

BLEEDING PER RECTUM: PEDIATRIC PROSPECT

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OBJECTIVE: Rectal bleeding is a common complaint in children and is the most common indication for colonoscopy in our unit in pediatric department. The aim of this study is to report the most common cause of this finding in children.

METHODS: Analysis of the medical and pathological records of all children below 16 years of age, who underwent colonoscopy from 2003 to 2005, in liver institute for the evaluation of bleeding per rectum.

RESULTS: 40 children presented with bleeding per rectum, accounting for about 90% of the indications for colonoscopy. The age range was from 2.5 to 16 years, and the male to female ratio was 2:1 . There were 13 children below 6 years and 22 between 6-12 years and just 5 children above 12 years. The causes of bleeding per rectum are presented in the table indicating that juvenile polyp is the most common cause 35/40 (87.5%), followed by inflammatory polyps in 3/40 (7.5%); whereas rectal ulcers, chronic nonspecific colitis were rarely presented. age-related analysis shows polyps frequent in all ages.

CONCLUSION: rectal juvenile polyp is the most common cause of bleeding per rectum in children. Rectal juvenile polyp is almost commonly associated with chronic nonspecific colitis not bleeding in touch.

CIRRHOTIC CARDIOMYOPATHY

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Cirrhotic patients, even in the presence of overt diabetes, are at low risk of cardiovascular disease . However, other entities can affect the heart in liver cirrhosis , most interesting and recently documented is cirrhotic cardiomyopathy . This can be defined as cardiac dysfunction characterized by cardiac output and altered diastolic relaxation at rest associated with insufficient ventricular contractility under strain. Based on available clinical information , ch Hc appears to progress more rapidly in men than in women and cirrhosis is predominately a disease of men and postmenopausal women (Impact of oestrogens will be highlighted). Pathogenesis of cirrhotic cardiomyopathy , clinical impact , investigations and relevant therapy will be discussed.

DNA PLOIDY AND P53 OVEREXPRESSION IN PAPILLA OF VATER IN CASES WITH OBSTRUCTIVE JAUNDICE; A CLINICOPATHOLOGICAL STUDY

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Carcinoma of the papilla of Vater has a relatively good prognosis when compared with the case of other biliary tract neoplasm such as pancreatic carcinoma or bile duct carcinoma. The adenoma–carcinoma development hypothesis is generally accepted for colorectal tumors. Recently, a genetic alteration model during colorectal tumor development has attracted much attention, leading to various studies. Our aim is to evaluate the clinicopathologic features, and the alteration of the p53 tumor suppressor gene using p53 immunohistochemical staining and the DNA ploidy of papilla of Vater epithelium in patients with obstructive jaundice. Patients and methods: The study included 70 patients had obstructive jaundice due to papillary lesions. The patient's papillary lesions were 40 adenocarcinoma, 10 cases pure adenoma of the papilla of Vater and 15 chronic papillitis as well as 5 patients had normal papilla as a control. We used immunohistochemistry technique to stain the tissue slides with p53 suppressor gene and Cell image analyzer to detect the DNA content of the epithelium through staining the tissue by felgin stain which stain the nuclei blue. Results: The patients were 34 to 76 years (mean age was [52.5 y]. There were 42 male and 28 female. The papillary lesions were benign in 30 cases and malignant in 40 cases. The papillary adenocarcinoma was well differentiated in 10 cases, moderately differentiated in 22 cases, and poorly differentiated in 8 cases. Positive staining for p53 protein was found only in the nuclei of tumor cells. Positive reaction for p53 were 0% on papillitis and in normal mucosal tissue, 20%(2/10) in adenomas, 50% (20/40) in adenocarcinoma. The percentage of p53 overexpression in the twenty cases of adenocarcinoma was 48% (7/15) for early carcinomas and 51.8% (13/25) for advanced carcinomas. The all cases of papillitis and adenoma exhibit DNA diploid histogram, while 16/40 (40%) of adenocarcinoma cases exhibit diploid histogram and the rest of cases 60% (24/40) exhibit aneuploid histogram. There was increase in the number of cells at the proliferative S phase in the chronic papillitis, adenoma and adenocarcinoma compared to control cases $p < 0.01$ and $p < 0.05$ respectively.

ETIOLOGICAL FACTORS OF BLEEDING PER RECTUM A STUDY IN EL-MINYA UNIVERSITY HOSPITAL

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Aim: This prospective study was designed to identify the incidence and etiological factors of lower gastrointestinal bleeding among the attendants of GIT out-patient clinic in El-Minya University Hospital in six months interval. **Methods:** During the period from February – August 2004, (4500) patients presented to the gastrointestinal tract out-patient clinic, eighty (80) patients of them was complaining of bleeding per rectum. These 80 patients subjected to history taking, clinical examination, abdominal ultrasound, stool analysis, trial of medical treatment and colonoscopy. **Results:** We found that (30%) of cases showed internal piles, while (25%) of cases showed inflammatory and ulcerative colonic lesions. Colorectal polyps were found in (11.3%) of cases and cancer colon was found in (10%) of cases, while normal colonic mucosa was found in (10%) of cases. Rectal varices represented (5%) of cases, while stenotic lesions represented (1.3%) and angiodysplasia represented (1.3%) of cases. Juvenile polyps are the commonest colorectal polyps as they were detected in (33.3%) of all cases with polyps. Double colonic lesions were detected in (13.8%) of cases in our study. **Conclusion:** the most common colorectal lesions were internal piles (30%) followed by inflammatory and ulcerative colonic lesions (25%). Screening programs for early detection of premalignant and(or) early malignant lesions are highly recommended

**GASTROINTESTINAL HORMONES IN THE MANAGEMENT OF
TYPE 2 DM**

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The concept of gastrointestinal factors; incretin hormones & how it differs from the available options for TT of type 2 DM is our aim. Included are the gastric inhibitory polypeptide (GIP) and glucagon like peptide-1 (GLP-1).

The current status of drugs development is discussed including :

I- Incretin mimetics

a- Exendin 4

b- Exenatide

c- GIP analogs

d- GLP-1 analogs

II- Dipeptidyl peptidase IV inhibitors

The recently FDA- approved drug BYetta is highlighted.

HEPATITIS C VIRUS GENOTYPING IN PATIENTS WITH CHRONIC HCV INFECTION IN EL MINYA PROVINCE

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Several studies were done studying the genotypes of HCV in Egypt but little is known about HCV genotypes in our locality. The Aim To study the HCV genotypes in El minya province and to find any correlation between different HCV genotypes and clinical, laboratory or histopathological findings of the patients Methods: this study included seventy five patients with chronic liver diseases, seropositive for HCV Antibodies and HCV RNA positive by RT-PCR divided into 3 groups : Group (A) included 8 asymptomatic patients with normal liver functions and abdominal ultrasonographic findings, group (B) included 37 asymptomatic patients with abnormal liver functions and or abdominal ultrasonographic findings suggestive of chronic hepatitis, group (C) included 30 patients with symptoms and signs of end stage liver diseases confirmed by ultrasonography and deranged liver function tests. All patients were subjected to thorough clinical history and examination and abdominal ultrasonography, liver biopsy (in some patients) in addition to blood sampling for liver function tests, PCR and HCV genotyping. Results: The genotype IV either alone or mixed with genotype III was the most common genotype being positive in 54(72%) of all patients while genotype III either alone or mixed with genotype IV was found in 19 (25%) and Genotype II either alone or mixed with genotype I was found in 7(9%) of patients. Genotype I either alone or mixed with genotype II was found in 12 (16%). No correlation was found between age, sex, residence , risk factors or serum level of AST and ALT and genotypes. There was a significant correlation between mixed genotypes (I&II, III&IV) and presence of hepatocellular carcinoma. Conclusions: the most common genotype present in our locality is genotype IV followed by genotype III and then genotype I. Mixed genotypes may be a risk of Hepatocellular carcinoma

IMAGING TECHNIQUES IN PREOPERATIVE EVALUATION OF LIVING DONOR FOR LIVER TRANSPLANTATION

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Aim of the work: Detection the value of non invasive imaging techniques as CT and MRI in evaluation of potential donor for liver transplantation as regards parenchymal evaluation and vascular mapping as well as biliary anatomy.

Patients and methods: This study included 15 patients. There were 5 females and 10 males with a mean age of 37.9 years (age range, 22-50 years). The study was carried out in Department of Diagnostic Radiology, Mansoura University. Imaging was performed as part of preoperative work up for potential adult right lobe liver transplantation. Different imaging techniques were used in this study; ultrasonography and Doppler study of the hepatic veins and portal vein. Also, multiphase spiral CT with 3D rendering techniques, and MR imaging including MRCP, MRA.

Results: Thirteen potential donors were excluded on radiological basis. More than one exclusion criteria was found in one patient. These findings included fatty infiltration in 5 cases, insufficient left liver lobe volume in 2 cases, portal vein anomaly in 3 cases, inferior right hepatic veins in 2 cases, accessory hepatic veins in 2 cases, biliary tree anomalies reported to be contraindication to transplantation were detected in three cases. Celiac artery stenosis was detected in one case & incidental discovered rib mass in one patient..

Conclusion: Preoperative evaluation of the potential donor must focusing on conditions that would place the donor at increased risk of complications and reveal any condition that would adversely affect graft function. Donor wellbeing must always be the primary consideration.

CT & MRI are mandatory imaging techniques in preoperative evaluation of living donor for liver transplantation. CT is better than MRI in evaluation of fatty liver and hepatic volume. CT is equal to MRI in evaluation of vascular mapping, in view of low cost of CT and its more availability, it is considered superior to MRI. CT better evaluates other abdominal organs than MRI. Bile ducts anatomy is only evaluated with MRCP.

IMPACT OF LIVER RESECTION ON HEPATOCYTE FUNCTION AND ITS POWER OF REGENERATION

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Background and Aim: Improved understanding of hepatic physiology coupled with advances in anesthetic management and postoperative care and improvement of the surgical techniques have allowed the surgeon to approach major hepatic resections with fewer complications. Volumetric restoration is not necessarily identical to the functional recovery. Regeneration means not only an increase in size, but also an increased functional hepatic recovery even without any volumetric changes. A number of methods have evolved to test liver function more directly. Among them the Indocyanine Green (ICG) clearance and the lidocaine metabolite monoethylglycinexylidide (MEGX) test. The aim of this work was to assess the impact of hepatic resection on the liver functions and its ability for biochemical regeneration. **PATIENTS and METHODS:** Forty patients underwent liver resection in National Liver Institute. All patients were followed-up for 6 months after operation and patients with recurrent tumors in the liver and/or other organs affecting hepatic function and those developed portal vein thrombosis were excluded from further analysis. Thus, a total of 30 patients were studied. Patients were classified into three groups on the basis of liver pathology; normal liver in 6 patients, chronic hepatitis in 11 patients, liver cirrhosis in 13 patients. Indications for hepatic resection were; Hepatocellular carcinoma in 21 patients, cavernous haemangioma in 2 patients, hepatoblastoma in 1 patient, hydatid cyst in 4 patients and gall bladder carcinoma in 2 cases. Alpha glutathion-s-transferase and MEGX test were done to all patients together with all other routine investigations assigned for preoperative assessment of liver resection. At 7, 14 days postoperatively and after 3 months the following were measured: complete blood count, serum levels of albumin, bilirubin, GPT, cholesterol, Alpha glutathion-s-transferase. MEGX test was also performed at these dates. When the differences in the values at each different time were no longer statistically significant compared to the preoperative level, the function was considered to have recovered. **RESULTS;** Types of hepatic resections ;Unisegmental resection was done for 9 patients, left lateral hepatectomy for 8 patients, extended left

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hepatectomy for 6 patients, non anatomical resection for 5 patients and right hepatectomy for 2 patients The tumor was located in single segment in 17 patients, two segments in 10 patients and in more than 2 segments in 3 patients. Complications occurred in 12 patients and mortality in one. Possibility of the development of postoperative complications increased in relation to the decrease in the MEGX value. Alpha glutathion-s-transferase reached the maximum peak of release earlier than transaminases at the 3rd postoperative day in all groups and returned to near normal level at 7 POD in normal livers and chronic liver patients and 1 POM in cirrhotics. Conclusion; Hepatic resection in patients with chronic liver disease and cirrhosis need a longer time to recover to the preoperative status Alpha glutathion-s-transferase is valuable parameter for detection of hepatocellular damage. MEGX test appears to be a reliable index of hepatic function and of residual function in liver diseases.

INCIDENCE AND MANAGEMENT OF BILIARY COMPLICATIONS AFTER ORTHOTOPIC LIVER TRANSPLANTION: 10 YEARS EXPERIENCE AT KING FAHD NATIONAL GUARD HOSPITAL

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Background: Despite technical modifications and application of various surgical techniques, biliary tract complications continue to be a major source of morbidity after orthotopic liver transplantation (OLTx). **Aim:** to assess the incidence and management of biliary complications within a single liver transplant unit. **Methods:** One hundred and eighty four consecutive cadaveric liver transplants have been performed at King Fahad National Guard Hospital from February 1994 till July 2004. Data regarding biliary complications in liver transplant recipients was reviewed retrospectively. We analyzed the incidence and the type of biliary complications, the management sequence and its success rate. The correlation between the modality of biliary reconstruction and the type and incidence of biliary complications was analyzed. **Results:** Thirty-two cases developed biliary complications giving an overall incidence of 17.4%. There was a higher incidence of complications in the hepatico-jejunostomy group (21.5%) compared with the duct-to-duct technique (15.1%). Bile leakage occurred in 12 cases. Endoscopic stent insertion and radiological techniques were successful in 8 cases (66.6%), while surgery was mandatory in 4 cases (33.3%). Out of the 12 cases with initial leaks, 6 cases developed subsequent stricture (50%). There were 26 cases of biliary strictures. Twenty-two cases (84.6%) were initially managed using nonsurgical techniques, with a success rate of 59%. **Conclusion:** Biliary complications remain as an important cause of morbidity after OLTx. They can usually be managed percutaneously or endoscopically, however tight strictures and major leaks frequently require surgical intervention.

INTERRELATION BETWEEN PERIPHERAL PLATELET COUNT AND PLATELET ACTIVATION DURING AND AFTER LIVER SURGERY IN PIGS

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Measures to ensure the safety of the donors hepatectomy remain the main concern.. The mechanisms leading to the hemostatic changes of acute liver injury are poorly understood. The acquired platelet function defects leads to hemorrhage, especially in association with trauma or surgery. The technique of donor operations consisted of initial hilar dissection, mobilization of the liver lobe and resection. The laboratory piglet is currently the preferred animal for experimental digestive surgery. Aim of the work: To study the acquired platelet changes and activation after hepatic Injuries by mobilization and resection of liver. Methodology and Experimental Design: A 15 healthy pigs were prepared for liver resection by Rt. Tri-segmentectomy. A peripheral blood samples (15 ml.) were collected as such: one before the operation, 2 during the operation (one after the mobilization and the other after the resection of the liver), 2 after the operation (one after 7days and the other after 14 days). Platelet count, markers of platelets activation[platelet factor 4 (PF 4) and B-thromboglobulin(B-TG)] were measured in all samples. Separated platelets from peripheral blood and the liver after resection were examined by transmission electron microscope (TEM). Results: Our results showed that after hepatic mobilization and resection platelet count significantly dropped ($p<0.05$) & ($p<0.01$) respectively while PF 4 and B-TG significantly elevated ($p<0.05$) & ($p<0.01$) respectively. On 7th day platelet count elevated but remained lower than normal level while PF 4 and B-TG returned to normal level detected before the operation .On 14th day Peripheral Platelet count returned to normal level with significant elevation of PF 4 and B-TG($p<0.05$) . EM analysis of platelets in peripheral blood and in the liver during the operation after hepatic mobilization and resection has revealed evident platelets activation in the form of loss of platelets normal discoid shape and transformed to a spiny sphere with long, thin filopodia. Alpha granules have been evacuated from their contents. These changes disappeared on 7th day and then the long thin filopodia could be reobserved on 14th day. In conclusion Liver surgical intervention causes an acute and profound drop in peripheral platelet count and an increase in platelet activation. The early drop of peripheral platelet count and platelet activation as detected by elevated plasma levels of PF4&T-G and confirmed by EM showed the necessity of proper systemic coagulant therapy beside the platelets transfusion at the end of surgery for one weak in case of major hepatic resection.

LATE MORTALITY IN ORTHOTOPIC LIVER TRANSPLANT RECIPIENTS WHO SURVIVE MORE THAN 5 YEARS SINGLE CENTRE EXPERIENCE

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The increasing success of liver transplantation (LT) means that more patients are surviving long term but there remains a mortality of long term survivors. We analyzed causes of death in patients who survived more than 5 years post-LT. Methods: Between May 1982 and May 1999, 1221 adult patients underwent primary LT at this unit. 844 patients (69%) survived > 5 years post LT. The median age of survivors was 59 months with 48% older than 60 years and 18% more than 70 years old. Findings: Of the long term survivors, 110 (13%) died at a median of 92.5 months. Sixty patients (55%) died from causes related to immunosuppression, predominantly from infection, de novo malignancy, and renal failure. Cardiovascular and cerebrovascular complications accounted for more than one fifth of deaths, 34% those were >60 years old. Recurrence of non-malignant diseases was the cause of death in 6%. Conclusion: Immunosuppression related deaths and vascular complications accounted for more than three quarters of the late deaths. Modifying immunosuppression regimens and close monitoring of vascular complications, may improve long term survival of liver transplant recipients.

MUTANT P53 PROTEIN AS A BIOMARKER: HISTOPATHOLOGICAL FEATURES AND PROGNOSIS OF HEPATOCELLULAR CARCINOMA AFTER SURGICAL RESECTION

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Presenting author: Maisa El-Razky

Background and Aim: Prognosis after hepatectomy for hepatocellular carcinoma (HCC) has been improved by early diagnosis, progress in the surgical techniques and perioperative management. However, even when curative resection is performed at a relatively early stage, a considerable number of patients develop early intrahepatic and/or extrahepatic recurrence postoperatively. This study analyzed the correlation between the p53 mutations and the clinical, pathological features, tumor recurrence and patient survival after surgical resection of HCC. **Patients and methods:** Specimens from 20 HCCs and surrounding liver tissues from 20 patients who underwent surgical resection were examined histopathologically and by immunohistochemistry for detection of p53 gene mutation. The association between p53 mutation and histopathological features of HCCs, as well as tumor recurrences and patient survival were evaluated. **Results:** p53 mutation was found in 9 out of 20(45%) HCCs. p53 mutations were frequent in large, and poorly differentiated HCCs. Five out of 9(55.5%) with p53 mutation showed microvascular invasions in contrast to none out of 11 without mutation. Hepatocellular carcinoma recurred in 6 out of 9(66.6%) with p53 mutation, in contrast to only 2 out of 11(18.2%) without mutation. The 1-year survival rate in patients with p53 mutation was significantly lower than those without. **Conclusion:** The detection of p53 mutation in histopathological specimens of HCC can provide additional and independent prognostic information for the course of the disease and can serve as an indicator of high-risk patients for whom closer follow-up and aggressive adjuvant therapy may be required.

NON-INVASIVE IMAGING TECHNIQUES IN EVALUATION OF THE PORTAL VENOUS SYSTEM

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Aim of the work: Knowledge of the congenital & acquired anomalies of the portal venous system is of great importance for liver surgery & interventional procedures such as hepatic resection & liver transplantation as well as TIPS & PVE.

Patients & Methods: This study includes 120 patients (72 males & 48 females), their age ranged from 5 to 75 years (mean age 41.3 years). Ultrasonography and CT were done for all patients, color Doppler for 70 patients, CT portography for 30 patients. MRI for 35 patients & MR portography for 23 patients.

Results: Anatomical variants were detected in 19, Benign P.V. thrombus in 15 patients. Malignant P.V.T. in 23 patients. Cavernous transformation of P.V. in 18 patients. P.V. aneurysm in 4 patients. Spl. V. aneurysm in 9 patients. Submucosal esophageal varices in 15 patients. Para-esophageal varices in 26 patients. Gastric varices in 18 patients. Lineo-renal varices in 22 patients.

Conclusion: Determination of congenital & acquired anomalies of the portal venous system can help us correctly interpret radiological findings in the abdomen & very important in liver surgery.

Non-invasive portal venous imaging (U.S., color Doppler U.S., CT & MRI) provide high great value in studying portal venous system)

Color Doppler US is the most useful tool for detection of portal vein thrombosis & aneurysms. It is also useful for distinguishing between benign & malignant thrombus.

Biphasic helical CT is useful tool for assessment of macroscopic & perfusion disorders of the liver associated with portal venous system anomalies. Contrast-enhanced thin-section helical CT is probably the best modality for demonstrating porto-systemic collaterals in patients with chronic liver disease. Color Doppler US & MRI can aid in diagnosis & evaluation of these conditions. Such entities include porto-systemic collaterals vessels; cavernous transformation of P.V., aneurysm & thrombosis.

**OBSTRUCTIVE JAUNDICE PROMOTES INTESTINAL BARRIER
DYSFUNCTION AND BACTERIAL TRANSLOCATION:
EXPERIMENTAL STUDY**

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Presenting author: H Abdeldayem

Background: Sepsis and multisystem organ failure (MOF) are common complications of obstructive jaundice. Bacterial translocation has been accepted as a critical component in development of multiple organ failure. The aim of this study is to determine whether obstructive jaundice would promote the translocation of bacteria. **Methods:** The effect of bile duct ligation for 7 days on bacterial translocation to blood mesenteric lymph nodes, spleen and liver in a rat model was examined and compared with control sham operated rats. **Results:** Compared with an incidence of zero in sham-ligated controls, bile duct ligated rats had a 67 per cent incidence of bacterial translocation. **Conclusion:** Obstructive jaundice in a rat model predisposes to bacterial translocation. This suggests a mechanism whereby jaundiced patients may be more susceptible to persistent infection.

**RETROSPECTIVE ANALYSIS OF THE CAUSES OF REJECTION OF
POTENTIAL DONORS FOR LIVING RELATED LIVER
TRANSPLANTATION**

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Background: A major prerequisite for living related liver transplantation (LRLT) is to ensure both donor safety and optimal graft quality. Therefore, excluding unsuitable donor candidates should be an important priority of the transplant team. **Purpose:** is to analyze the criteria for exclusion of potential living related liver donors. **Patients and Methods:** From November 2000 to March 2005, 327 potential living related donors for 136 potential recipients for liver transplantation were screened and worked up at the Liver Transplant Center, King Abdul Aziz Medical City. They were evaluated in a stepwise manner including medical, physical, laboratory, psychosocial, and imaging assessment. Data regarding potential donors was retrospectively reviewed. Reasons for rejection of disqualified donors were analyzed. **Results:** Out of the 327 potential donors, 223 (68.2%) were rejected at an early stage. One hundred and four cases (31.8 %) had CT-volumetry and/or MRCP. While 44 (42.3%, of those who had CT-volumetry and/or MRCP) had their work up completed, 24 (23%) went for surgery. Causes for donor rejection were classified as donor related factors (inadequate volume, unsafe anatomy, abnormal liver function tests, medical/psychiatric, fatty liver, etc.), n = 191 and recipient related factors (too ill, died, received cadaveric transplant, etc.), n = 112. **Conclusion:** In our as well as in most other centers experience, small proportion of potential donors prove to be satisfactory candidates. Therefore, strict attention to a stepwise evaluation process is of utmost importance to disqualify unsuitable potential donors as early as possible during work up.

ROLE OF ENDOSCOPIC ULTRASOUND (EUS) IN THE MANAGEMENT OF SOME PANCREATICO-BILIARY DISORDERS

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Role of Endoscopic Ultrasound (EUS) in the Management of Some Pancreatico-Biliary Disorders Endoscopic ultrasonography is a technique where a high frequency ultrasound transducer is incorporated into the tip of the endoscope or a probe is passed through the channel of the endoscope. This provides high resolution images of the gastrointestinal wall and adjacent structures. Instruments can be passed under ultrasonographic guidance to obtain tissue samples and perform therapy. There are three known types of EUS viz. Radial EUS scope using a 360 degree ultrasound probe, Linear EUS scope with an ultrasound transducer along one wall of the scope and image only one wall of the GI tract with the advantage of being able to get fine needle biopsy/aspiration , and the third type is the transverse array endoscope with 270 degrees of imaging and allows good endoscopic view at the same time. EUS is generally indicated for: (according to the ASGE,2004) 1-Staging tumors of the gastrointestinal tract, pancreas, bile ducts and mediastinum. 2- Evaluating abnormalities of the gastrointestinal tract wall or adjacent structures. 3-Tissue sampling of lesions within, or adjacent to, the wall of the gastrointestinal tract. 4-Evaluation of abnormalities of the pancreas, including masses, pseudocysts and chronic pancreatitis. 5-Evaluation of abnormalities of the biliary tree. 6-Providing endoscopic therapy under ultrasonographic guidance including biliary drainage and drainage of pseudo-pancreatic cyst. In this brief presentation , the role of EUS in the following disorders will be addressed: 1- Diagnosis and staging of cancer pancreas. 2- Diagnosis of chronic pancreatitis vs. cancer pancreas. 3- Diagnosis of Biliary obstruction including malignancy and choledicolithiasis. 4- Biliary drainage. 5- Pseudopancreatic cyst drainage.

STUDY OF HEPATITIS E VIRUS AMONG A GROUP OF PREGNANT MOTHERS AND THEIR INFANTS

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Hepatitis E virus (HEV) infection, an enterically transmitted viral disease, was found to be endemic in Egypt. However, no outbreaks or epidemics have ever been reported. This study, a prospective cohort study, was conducted in three rural villages in Menoufia to assess the magnitude of HEV infection among pregnant women and their offspring. At the time of study enrollment, anti-HEV seroprevalence was found to be as high as 84.3% among 2428 pregnant women. Several risk factors associated with anti-HEV included older age, not using soap to wash fruits and vegetables, frequent contact with cats, exclusive residence within the study area and residence in Melieg (one of the three study villages). Histories of jaundice (1.4%) and liver disease (0.7%) were rare and not increased in those having anti-HEV. Sixteen seroconversions were observed among the 295 baseline anti-HEV IgG negative women who were subjected to follow up for about 1 year, giving an estimated anti-HEV seroincidence rate of 49.25 per 1000 person years. Risk factors associated with the seroincident cases were residence in Melieg, having history of previous miscarriage and frequent contact with dogs. None of the new cases gave history of any associated manifestations such as jaundice, change in colour of urine or any constitutional manifestations. All the 16 seroconverters were suspected to have converted during pregnancy, yet no adverse pregnancy outcome was observed among them. Until the age of one year, none of the infants born to the study cohort acquired the infection. It was concluded that HEV infection is wide spread in the studied Egyptian villages. However, no disease morbidity or complications were observed in the studied population, and no evidence of childhood infection was detected through first year of life.

TWENTY CASES OF ADULT-TO-ADULT LIVING RELATED LIVER TRANSPLANTATION: SINGLE CENTER EXPERIENCE IN SAUDI ARABIA

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Background: cadaveric organ shortage forced surgeons to implement surgical innovations, including living-related liver transplantation (LRLT). **Objective:** To present the first 20 cases of adult LRLT in a single center in Saudi Arabia, **Methods:** From November 2000 to May 2004, we performed 20 cases of LRLT. The donors were selected according to standard protocol. Standard indications for liver transplantation were considered. Eighteen of the donors were males and 2 were females. Their median age was 27 years. Seventeen of the recipients were males and three were females and their median age was 55 years. One case received combined liver and kidney grafts. **Results :** All cases had liver cirrhosis. Seven had hepatitis C, 6 had hepatitis B and C, 3 had hepatitis B, one case of alcoholic cirrhosis, one case secondary to Bylar disease, one case of hepatic shistosomiasis and one case of cryptogenic cirrhosis Three cases had associated hepatocellular carcinoma. There is no donor mortality. In the recipients, the overall patient and graft survival was 85%. While 10 donors presented an uneventful postoperative course, 8 presented with minor complications and 2 with major complications (biliary stricture and portal vein thrombosis). Complications in the recipients included: biliary complications (35%), acute rejection (20%), hepatitis C reactivation (20%), hepatic vein stenosis (10%), hepatic artery stenosis (5%) and hepatocellular carcinoma recurrence (5%). **Conclusions:** LRLT has become a standard option in adults with end stage liver failure in our center.

UTILITY OF VOICE-ACTIVATED SYSTEM IN MINIMALLY INVASIVE SURGERY

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Background: Advances in computer enhancement for surgery, including a voice-activated control system for Minimally Invasive Surgery (MIS), are being introduced into the clinical practice. Few reports have objectively evaluated the utility of voice activated control system. The aim of this study was to evaluate the utility of voice-activated control system for delivery of commands to specific operating room (OR) equipment. **Materials and Methods:** We evaluated a total 30 laparoscopic procedures: 15 laparoscopic hernia repairs, 10 laparoscopic cholecystectomies, and 5 laparoscopic funduplications performed with THE HERMES- Operating Room Control center (Computer Motion, Santa Barbara, California) voice-activated control system. When the Voice Command (VC) to the HERMES voice system was given, the circulating nurse was observed and her location was recorded. The 3 locations were scored, A: the nurse was immediately available in the OR i.e. not engaged in any other tasks, B: the nurse in the OR but engaged in other tasks and C: the nurse outside the OR. **Results:** The 30 cases were performed by the same surgeon and completed laparoscopically. For 170 VCs for gas insufflation: (A = 50, B= 98 and C=22). For 135 Light source adjustments : the locations were (A=34, B= 82 and C=19) .In76 white balance : (A=16, B=51 and C= 9). In 128 for Camera adjustment: (A= 27, B= 77 and C= 24). Eight 8 Video capture VCs: (A=1, B=3 and C=4). For 69 image capture VCs: (A=5,B=41and C= 23). The total VCs was 586: (A=133 (22.7%), B = 352 (60%) and C=101(17.3%). All VCs were accurately interpreted by the HERMES system. **Conclusion:** Voice-activated control systems improve the operative room Communication and efficiency of operative room staff. The surgeon is afforded the most timely equipment adjustment possible. Circulating nurses are allowed to concentrate on patient care instead of equipment adjustment during the course of the surgery. **Key works:** HERMES voice-activated system.-Minimally invasive surgery (MIS) - Voice Commands (VCs)