

Abstracts

(Sorted in alphabetical order)

ABSTRACTS

**A NOVEL EPITOPE TAG SYSTEM TO STANDARDISE HEPATITIS B
SURFACE ANTIGEN VARIANTS AFTER IN VITRO EXPRESSION**

Ashraf A Basuni^{1,3} Ralph Gehrke², WF Carman^{3*}

¹Division of Clinical Biochemistry, National Liver Institute, Menoufiya University, Egypt; ³Roche Diagnostics, Penzberg, Germany; ² West of Scotland Specialist Virology Centre, Gartnavel General Hospital, Glasgow, Scotland, UK.

Presenting author: Ashraf A Basuni

Background: Some variants of hepatitis B surface antigen (HBsAg) are not detected in commercial assays. Supernatants of in-vitro expressed cloned HBsAg variants can be used to test reactivity. However, reduced reactivity might be due to antigenic changes or lesser particle production. **Objective:** To set-up a system to measure antigenic reactivity of HBsAg variants that is independent of expression efficiency. **Study design:** Non-HBV epitope tags were inserted into the surface gene of control samples and 12 diagnostically important variants within different backbone subtypes: one ayw1, four ayw2, two ayw3, and five adw2. The amount of in-vitro expressed HBsAg was then equalised in an ELISA that captures the tag as a first step. Subsequently the immunoreactivity of each variant was compared using Abbott IMX HBsAg, bioELISA HBsAg colour and Murex HBsAg GE14 commercial assays. Three tag systems were assessed. **Results and Conclusions:** Single tags of up to 15 amino acid could be inserted at either end of HBsAg protein without affecting reactivity. However, insertion at both ends led to a major impact on HBsAg reactivity. A haemagglutinin tag was finally employed to standardise HBsAg concentration. Three variants displayed normal secretion but reduced antigenicity. Inefficient secretion and altered antigenicity was observed for four variants, though the effect on antigenicity was dominant in two of these. Two variants showed predominantly reduced secretion. Three variants had comparable reactivity to their cognate subtype standard sequence.

ABSTRACTS

ARGON PLASMA COAGULATION FOLLOWING ENDOSCOPIC INJECTION SCLEROTHERAPY FOR THE PREVENTION OF ESOPHAGEAL VARICEAL RECURRENCE AND REBLEEDING

Mohamed El-Saadany, Aymen Menassy, Magdy Hamed

Internal Medicine Department, Faculty of Medicine, Mansoura University

Presenting author: Mohamed El-Saadany, MD

Background and aims: Endoscopic injection sclerotherapy (EIS) is widely used for treatment of bleeding esophageal varices. However, variceal recurrence and rebleeding represent a major clinical problem. The aim of this study was to evaluate safety and efficacy of Argon Plasma Coagulation (APC) when applied after esophageal variceal obliteration by EIS for the prevention of variceal recurrence and rebleeding. Methods: This prospective randomized study included 100 patients with liver cirrhosis presented with first attack of acute esophageal variceal bleeding. Standard resuscitation measures and urgent EIS after admission were carried out to control variceal bleeding. Randomization after control of the initial bleeding episode into 2 groups with 50 patients in each one ; group I (GI) and group II (GII) who were matched for age (mean \pm SD) 49.04 \pm 6.45 vs. 50.28 \pm 6.23 years (p 0.13), sex (M: F) 40: 10 vs. 38: 12 (p 0.63), etiology of cirrhosis (HCV: HBV) 44:6 vs. 47: 3 (p 0.2) and Child-Pugh class (A / B / C) 20 / 24 / 6 vs.19/ 26 / 5 (p 0.9), respectively. All patients received repeated sessions of EIS at 2-4 weeks intervals until complete variceal eradication, followed by APC therapy to the lower esophageal mucosa of patients in GI only at 2- 4 weeks intervals until complete esophageal mucosal coagulation. Omeprazole 20 mg / d was given after each APC session for 2- 4 weeks. Endoscopic follow-up every 2- 3 months to detect variceal recurrence and/ or complications. Results: In GI, variceal recurrence occurred in 7 patients (14%) after (mean \pm SD) 29.57 \pm 6.29 weeks of variceal obliteration vs. 19 patients (38%) (p 0.006) after 20.6.48 weeks (p 0.003) in GII, respectively. Variceal rebleeding occurred in one patient (2%) only in GI vs. 7 patients (14%) in GII (p 0.027). Complications after APC were transient and mild including: chest pain (42%), abdominal distension (16%), fever \leq 38.0 (46%), dysphagia (32%) and esophageal ulcers (4%). No esophageal perforation, stricture or submucosal emphysema occurred. Conclusions: APC after EIS is an effective consolidation therapy for the prevention of variceal recurrence and rebleeding.

ABSTRACTS

**ASSESSMENT OF KL-6 AS A TUMOR MARKER IN PATIENTS WITH
HEPATOCELLULAR CARCINOMA**

Amal Gad, Eiji Tanaka, Akihiro Matsumoto, Moushira Abd-el Wahab, Abd el-Hamid Serwah, Fawzy Attia, Khalil Ali, Howayda Hassouba, Abd el-Raouf el-Deeb, Tetsuya Ichijyo, Takeji Umemura, Hidetomo Muto, Kaname Yoshizawa, Kendo Kiyosawa

Presenting author: Ashraf M. Shawkat

AIM: To investigate the clinical significance of KL-6 as a tumor marker of HCC in two different ethnic groups with chronic liver disease consecutively encountered at outpatient clinics.

METHODS: Serum KL-6 was measured by the sandwich enzyme immunoassay method using the KL-6 antibody (Ab) as both the capture and tracer Ab according to the manufacturer's instructions (Eisai, Tokyo, Japan). Assessment of alpha fetoprotein (AFP) and protein induced vitamin K deficiency or absence (PIVKA-II) was performed in both groups using commercially available kits.

RESULTS: A significantly higher mean serum KL-6 (556 ± 467 U/L) was found in HCC in comparison with non-HCC groups either with (391 ± 176 U/L; $P < 0.001$) or without (361 ± 161 U/L; $P < 0.001$) liver cirrhosis (LC). Serum KL-6 level did not correlate with either AFP or PIVKA-II serU/Levels. Using receiver operating curve analysis for KL-6 as a predictor for HCC showed that the area under the curve was 0.574 (95%CI = 0.50-0.64) and the KL-6 level that gave the best sensitivity (61%) was found to be 334 U/L but according to the manufacturer's instructions; a cut-off point of 500 U/L was used that showed the highest specificity (80%) in comparison with AFP and PIVKA-II (78% vs 72% respectively). Combining the values of the three markers improved specificity of AFP for HCC diagnosis from 78% for AFP alone; 93% for AFP plus PIVKA-II to 99% for both plus KL-6 value ($P < 0.001$). Mean serum alkaline phosphatase level was significantly higher in KL-6 positive (564 ± 475) in comparison with KL-6 negative (505 ± 469) HCC patients ($P = 0.021$), but such a difference was not found among non-HCC corresponding groups.

CONCLUSION: KL-6 is suggested as a tumor for HCC. Its positivity may reflect HCC-associated cholestasis and/or local tumor invasion.

ABSTRACTS

CHANGES IN SERUM GASTRIN LEVEL ,GASTRIC MOTILITY AND ACIDITY AFTER ROUX-EN-Y BILIARY-ENTERIC RECONSTRUCTION IN PATIENTS WITH OBSTRUCTIVE JAUNDICE

*El-Sayed Soliman * , Hesham Abdeldayem * , Maher Osman * , Ibrahim Abdel-Kader Salama * Basem Soliman * , Redda Ghoneim * , Ann Abdel Moneim ** , Talaat El-Sefi * , Ibrahim Marwan **

Presenting author: El-Sayed Soliman/ Hesham Abdeldayem

Background: Roux-en-Y biliary enteric reconstruction procedures have been widely used in the treatment of many patients with obstructive jaundice. However several studies showed that there is increased incidence of peptic ulceration after such procedures. **Objective:** is to evaluate the effect of Roux-en-Y biliary-enteric reconstruction on serum gastrin level, gastric acidity and motility in patients with obstructive jaundice. **Patients and Methods:** 20 patients with confirmed biliary obstruction who underwent biliary enteric reconstruction were studied. Pre- and postoperative serum gastrin level, gastric motility and acidity were assessed by radioimmunoassay, gamma scintillation camera and basal acid output (BAO), and pentagastrin stimulated maximum acid output (MAO) respectively. **Results:** There were significant rise in postoperative serum gastrin levels when compared with preoperative levels (percent of change: $29.53 \pm SD 7.82$ pg/ml, and $p = 0.000$) Postoperative BAO and MAO increased significantly when compared with preoperative values (percent of change: $32.99 \pm SD 25.91$, $p = 0.000$ and percent of change: $18.64 \pm SD 11.86$ $p = 0.000$ respectively). On the other hand there was significant delay in gastric emptying postoperatively (percent of change: $19.45 \pm SD 8.91$ and $p = 0.000$) .**Conclusion:** Roux-en-Y biliary enteric reconstruction results in increased levels of serum gastrin, gastric acidity and delayed gastric emptying.

ABSTRACTS

**CLINICAL ASPECTS OF USING PROTON PUMP INHIBITORS IN
TREATING CHRONIC PANCREATITIS**

*J. Seleznovs, J. Pokrotnieks, G. Orlikovs, V. Voltner, I. Plavina, E.
Ostrovskis*

Gastroenterology Centre

Presenting author: Jurijs Seleznovs

During acute attack of chronic pancreatitis (CP) the exocrine pancreatic secretion(PS) wanted to be reduced to prevent pathological tissue changes mentioned above as well as to precipitate the remission of exocrine PS. Methods: Three groups of patients were studied with the purpose of assessing the efficiency of the application of proton pump inhibitors(PPI) in the treatment of CP. Patients with confirmed CP diagnosis received a course of treatment during one month. The first group received Nexium 20mg per day and Pangrol 25000 three times per day, second group received Omeprazol 20mg twice per day and Pangrol 25000 three times per day, third group received Omeprazol 20mg twice per day, control group received Pangrol 25000 three times per day. The next examination before and after the trial was provided: registration of symptoms, abdominal ultrasound, fecal test (steatorrhea), the fecal pancreatic elastase(FPE). Results: All the groups mentioned abdominal pains diminishing, the stool was normalized, has disappeared steatorrhea (excepting third group). Statistically reliable reduction of ultrasound pathological signs of a CP and normalization of activity FPE were revealed in patients received combined therapy compare to groups of patients with monotherapy. Conclusions: Therapy with PPI in a combination with PE is more effective, than monotherapy.

ABSTRACTS

CYSTATIN C IN CHRONIC LIVER DISEASES

Ahlam MA, *Magda Sh, **Heba G, *Madiha Attar, and* May S.

***Tropical Med. Depart. **Clinical Pathology Depart. Assuit University**

Presenting author: Magda Shehata

Serum cystatin C concentration is closely related to the degrees of fibrosis determined histologically and is significantly elevated even in patients with mild hepatic fibrosis. We aimed to study the applicability of serum cystatin C as a marker in monitoring the progression of chronic liver diseases. The study included 74 male patients with chronic liver diseases of different grade of severity, they subdivided into: Group I: 27 patients with liver cirrhosis with different Child-Pugh grade [Group Ia: Child B cirrhotic patients (n=11) & Group Ib: Child C cirrhotic patients (n=16)]. Group II: 47 chronic hepatitis C patients, they subdivided into [Group IIa: Chronic HCV infection patients with normal ALT value (n=24) & Group IIb: Chronic hepatitis C patients with raised ALT value (n=23)]. Group III 25 healthy controls with an age range of 18-55 years. Results: Serum cystatin C level was significantly higher in group Ia, group Ib and group IIb as compared to the control group and in group IIb as compared to group IIa ($p < 0.001$). No significant difference between group IIa as compared to the control group and group Ia as compared to group Ib ($p > 0.05$). Also, there was no significant correlation between cystatin C and age, platelet count or ALT in groups I, Ia, Ib, IIa and IIb. No significant correlation between cystatin C and age and platelet count in group II, while there was a positive correlation between cystatin C and ALT value. No relation between cystatin C concentrations and the process of necro-inflammation was detected. Conclusions: Serum cystatin C increased with increased severity of liver disease, (cystatin C in cirrhosis > in chronic hepatitis C > control) but its applicability as a marker for liver disease progression is still questionable.

ABSTRACTS

IMPACT OF CIGARETTE SMOKING IN PATIENTS WITH HCV INFECTION

Laila Abdel Baki , Magda Shehata , Sherief Ibrahieum ,Mohamed al Taher and Hussein A. Elamin

Tropical Medicine, and of Internal Medicine* , Assiut University

Presenting author: Laila Abdel Baki

Background:In patients with chronic hepatitis C virus (HCV) infection, the severity and progression of liver disease differ from one subject to another. The role of host, viral and environmental factors as the impact of alcohol has been largely documented but the effects of smoking is poorly documented. So the aim of this work is to study the impact of cigarette smoking in patients with HCV infection. **Patients and methods:** A total of 240 subjects with anti-HCV positive (HCV RNA positive in 50%) as cases and 100 subjects with anti-HCV negative as control were included in the study .All were males with HBsAg negative. The mean age was 41.1 \pm 12.7 years, age ranged from 18-85 years. A full medical history was taken according to a previously designed questionnaire for liver disease with detailed history about cigarette consumption. Physical examination aimed at detecting physical signs suggestive of liver disease. Blood sampling was withdrawn from all subjects to test for AST, ALT and hepatitis markers (HBsAg, anti-HCV Ab by third generation enzyme-linked immunosorbent assay (ELIZA) and detection of HCV RNA by reverse transcriptase polymerase chain reaction (RT-PCR). **Results:** Elevated levels of ALT (> 40 U/L) were detected in 54.5% of cases and in 3.4% of the controls (13.2% were smokers). In HCV positive subjects, cigarette smokers are more likely to have raised ALT levels than the non-smokers (50.1% vs15.8%) $P<0.001$. There was a positive correlation between the duration of smoking and ALT levels ($r=+0.71$ $p <0.001$). The highest proportion of patients with increased levels of ALT was in those who smoked more than 20 cigarette per day (86% OR 1.72 CI 0.7-3.2 $P<0.001$). Other risks for raised ALT in patients with anti-HCV positive were age more than 50 years (OR 1.1 95% CI 0.8-1.5 $p=0.02$), Goza smoking (OR 1.7 95% CI 1.16-2.49 $p=0.004$), history of blood transfusion (OR 2.3 95% CI 0.84-6.4 $P=0.01$), and positive HCV RNA (OR 1.6 95% CI 0.2-5.3 $P=0.02$). In multivariate logistic analysis only smoking was significantly associated with elevated ALT levels among anti-HCV seropositive subjects $p=0.02$. The Odds of elevated ALT levels was 6 times higher for the anti-HCV seropositive patients who smoked for more than 20 years (95% CI 1.1-13.8). **Conclusion:** Smoking is associated with elevated ALT levels in patients with HCV infection so HCV positive patients are strongly advised not to smoke to reduce the possible risk of regression of liver dysfunction.

ABSTRACTS

LATERAL DISSECTION TECHNIQUE: TOWARDS SAFER LAPAROSCOPIC CHOLECYSTECTOMY

Ibrahim AbdElkader Salama 1, Hesham Abdeldayem1, Mohamed Abuoshady1, Samy Kashkosh1, Amr Mostufa1, Steven D. Schwaitzberg2, Amr Helmy1

Department of Hepatobiliary surgery, National Liver Institute, Menouphya University, Shibin Elkom, Egypt 1. Department of surgery, Cambridge Health Alliance, Cambridge, MA, USA 2

Presenting author: Ibrahim AbdElkader Salama

Background: Laparoscopic Cholecystectomy has been quickly accepted worldwide. However, the incidence of bile duct injuries seem to be high. **OBJECTIVE:** to evaluate the efficacy and safety of lateral dissection technique during laparoscopic cholecystectomy. **METHODS:** Between 1 October 1995 and 30 September 2005. 1.645 laparoscopic cholecystectomies were performed in National Liver Institute and Mahmoud hospital by using lateral Dissection technique. Keeping close to gall bladder wall, dissection start at a safety zone identified at the lateral edge of the gall bladder neck. The peritoneum at the lateral Side of Hartman pouch is opened from above down to the junction with the cyst duct. The base of the gall bladder is freed off the liver bed until a window above the hepatic pedicle is opened. Then with minimal dissection the cystic artery and the cystic duct are clipped. **RESULTS:** Out of 1.645 cases of laparoscopic cholecystectomies performed by lateral dissection techniques there were no mortality. 279 cases (16.9%) were acute cholecystitis Eight (0.48%) had significant bile leak (5 from cystic duct stump and 3 from accessory duct at the liver bed) 2 managed conservatively, 3 treated by endoscopic stenting and surgery was mandatory in 3 cases. Intraoperative Cholangiography (IOC) was performed in 213(12.9%). Missed CBD stones in 4 cases (0.24%) all successfully treated endoscopically. There were no bile duct injuries among our series. Port site hernia in 11 cases (0.66%). Port site wound infection in 18 cases (1.09%). Hospitals stay (1-12 days). Four cases (0.24%) were converted to open (2 had severe adhesions and inflammation and 2 had intraoperative bleeding). **CONCLUSION:** improving the safety of laparoscopic cholecystectomy can be achieved by starting dissection at a safety zone lateral to edge of the gall bladder with minimum dissection at triangle of Calot (Dangerous zone). **Key words:** Lateral dissection- Safety zone-Laparoscopic cholecystectomy.

ABSTRACTS

LONG EXPERIENCE WITH HIGH BILIARY RECONSTRUCTION

Ashraf M. Shawkat

Department of General and Laparoscopic Surgeries, Minia University.

Presenting author: Ashraf M. Shawkat

High biliary strictions and injuries remain major challenge to biliary surgeons. Long experience with ligamentum teres approach, lowering of the bilar plate and anterior segmentectomy IV for exposure of high biliary channels and further anastomoses to jejunum.

Techniques, results will be presented.

ABSTRACTS

MANAGEMENT OF CHRONIC HCV IN EGYPT ON A NATIONAL BASIS

M. Reda Awadein

Internal Medicine Department, Cairo University

Presenting author: M. Reda Awadein

HCV infection is a major health problem among Egyptians. Management of this large sector of population is very expensive. A scoring system for patients' management – based on international criteria of predictors of response – is suggested. Various drug regimens are suggested.

ABSTRACTS

**NEWER TECHNOLOGIES FOR GI TUMORS IN-VIVO ELECTROPORATION,
IS IT THE ANSWER FOR PANCREATIC CANCER, A SYSTEMATIC
REVIEW**

*Ayman B. Ibrahim c, D , Sammy Saab c, Elsairafy Eman D Division of
Digestive Diseases, Department of Medicine, Dumont-UCLA Liver
Transplant Center, Department of Surgery Los Angeles, USA*

Presenting author: Ayman B Ibrahim MD

Background: Invivo Elecotroporation is a new technology used to fight cancer. Electroporation is a physical process of inducing nanometer-sized transient pores in the cell membrane by the application of short duration, high intensity electric field pulses to tumor cells or tissues. In this permeabilized state (electropermeabilization), cell membrane can allow passage of Antineoplastics, DNA, enzymes, and antibodies into cells. Electroporation has been in use for in-vitro experimentations for years. **Description of techniques:** The most important parameters for effective electroporation are the voltage [V], the length of time the field is applied (pulse duration), medication or plasmid concentration and electrodes. Using a Trigrad or Unipolar electrode attached to an electrical current generator where electrodes are inserted in the middle of the tumor is the critical step. A few minutes after injecting the anti-neoplastic drug intratumorally, the Tumor is electroplated using the electroporation device for multiple times. This allows the antineoplastic medication or DNA plasmid to enter the cancerous cells and exert its effect. The tumor is assessed later postoperatively at regular intervals of 2, 4, 6 and 12 weeks. **Potential Indications:** This technique is suggested for pancreatic cancer as Phase I clinical trial, where surgeons explore the tumor to assess respectability. When tumor is not resectable, EPT is suggested to play a role. Comparing the outcome of the procedure is based on tumor shrinkage and survival rate. The treatment should be evaluated for long term safety and efficacy. This treatment modality may hold a lot of optimism for non resectable tumors. This technology is underway for testing in head and neck tumors and skin cancers. **Future Directions:** Optimization of the process. More clinical trials for validation of the techniques. Verification of results and providing proof of safety and efficacy. Determining future indications.

ABSTRACTS

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

Hesham Abdeldayem , Enas Ghoneim and Mohamed Tawfeek Badr

Presenting author: Hesham Abdeldayem

Background: Although clinical and experimental studies have demonstrated a correlation between obstructive jaundice and the development of sepsis, the mechanism has not been fully elucidated. The aim of this study was to investigate the influence of biliary obstruction on bacterial translocation as a possible source of infection in cases of obstructive jaundice. **Material and Methods:** Two groups of 12 Wistar rats were examined: rats subjected to common bile duct (CBD) ligation (group A) and rats subjected to a sham operation (group B). After 7 days blood samples were taken and liver, spleen, and mesenteric lymph nodes (MLN) from the ileocaecal area were removed, divided into small pieces and cultured. Quantitative culture results were determined by the number of colony-forming units (CFU) per ml homogenate. Bacterial translocation was defined as the presence of a positive culture of mesenteric lymph nodes, blood, liver and/or spleen. Samples for histopathological examination were taken from the mucosa of the ileum and the colon and evaluated for inflammatory and destructive changes. **Results:** There was no evidence of bacterial translocation to MLN, blood, spleen or liver detected in any of the 12 sham-operated control rats. In contrast, bacterial translocation was demonstrated in 8 of the 12 CBD ligated rats ($P < 0.01$). In all 8 cases in which translocation occurred, *Escherichia coli* was cultured from the mesenteric lymph nodes. There were no histological changes in the mucosal samples of the control animals. In the CBD ligated rats hyperemia, vacuolization, reduction of goblet cells, decreased mitotic activity and infiltration by lymphocytes and PMNLs were detected. Cases in which translocation occurred were significantly associated with decreased mitotic activity in the colon ($r = -0.5$, $p < 0.01$) and higher infiltration by PMNLs in the ileum ($r = -0.62$, $p < 0.05$). **Conclusion:** Obstructive jaundice in a rat model predisposes to bacterial translocation. This suggests a mechanism whereby jaundiced patients are susceptible to septic complication.

ABSTRACTS

**PATIENTS SEEKING LIVER TRANSPLANTATION TURN TO CHINA:
OUTCOME OF 15 EGYPTIAN PATIENTS UNDERWENT CADAVERIC LIVER
TRANSPLANTATION IN CHINA**

*Hesham Abdeldayem **, *Ibrahim Abdel Kader Salama **, *El.Sayed Soliman **,
*Khaled Gameel ***, *Mohamed Akl Rady***, *Khaled Abu El-Ella **, *Amr Aziz **,
*and Amr Helmy **

Presenting author: Hesham Abdeldayem- Ibrahim Abdel-Kader

ABSTRACT : Background: Increasing numbers of Egyptian patients with end stage liver disease are seeking cadaveric liver transplantation in China. They are attracted by the lower costs and shorter waiting time compared to living related liver transplantation in Egypt. At the same time, they will get a whole organ without the need for searching for a suitable living related donor. Aim: To evaluate the outcome of Egyptian patients who underwent cadaveric liver transplantation in China and to address our ethical concerns. Patients and methods. Fifteen Egyptian patients who underwent cadaveric liver transplantation in China were included in this study. Preoperative data before traveling to China, all available reports from China and data concerning their follow up after coming back from China were retrospectively reviewed. Results: Of the 15 patients, 11 were men and 4 were women. Their mean age was 52 years. Indications included hepatitis C-related liver cirrhosis (n=9), hepatitis C-related liver cirrhosis with hepatocellular carcinoma (n=4), and hepatitis B-related liver cirrhosis (n=2). Nine of the 15 patients were evaluated for living related liver transplantation but none of their potential donors was considered suitable. Three patients had advanced hepatocellular carcinoma and were not accepted by any center in Egypt for living related liver transplantation. Two patients did not have any potential living related donor. One patient refused the option of having living related liver transplantation in Egypt and elected from the start to get a whole liver graft from China. The overall survival rate was 80.0% at 6 months and 73.3% at 12 months. There were four deaths, two of which occurred in China. Of the 11 surviving patients, nine (82%) developed complications. Nineteen complications were seen in the 13 patients who were managed following their return from China. Infective and biliary complications accounted for 46% and 23% respectively. Major complications necessitated prolonged hospitalization occurred in 4 patients. Two patients required further laparotomy. Conclusion. Although cadaveric liver transplantation in China could be an option for Egyptian patients with end stage liver disease, patients and clinicians should be aware of the possible outcomes and related ethical issues.

PROLINE ANALOGUES DECREASE COLLAGEN DEPOSITION AND BILE DUCTS PROLIFERATION IN FASCIOLA INFECTED ANIMALS

Abdel-Gawad El-Sayed Abdel-Gawad Saad
National Liver Institute, Menoufiya University

Presenting author: Abdel-Gawad El-Sayed Abdel-Gawad Saad

The amino acid proline is a major constituent of collagen, and an excretory product released in large quantities by fasciola. Collagen increases occur in the bile ducts during fascioliasis, the hyperplasia and fibrous infiltration of the bile ducts producing thickened duct wall and enfolded epithelial lining surrounding the duct lumen were found to be collagenous. Azetidine and 3,4-dehydroproline are two proline analogues were used in this experimental study. It is found that these analogues counteracted the effects of proline produced by the liver fluke (Fasciola) and consequently inhibited collagen deposition and bile ducts hyperplasia that used to occur with fasciola infection.

ABSTRACTS

**PROTECTIVE EFFECT OF ISCHEMIC PRECONDITIONING AGAINST
HEPATIC ISCHEMIC INJURY DURING THE COURSE OF LIVER
RESECTION IN A RAT MODEL**

*Hesham Abdeldayem *and Ahmad Ahmad-El-Refaie **and Ashraf Bassiouny****

Presenting author: Hesham Abdeldayem

Background: Ischemic preconditioning (IP) is a process by which a brief ischemic episode confers a state of protection against subsequent sustained long-term ischemia-reperfusion injury. The purpose of this study was to evaluate the protective effect of ischemic preconditioning on ischemic injury of the liver during the course of hepatic resection in a rat model. **Material and Method:** Three groups of 6 Wistar rats were examined; Group A: subjected to sham-operation, Group B (ischemia/reperfusion group I/R): animals subjected to left-lobe hepatic ischemia for 30 min followed by reperfusion and right lobe resection and Group C (ischemic preconditioning group IPC): subjected to 10 minutes to left-lobe hepatic ischemia followed by 10 minutes of reperfusion followed by the prolonged ischemia for 30 min followed by reperfusion and right lobe resection. After 10 days the animals were killed and the livers were excised for histopathological assessment of the degree of liver damage. Serum concentrations of lactate dehydrogenase (LDH), aspartate aminotransferase (AST), alanine aminotransferase (ALT), were measured as markers of hepatocyte injury at completion of the first laparotomy and at relaparotomy after 10 days. **Results:** There were significantly higher levels of AST ,ALT and LDH in ischemia/reperfusion group as compared to ischemic preconditioning group ,(p <0.05). Furthermore, histopathological evidence of liver damage was more pronounced in ischemia/reperfusion group as compared to ischemic preconditioning group, (p <0.05). **Conclusion:** Ischemic preconditioning exerts a protective effect on hepatic ischemia-reperfusion injury in rat model. Such a manoeuvre may be useful for hepatic resection in the clinical setting.

ABSTRACTS

RECURRENT COLORECTAL CARCINOMA, PATTERNS & ASSESSMENT OF CLINICAL COURSE, A STUDY ON 30 PATIENTS WITH RECURRENT CRC, AT GIAND HEPATOLOGY TEACHING HOSPITAL BAGHDAD IRAQ

Qais S Mohammed (MD,CABS), Maad M AbdulRahman (MD,FRCS)
Iraq

Presenting author: Qais S Mohammed

Background: Colorectal carcinoma (CRC) is the third most common malignancy in most western & North America countries. In Iraq, CRC is increasing to become the leading gastrointestinal (GIT) malignancy for the past 15 years, ranking 8th among the ten most common malignancies. Approximately 30-40% of all patients resected for cure will develop recurrent disease, half of those amenable to salvage surgery aimed at improving the quality of survival. **Methods:** A prospective study done in GIT & Hepatology hospital, Baghdad, Iraq, from the period of Nov 2002 to July 2005; there were thirty patients admitted with recurrent CRC. 17 recurrent rectal, 13 recurrent colonic carcinoma. **Results:** There were 20 men and 10 women with a mean age of 55 years. The time from primary carcinoma resection to recurrence ranged from 6 months to 48 months with a median duration of 27 months. Rectum & sigmoid colon were the commonest sites of primary tumor (83.3%). The most frequent sites of recurrences were the site of anastomosis (40%), the liver 20%. multiple sites noted in about 47% of patients. **Discussion:** Therapeutic strategies for loco regional recurrences are not uniform, operation alone rarely result in a cure. Complete resection of recurrent extra hepatic intra abdominal CRC had significant effect on patient's survival. Anastomotic recurrences are more frequently amenable to curative resection than loco regional recurrences; resection with curable intent was successful in 33% of our patients. Recurrent rectal cancer is more difficult to manage because of proximity to other pelvic structures. The 17 patients with recurrent rectal cancer curative intent resection were done in 3 patients 17.7%. The associated peritoneal nodules, adhesions & fixity to major vessels, were obstacles to curative resections. **Conclusions:** Recurrent colorectal cancer usually present within 24 months after primary curative surgery. The most frequent sites of recurrences were the site of anastomosis. The most common mode of presentation was acute or sub acute intestinal obstruction (33%). Salvage surgery aimed at improving the quality of survival and cure could be applied, and should be looked for whenever possible especially for well differentiated tumors.

ABSTRACTS

SUBTOTAL GASTRIC RESECTION FOR PREVENTION OF DELAYED GASTRIC EMPTYING AFTER PANCREATICO-DUODENECTOMY

Medhat Khafagy

Department of Surgery, National Cancer Institute

Presenting author: Medhat Khafagy

Rationale: Delayed Gastric emptying is one of the leading causes of morbidity following pancreatICO-duodenectomy occurring in nearly one third of patients. In order to improve gastric emptying subtotal gastrectomy with resection of nearly 60% of the stomach converting it from a reservoir into a conduit is undertaken to prevent gastric stasis and shorten transient time.

Study Design: Over a period of five years, from 2000 through 2005, a total of twenty patients with operable pancreatic cancer underwent subtotal gastric resection concomitant with pancreatICO – duodenectomy. This group was compared retrospectively with a matched control group of twenty patients who underwent classic pancreatICO – duodenectomy. The studied group was evaluated clinically as regards delayed gastric emptying which was marked by emesis and re-insertion of nasogastric tube for more than 10 days after surgery.

Oral Gastrograffin examination was carried out at the tenth postoperative day to assess emptying time radiologically.

Results: None of the patients in the studied group developed early delayed gastric emptying compared to six patients (30%) in the control group ten days following surgery.

This new technique abolished delayed gastric emptying completely.

Conclusion: Subtotal gastric resection with concomitant pancreatICO-duodenectomy contributed greatly in the prevention of early delayed gastric emptying.

Though not life threatening, delayed gastric emptying if prevented can result in short hospital stay and cost without any associated surgical morbidity.

ABSTRACTS

**SURGICAL OUTCOME OF MAJOR HEPATIC RESECTION OF PRIMARY
HEPATIC TUMOR : A THREE-YEAR FOLLOW-UP STUDY**

Hussein Abdel fattah MD, Ahmed S Kawashti, and Ahmed M Younis
Al-Azhar university

Presenting author: Hussein Abdel Fattah

This prospective study aimed to evaluate the 3-year surgical outcome of major hepatic resection in patients with solitary primary liver cancer. The study comprised 20 patients (15 males & 5 females) with mean age of 61.2±9.4 years. All patients underwent full clinical examination and preliminary evaluation included laboratory investigation and abdominal US examination. Cases with suspected primary liver carcinoma underwent abdominal CT imaging, upper gastrointestinal endoscopy and preoperative CT guided biopsy. Resections were performed with vascular isolation before parenchymal division. Ten patients were not. Chronic hepatitis C WAS REPORTED IN 6 PATIENT and 4 patients were HBs positive. CT examination detected solitary lesion in all patients within a range of 5-10 cm in diameter with a mean diameter of 6.6±1.8 cm. Patients grading according to TNM classification of primary hepatic tumors defined 12 patients (60%) of grade I, 5 patients (25%) of grade II, 2 patients of grade III (10%) and only one patient (5%) of grade IV. All patients had smooth intraoperative course without intraoperative complications or injury of important organs: 18 patients underwent right hepatectomy and 2 patients left hepatectomy. Immediate postoperative morbidity rate was 55% and mortality rate of 10%. One year after surgery 4 patients died with a 1-year survival rate of 80% and the 2-year and 3-year survival rate was 75% and 70%, respectively with mean survival duration of 29.7±9.1; range : 4-36 months. Eight patients had local intrahepatic recurrence and one patient had pulmonary metastasis with a mean recurrence free period was 21.6±9.5 (range: 4-33) months in 9 patients; whereas the other 11 patients had 3-year recurrence free period. The mortality rate of cirrhotic patients was 40% and 20% of non-cirrhotic patients. There was a positive significant correlation between the occurrence of recurrence and tumor grading and a negative significant correlation between tumor grading and survival. It could be concluded that major hepatic resection for primary hepatic tumors had an acceptable morbidity and mortality rates and allow a 3-year recurrence-free period in about 55% of patients and a 3-year survival rate of 70%.