombosis (PVT) is a common complication for patients with end-stage liver disease. The presence of PVT used to be a contraindication to living donor liver transplantation (LDLT).
Methods: We reviewed the data of patients who underwent LDLT during the period between 2004 till 2017.
Results: During the study period, 500 cases underwent LDLT. Patients were divided into three groups. Group I included Non-PVT: 446 patients (89.2%), Group II included attenuated PV: 26 patients (5.2%), and Group III included PVT: 28 patients (5.6%). Higher incidence of hematemesis and encephalopathy was detected in PVT ($p = 0.001$). Longer anhepatic phase was found in PVT ($p = 0.013$). There were no significant differences between regarding operation time, blood loss, transfusion requirements, ICU and hospital stay. The 1-, 3-, and 5-years overall survival (OS) rates of Non-PVT were 80.5%, 77.7%, and 75%, and for attenuated PV were 84.6%, 79.6%, and 73.5%, and for PVT were 88.3%, 64.4%, and 64.4%, respectively. There was no significant difference between the groups regarding OS rates (Log-Rank: 0.793).
Discussion: Preoperative PVT increases the complexity of LDLT operation, but it does not reduce the OS rates of such patients.

OUTCOME OF PANCREATODUODENECTOMY WITH VENOUS RESECTION AND RECONSTRUCTION IN LOCALLY ADVANCED PANCREATIC HEAD CANCER

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Background: Pancreatic cancer is the fourth most common cause of cancer death in the United States in 2015 with a 5- year OS rate around 7% .Approximately 50%-55% of the patients are found to have metastatic disease, 20%-25% have locally advanced disease and only 20% have resectable disease. Due to its anatomic position, the SMPV confluence can be involved early, especially by uncinate process tumours, without retroperitoneal spread and may represent the only barrier towards a “curative resection”. VR is performed to achieve negative resection margins because the tumour involves the vessel or inflammatory adhesions preclude a safe separation of the vein. The Study: Prospective study that was done on 40 patients during the period from September 2014 to November 2016 in Gastrointestinal and Laparoscopic Unit, General Surgery Department, Tanta University and Surgical unit of Centre Hepato-Biliare, Paul Brousse Hospital, South Paris University on patients with pancreatic head cancer that invaded the SMV, PV or SMPV axis, proved by preoperative imaging or discovered intraoperativly.
Result: Pathological differentiation and L/N ratio were found to be related to OS and DFS. Age more than 67 years, longer clamping time, higher T staging and poor differentiation of adenocarcinoma were all predictors of a poor outcome in the survival of the patients. While male gender, intraoperative blood transfusion, higher N staging and higher L/N ratio were all predictors of short DFS in our patients, with multivariate analysis there is no factor associated with OS and DFS.
Conclusion: VR and reconstruction is now increasingly performed, with morbidity, mortality, and survival similar to PD without vascular reconstruction. The neoadjuvant chemoradiotherapy should be considered in cases where venous involvement is suspected preoperatively. Surgical resection after downstaging of LAPC and BRPC should be offered to all surgically fit patients without an increased postoperative mortality/morbidity.

PATIENT STATE INDEX VERSUS BISPECTRAL INDEX IN CIRRHOTIC PATIENTS AND NON-CIRRHOTICS UNDERGOING HEPATIC RESECTION: A CONTROLLED RANDOMIZED STUDY

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Background and goal of work: Patient State Index (PSI) and Bispectral Index (BIS) monitor anaesthesia depth with different algorithms. Primary goal is to test their agreement in two different groups: Healthy volunteers undergoing right hepatotomy for live donor liver transplantation and liver cirrhotic patients undergoing major liver resection. Secondarily their sevoflurane (Sevo) consumption and tolerance to electrocautery interferences.
Methods: A prospective randomized trial with local Ethics Committee approval and Pan Africa Clinical Trial Registry (PACTR201601001446303). PSI (Masimo, Irvine, USA) (Target depth: 25-50) or BIS (Aspect, Newton, USA) (Target depth: 40-60). Both forehead sensors were applied simultaneously. Anaethesist when monitoring PSI were blinded to BIS and vice versa. 4 subgroups: Cirrhotic (PSI) (n=15), Cirrhotic (BIS) (n=15), Non-cirrhotic (PSI) (n=1on ct5) and Non-cirrhotic (BIS) (n=15). PSI, BIS values, end-tidal (ET) Sevo concentration (%) monitored perioperative.
Results: 65 adults (5 excluded). Comparable age among cirrhotics, p=0.935 and non-cirrhotics, p=0.461 with similar operation times in cirrhotics, p=0.106, and non-cirrhotics, p=0.25. An excellent degree of reliability between PSI and BIS at all measuring points: Overall (804 paired readings) (Intra-class correlation (ICC) =0.92, 95% CI (0.91-0.93), P<0.001. In cirrhotic groups alone (ICC =0.93, 95% CI (0.91-0.94), p<0.001); and in non-cirrhotics (ICC= 0.92, 95% CI (0.90-0.93, p<0.001, Bland and Altman analysis showed an overall mean bias difference of 2.19 and 95% confidence (1.40-2.98), p<0.0001. (n=804 pairs). An overall moderate degree of correlation between PSI and BIS (Kendall's tau b = 0.604, p<0.001. (n= 804 pairs). Both PSI and BIS negatively correlated with ET Sevo in all patients (Kendall's tau b = -0.463, p=0.000) and (Kendall's tau b = - 0.520, p=0.000) respectively. PSI guided Sevo consumption (ml) was not different from BIS in cirrhotics (65.67±31.60 vs. 68.47±27.63, p=0.983) and non-cirrhotics (41.13±37.45 vs. 47.27±34.80, p=0.338), respectively. PSI was least affected by electrocautery vs. BIS (p=<0.001).
Conclusion: The agreement between PSI and BIS during surgery is excellent with healthy or cirrhotic livers patients. Both were able to monitor trends of anaesthesia

PERIOPERATIVE HEPARINASE ROTATIONAL THROMBOELASTOMETRY MONITORING DURING AND AFTER ADULT LIVING RELATED LIVER TRANSPLANTATION

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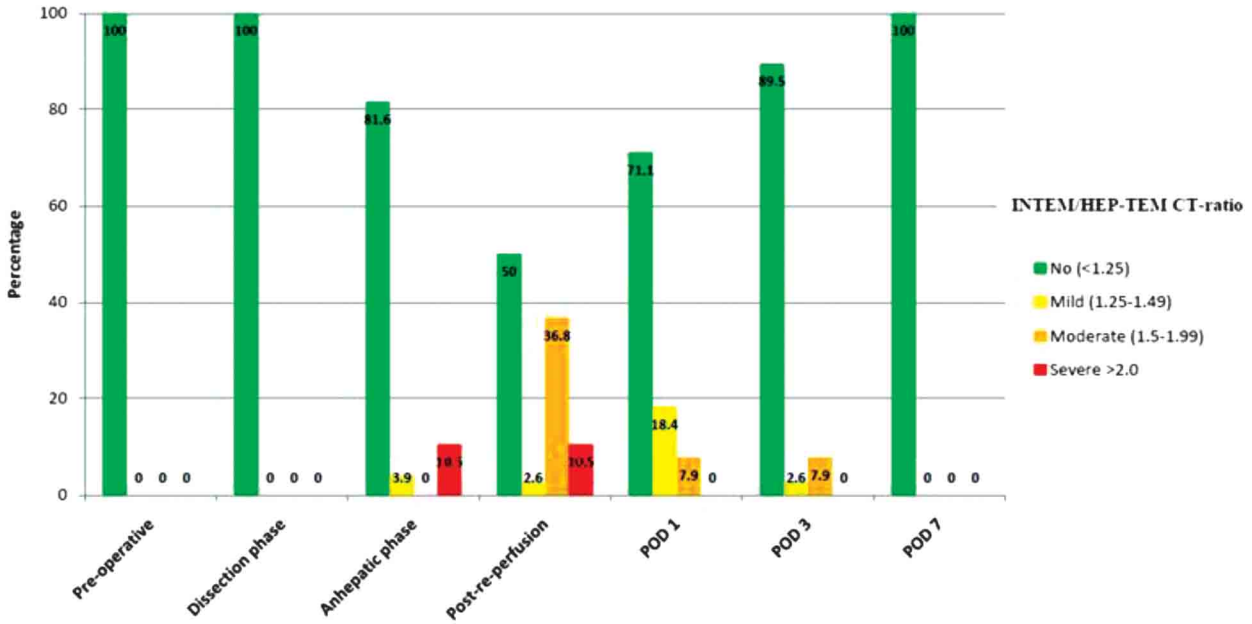
Background and Goal of Study:Heparin like effect (HLE) can affect coagulation variably during transplantation. Primary aim is to monitor incidence and severity of HLE with rotational thromboelastometry (ROTEM) and standard laboratory tests (SLT) in our center. Materials and **Methods:** A diagnostic clinical trial among recipients (2015-2017) (PACTR201712002839259). No heparin was given prior to surgery and liver donor vessels were flushed. Unfractionated heparin was infused (60-180 U/kg/day) postoperatively for 2 days and then was replaced by low molecular weight heparin (LMWH) (20 mg/12 h). ROTEM (INTEM and HEPTEM) and SLT (aPTT) were performed pre-operative, anhepatic, post-reperfusion, and on post-operative day (POD) 1, 3 and 7. HLE is identified when CT INTEM is >240 sec and CT INTEM/CT HEPTEM ratio >1.25. Blood transfusion was ROTEM-guided.
Results: 39 recipients included (1 excluded), with age 49.53±6.11 y, graft body weight ratio 1.01+0.08 g/kg, operation duration 11.00±2.0 h, MELD 15.00±3.0. Prolonged CT INTEM was observed in 7/38 during anhepatic phase (range: 257-1523 sec), in 19/38 at reperfusion (range: 270-3312 sec) and in 10/38 at POD 1 with heparin infusion (range: 257-344 sec). A mild to moderate HLE in 4/38 on POD 3 and no HLE on POD 7 was detected on ROTEM with the shift to LMWH. Grades and percentages of HLE are presented in the figure.



Total 3-month survival was 78.9% (30/38) and mortality, 21.1% (8/38) (2/6 with severe HLE, died 3 weeks postoperative). No blood was transfused in 26.32% (10/38) during surgery, in contrast to recipients with severe HLE (median [IQR]: red blood cells 8 [6-10], plasma 6.5 [6-7.5] units). Weak correlation existed between aPTT and CT INTEM (r=0.12, p=0.04). aPTT was only prolonged after reperfusion and on POD1.
Conclusion: HLE mainly accompanies reperfusion, but when identified in a severe form, it carries a high risk of mortality. CT INTEM and CT INTEM/CT HEPTEM-ratio are more sensitive to identify HLE than aPTT. This is important since HLE during the anhepatic phase is associated with worse outcome.

SURGICAL CHALLENGES TOWARD BETTER OUTCOMES OF PEDIATRIC LIVING DONOR LIVER TRANSPLANTATION

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Background: Since there is no cadaveric organ donation scheme is legislated in Egypt yet, living donor liver transplantation (LDLT) is the only curative option for children with liver failure. The complexity of pediatric LDLT arises from the anatomical and technical challenges in both donor and recipient operation. These challenges are reflected on recipient early postoperative morbidity and long-term survival.
Methods: Retrospective observational cohort study was conducted to evaluate surgical challenges and difficulties toward better outcomes in 52 pediatric LDLT recipients in National Liver Institute, Menoufia University from Apr 2003 to Dec 2016. As the first pediatric LDLT program in Egypt, the difficulties associated with the initiation (Phase A) and maintenance of the program (Phase B) in collaboration with Kyoto University were also analyzed.
Results: The mean age of recipients was 4.9 years (0.66-17). The indication for LDLT was biliary atresia (38.5%), PFIC (15.4%), cryptogenic cirrhosis (13.4), Crigler-Najjar type I (7.7%), Budd-Chiari Syndrome (5.8%), HCV cirrhosis (5.8%) and hepatoblastoma (1.9%). Type of graft used was segment II &III (76.9%), formal right and left liver lobes (15.3%), segment II, III & partial IV (5.8%), monosegment-III/hyper-reduced (3.8%). Early surgical 90-days morbidity were observed in 27% of cases; consisting of vascular complications (9%), biliary complications (8%) and graft size issues (10%). Acute rejection, infections, and other medical 90-days morbidity were observed 31% of cases. Kaplan-Meier survival analysis shows that patients who did not experience 90-days morbidity had a 1-year survival of 95%, 5-years survival of 89% and 10-years survival of 74%, while patients who had 90-days morbidity showed a 1-year survival of 40%, 5-years survival of 19% and 10-years survival of 19%. Log Rank 4.87 and P =
Conclusions: Early postoperative 90-days morbidity significantly reduces patients' long-term survival.

THE EFFECT OF PNEUMOPERITONEUOM ON SYSTEMIC HAEMODYNAMICS AND HEPATIC ENZYMES (PERFUSION) IN CIRRHOTIC VERSUS NON CIRRHOTIC PATIENTS UNDERGOING LAPAROSCOPIC SURGERY USING NON-INVASIVE ELECTRICAL CARDIOMETRY

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Background and goal of work: Pneumoperitoneuom (PP) can affect haemodynamics variably. Primarily goal is to monitor changes in cardiac output (CO) calculated by electrical bioimpedance cardiometry (EC), and secondarily the PP effect on haemodynamics, liver functions in patients with liver cirrhosis (CHILD A) and without
Methods: Randomised controlled trial with local Ethics Committee approval, registered at Pan African Clinical Trial registry. 43 patients (3 excluded): Cirrhotic C, (n=20) and Non-Cirrhotic control (NC) (n=20). Following anaesthesia, a central venous pressure (CVP) catheter (after consent) was inserted and EC (ICON, Osypka, Germany) skin sensors were applied. CVP(mmHg), CO l/min, Systemic Vascular Resistance (SVR) (dyns/s/cm^{-5}) and Stroke Volume Variation (SVV) (%), EC Contracility Index (EC measured parameter of contractility) (normal range: 37.5-62.5), Heart rate (beat/min), mean noninvasive blood pressure) (mmHg), Alanine aminotransferase (ALT, U/l), Aspartate aminotransferase (AST, U/l) and serum lactate (mg/dl) were reported at T1: After induction, T2: Post –intra-peritoneal CO_2 insufflation (14 mmHg) and T3: 6 h after surgery,
Results: Total Insufflation and operative times (min) were comparable between C vs NC ((52.1±30) vs (58.1±28), P=0.27) and ((72.8±14.50) vs (79.75±34.3), P=0.92), respectively

During insufflation: Heart rate , (b/min), (75.8±13 vs 79.8±12, p=0.34), CVP (mmHg), (13.6±4 vs 14.4±2, p=0.33), SVV, (8.9±3.6 vs 11.6±7.6, (%), p=0.39), SVR (dyns/s/cm^{-5}) (1153±442 vs 1332±430, p=0.20) and CO (l/min), (5.5±1.3 vs 5±1.9, p=0.1)) were not different between NC and C, respectively and no significant change from baseline AST, ALT and lactate were not affected by the insufflation, nor differed between C and NC postoperative. A lower contractility index was observed with C vs. NC (T2: 29±10 vs. 46±19, p= 0.002, T3: 38.6 ±12 vs. 50.2±19.2, p=0.05). respectively.
Conclusion: EC was able to track CO changes and clearly demonstrated that no significant changes associated the short duration of PP during laparoscopic cholecystectomy in both groups. CHILD A hepatic patients were not different from healthy patients and tolerated laparoscopy. The only difference which could invite further investigations is the lower cardiac contractility Index parameter of EC noticed in patients with liver cirrhosis

THE EFFECTS OF TEMPORARY PORTOCAVAL SHUNT DURING LIVE DONOR LIVER TRANSPLANTATION ON THE HEMODYNAMICS AND LABORATORY PARAMETERS OF THE ANHEPATIC PHASE AND REPERFUSION

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Background and goal of work: Temporary portocaval shunt (TPCS) is a surgical procedure to help venous return and reduce gut congestion post-dissection phase of the diseased liver. Aim is to evaluate the effects of TPCS on systemic haemodynamics and laboratory parameters during the anhepatic and reperfusion phases.
Methods: A randomized control trail (2014-2017), registered at Pan African Clinical Trial Registry. Systemic haemodynamics and Transesophageal Doppler, (TED) (Cardio Q, Deltex, Chichester, UK) parameters, haemodynamic supportive therapy, arterial blood gases, serum lactate (mg/dl) are reported at the end of the anhepatic phase and 5 minutes post-reperfusion. Blood products were guided by rotational thromboelastometry. Postoperative graft liver enzymes and complications were monitored.
Results: 64 adults LDLT included, 4 excluded for portal vein extended thrombosis, 30 recipients received TPCS and 30 Control (C) with no shunt. MELD score and age were comparable (16[15-18] vs. 15[12-17.7], P= 0.055, 49.5[45-52] vs. 47.5[42.25-51.7] years, P=0.36), respectively. Median [IQR] arterial pH values, bicarbonate (HCO3) (mmol/l) were higher with TPCS compared to C during the anhepatic phase(pH 7.32[7.28-7.37] vs. 7.29 [7.25-7.33] P=0.06) and HCO3 (22.3[19.7-24.25] vs. 18.3[17.02-20.01], P= 0.001), respectively and after 5 min post-reperfusion (pH 7.28[7.24-7.31] vs. 7.22[7.19-7.25], P=0.001), HCO3 (20.75[18.6-23.01] vs. 16.5[14.01-18.72], P=0.001), respectively. Post-reperfusion blood Lactate levels (mg/dl) were significantly less with TPCS compared to C (27.02[18.6-39.6] vs. 50.01[40.01-82.01], mg/dl, P= 0.001
More noradrenaline support were required during anhepatic phase and throughout the procedure guided with TED to support mean blood pressure and systemic vascular resistance in TPCS compared to C, (Total noradrenaline 3.6[1-6] vs. 6[1-12] mg, P= 0.03), respectively. Significantly less adrenaline boluses during the 5 minutes following reperfusion were required in TPCS vs C (17+1 vs. 45+ 20.1, microgram P= 0.001). Fluids guided by TED were comparable (p>0.05), as well as packed red cells (2[0-4] vs. 2[0-6.7] units, P= 0.31.) Warm ischemia time was longer in TPCS vs. C (51.1+14 vs. 44.12+16 mins, P= 0.01). 24 h postoperative liver enzymes were comparable (P= 0.6)
Conclusion: TPCS reduced acidosis and the catecholamines dosages required to support the haemodynamics during the anhepatic phase and immediately after reperfusion of liver donor gra

TREATMENT OF SCHISTOSOMA MANSONI WITH MILTEFOSINE IN VITRO ENHANCES SEROLOGICAL RECOGNITION OF DEFINED WORM SURFACE ANTIGENS

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Presenting Author: Eglal Amer

Background: Miltefosine, an anti-cancer drug that has been successfully repositioned for treatment of Leishmania infections, has recently also shown promising effects against Schistosoma spp targeting all life cycle stages of the parasite. The current study examined the effect of treating Schistosoma mansoni adult worms with miltefosine on exposure of worm surface antigens in vitro.
Methodology/Principal findings: In an indirect immunofluorescence assay, rabbit anti-S.mansoni adult worm homogenate and anti-S. mansoni infection antisera gave strong immunofluorescence of the S. mansoni adult worm surface after treatment with miltefosine, the latter antiserum having previously been shown to synergistically enhance the schistosomicidal activity of praziquantel. Rabbit antibodies that recognised surface antigens exposed on miltefosine-treated worms were recovered by elution off the worm surface in low pH buffer and were used in a western immunoblotting assay to identify antigenic targets in a homogenate extract of adult worms (SmWH). Four proteins reacting with the antibodies in immunoblots were purified and proteomic analysis (MS/MS) combined with specific immunoblotting indicated they were the S.
mansoni proteins: fructose-1,6 bisphosphate aldolase (SmFBPA), Sm22.6, alkaline phosphatase and malate dehydrogenase. These antibodies were also found to bind to the surface of 3-hour schistosomula and induce immune agglutination of the parasites, suggesting they may have a role in immune protection.

TREATMENT SEQUENCING IN SYNCHRONOUS COLORECTAL CANCER, LIVER METASTASIS

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Surgical resection is the only potentially curative therapy option in patients with colorectal liver metastasis, with reported 5 year survival of up to 50%. Approximately 25% of all patients with colorectal cancer have synchronous liver metastasis, which has been associated with extremely poor prognosis. Advances in hepatic surgery and improved response rates to modern chemotherapeutic and targeted agents have changed the approach to sage IV patients from therapy towards an aggressive multidisciplinary strategy in curative intention. However, the optimal treatment sequence in these patients has not been clearly defined.
Here we present a number of cases with a review of different treatment options in patients with newly diagnosed colorectal cancer and synchronous liver metastasis.
Keywords: Colorectal cancer, synchronous, colorectal liver metastasis.

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References:

1. In a design validation study with surgeons (n=33) operating in simulated procedures in an animate porcine laboratory model (26/33) Ethicon. DOC021988A Buccaneer Design Validation Study – Marketing Questions. May 2016. Data on File #053344-160516 **2.** In a pre-clinical study, 100% (56/56) of porcine blood vessels remained hemostatic over a 30 day survival period. Ethicon. PSB004423 Survival Pig Binder. March 2015. Data on File #049339-160315 **3.** In a benchtop study with 5-7mm porcine carotid arteries that compared median burst pressure, HARMONIC® HD 1000i (1878 mmHg) vs. LigaSure Impact™ (1224 mmHg) (p<0.0001). Ethicon, PRC074054A Buccaneer Thermal Spread and Burst Claims. February 2016. Data on File #049305-160315 **4.** In a benchtop study with 5-7mm porcine carotid arteries that compared median burst pressure, HARMONIC® HD 1000i (1878 mmHg) vs. LigaSure™ Maryland (1171 mmHg) (p<0.0001). Ethicon, PRC074054A Buccaneer Thermal Spread and Burst Claims. February 2016. Data on File #049315-160315 **5.** In a design validation study with surgeons (n=33) operating in simulated procedures in an animate porcine laboratory model (26/33) Ethicon. DOC021988A Buccaneer Design Validation Study – Marketing Questions. May 2016. Data on File #053344-160516 **6.** In a porcine study comparing sealing times of HARMONIC® ACE+7 and HARMONIC® HD 1000i. HARMONIC® HD 1000i Shears transected vessels faster than HARMONIC® ACE+7 (mean vessel transection time of 9.186 seconds vs 15.291 seconds). Ethicon. PRC074125B Buccaneer DV-Vessel Transaction Speed. April 2015. Data on File #051753-160420 **7.** Design Validation Study with surgeons (n=33) operating in simulated procedures in an animate porcine laboratory model (33/33) Ethicon. DOC021988A Buccaneer Design Validation Study – Marketing Questions. May 2016. Data on File #053346-160516

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REFERENCES: 1.ENSEAL™ X1 Large Jaw had 88% less bleeding at the distal tip than LigaSure Impact™. Preclinical test of distal tip bleeding (ENSEAL™ vs. Impact-LF4318) in thick porcine mesentery base (p<0.001). Ethicon. PSB004548 Final Report Brick Distal Tip Sealing Algo D. 2016. Data on file. (C2169). **2.** ENSEAL™ X1 Large Jaw had 41% less lateral thermal spread than LigaSure™ Impact. Preclinical testing on porcine carotids (ENSEAL™ vs. Impact-LF4318) that measured mean max lateral thermal damage via histology showed ENSEAL ™ at 41% less thermal spread than Ligasure (p=0.005). Ethicon. PSB004570 Final Report Brick Thermal Damage vs Impact1. 2016. Data on File. (C2155) **3.** ENSEAL™ X1 Large Jaw Tissue Sealer has an overall better design compared to LigaSure Impact™. MMiller - DOC022221- Memo - X1 Large Jaw - better design and ergonomics vs Impact. 2016. Data on File. (C2114). **4.** ENSEAL™ X1 Large Jaw has a larger distal electrode surface area than LigaSure™ Impact. Ethicon. DOC022209A Brick - Superior Distal Tip Sealing Rationale. 2016. Data on File. (C2166) **5.** The 360 degree shaft rotation of the ENSEAL™ X1 Large Jaw was designed to improve access to targeted tissue. Ethicon, MMiller -DOC022221- Memo - X1 Large Jaw - better design and ergonomics vs Impact. 2016. Data on File. (C2158)