AFLATOXIN LEVELS IN WHEAT GRAINS AND ITS PRODUCTS DURING THE 2005, POISONING OUTBREAK IN DAKAHLIA OF EGYPT

Mohamed Tabekha

Presenting author: Mohammed Tabekha

Aflatoxin are among the major classes of my co toxins which are natural toxins produced by various fungal species namely aspergillums fusarium and penicillin. The occurrence of these toxins in food is attributed to fungal invasion of growing crops or growth of toxigenic fungi on crops that had been poorly handled during harvest or storage consumption of aflatoxin contaminated foods or feds may result in acute or chronic health affects in both man and animals. In 2005 Dakahlia District found 15,000 tons of wheat grain was invaded with this type of toxins, determination of aflatoxins levels using immunoafinity coupled with solution, fluorometery and HPLC total samples with random environmental samples were collected and analyzed, included wheat grains, wheat flour and bread made out of that flour. The amount of aflatoxin observed in food sample had average of 0.58.000 ug/kg the International Agency for research on Cancer (LARC) of who has placed aflatoxins in Class I of Cancer causing Poison. Epidemical Social Studies shows a strong correlation between high incidence of liver cancer and exposure to aflatoxins. The maximum permissible limit of 20 ug/kg there is need to address the issue of pre and post harvest handling of grain and establishing, monitoring and surveillance for early detection and intervention, all proper details will be discussed.

CHARACTERIZATION OF INCIDENTALLY DETECTED ASYMPTOMATIC HEPATITIS B POSITIVE SUBJECTS IN EGYPT

G.Shiha¹, W.Samir¹, K.Zalata², S.Seif¹, A.Moanis³, M.Gabre⁴, A.Elfakhry¹.

¹Elmansoura Specialized Medical Hospital, Elmansoura University, ² Pathology Dept, Elmansoura Faculty of Medicine, ³ Internal Medicine Dept, Tanta University, ⁴ Internal Medicine Dept, Ain Shams University, Egypt.

Background: Although chronic hepatitis B virus infection is relatively common in Egypt, the incidental discovery of asymptomatic forms have not been well studied.

Aim: To characterize the clinical, serological and histological liver damage among incidentally detected asymptomatic hepatitis B surface antigen (HBsAg)-positive subjects (IDAHS) in Egypt.

Methods: We prospectively studied 70 consecutive IDAHS patients. Tests for liver function, serological markers for HBV, HCV, HDV and schistosomiasis were performed for all patients. HBV DNA was determined by the branched DNA technique and PCR. Liver biopsy specimens from 44 patients were studied and scored for activity and fibrosis stage by modified Knodell score and the METAVIR score. HBsAg and HBcAg were immunohistochemically evaluated in the liver tissue.

Results: Of the studied 70 patients, 57 (81.6%) were HBeAg-negative and 13 (18.4%) were HBeAg-positive. Hepatic transaminases in HBeAg-positive patients were significantly elevated when compared to HBeAg-negative patients. HBV DNA was detected in only 3% of patients by the b-DNA technique and in 97% by PCR. Pathological examination of liver tissue revealed mild activity in 21 (47.7%) patients. Additionally, 21 patients (47.7%) revealed mild to moderate expansion of portal areas by fibrosis while 7 patients (15.9%) showed bridging fibrosis. Non of the patients were cirrhotic.

Conclusion: The majority of IDAHS subjects are HBeAg negative without elevation of hepatic transaminases. However, they should be considered as patients since viremia is detected in almost all cases using PCR technique, and histopathological evidence of chronic hepatitis B virus infection is present in varying degrees.

CHARACTERIZATION OF PATIENTS COINFECTED BY HEPATITIS B AND HEPATITIS C VIRUSES AMONG EGYPTIANS

Shiha G¹, Samir W¹, Zalata K², Seif S¹, Elfakhry A¹, Elshenawy H³. Internal Medical Department, ElMansoura Faculty of Medicine¹ Pathology Department, ElMansoura Faculty of Medicine² Monofia Liver Institute³. Egypt.

Background: Hepatitis C virus (HCV) and hepatitis B virus (HBV) infections are common in Egypt. Coinfection by the two viruses is not uncommon. Little and quite controversial data are known about clinical, biochemical and histological profile in these patients. Aim: To study the biochemical, virological and pathological characteristics in patients with dual infection by HBV and HCV compared to each virus alone. Methods: We enrolled 404 incidentally discovered patients with chronic viral hepatitis: 72 HBsAg and anti-HCV positive (Group BC), 121 HBsAg positive and anti-HCV negative (Group B) and 211 anti-HCV positive, HBsAg/anti-HBs/ anti-HBc negative (Group C). Liver function tests, complete blood picture, serological markers for HBV and HCV and polymerase chain reaction for HBV DNA and HCV RNA were done. Histopathological examination of liver biopsies was done for 30/44/191 patients in different groups (BC, B and C respectively) and scored by modified Knodell and Metavir scores. Results: Group B patients were significantly younger than patients in group BC and C (P<0.001). Significantly higher liver transaminases were found in groups BC and C when compared to group B (P<0.001) without significant difference between The prevalence of HBV wild type was not groups BC and C (P<0.07). significantly different between group BC and B while anti-HBe was significantly higher in patients with pure hepatitis B. HBV-DNA was significantly suppressed in group BC than group B (82.3% vs 94.2%, P<0.02). Significantly higher histological activity index Metavir scores were found in groups BC and C compared to group B (P<0.001) while there was no significant differences between group BC and C except for steatosis which was more frequent in patients with pure hepatitis C (P=0.05). Conclusion: Dual infection by HBV and HCV are characterized by suppression of HBV replication without significant suppression of HCV replication and are associated with severe liver diseases.

CIRCULATING ALPHA-FETOPROTEIN MESSENGER RNA AS A POSSIBLE INDICATOR OF HEMATOGENOUS SPREAD OF HEPATOCELLULAR CARCINOMA

- * Laila Mahmoud Montaser ** Emam Abd El-Latif Wakid *** Omima Mahmoud Abbas
- * Clinical pathology ** Medicine, Hepatology Dep. *** Clinical pathology

Presenting author: Laila Mahmoud Montaser

Hepatocellular carcinoma is the fifth most common cancer world wide, and most cases are associated with HBV or HCV infection. In Egypt, there is a high prevalence of HCVAb rendering it attributable important risk factor in occurrence of HCC. Molecular biology methods now permits us to detect a small number of cancer cells in blood by use of RT-PCR targeting a cell-specific gene. This molecular technique has been proposed for detecting HCC cells in the circulation, targeting AFP mRNA which might predict hematogenous spreading of tumor cells in patients with HCC. The aim of this work is to study the expression of AFP mRNA in blood of patients with HCC and its correlation to the level of serum AFP, tumor size and presence of metastasis to detect its possible role as an indicator of hematogenous spread of HCC. This study was conducted on 47 patients complaining of HCC and CLD. 10 apparently healthy individuals of comparable age and sex were taken as a control group. They were divided into 4 groups: Group I: 14 patients with HCC before start of treatment. Group II: 18 treatment of (by resection, HCC radiofrequency chemoembolization). Group III: 15 patients with CLD but without HCC. Group IV: 10 healthy volunteers with normal liver function & no history of liver disease. Detection of AFP mRNA expression in blood was done and the results showed that: •The comparison between treated HCC group and non treated HCC group regarding the positivity rate of AFP mRNA showed significant difference. •There was non significant difference of AFP mRNA positivity rate in studied patients regarding their serum AFP level. •There was a significant difference of AFP mRNA positivity in studied patients regarding HBV infection. The association between HBV infection and the hematogenous spreading of liver and/or HCC cells - as detected by AFP mRNA- needs to be investigated with a new large series with HBV infection are needed. Using two markers assay with a liver specific marker or a hepatoma specific marker is recommended & appears to be highly sensitive method for the detection of circulating HCC cells.

COMPARISON OF SERUM LEVELS OF VITAMINS E AND C AND DIETARY ANTIOXIDANTS INTAKE BETWEEN PATIENTS WITH INFLAMMATORY BOWEL DISEASE AND HEALTHY SUBJECTS

1- Amani R, 2- Hajiani E 3- Zand-Moghaddam A1,3- Dept. of Nutrition; 2- Dept. of Gastroenterology; Jundi-Shapour University; Ahvaz; Iran

Presenting author: Reza Amani

Background- Inflammatory bowel disease (IBD) is a chronic gastrointestinal inflammatory disease which has an unknown etiology. Nutrition has been proposed as an etiological factor in IBD. Objective - The aim of this study was to compare dietary intake of antioxidants and serum levels of α -tocopherol and vitamin C in IBD patients with that of normal subjects. Method –Twenty three IBD patients and twenty eight sex and age matched healthy subjects were selected from gastroenterology ward and similar catchments area, respectively. Serum samples were collected for further HPLC analysis. Food frequency questionnaires of all subjects were also obtained via interview. Result- There was no significant difference in serum levels of vitamin ${\bf C}$ and ${\bf \alpha}$ -tocopherol between two study groups. Consumption of whole grain bread and fresh vegetable in healthy subjects were 2.5 and 1.5 times more than patients, respectively (p <0.05). Moreover, it was observed that patients used to drink lower amount of tea daily (p<0.05). No significant difference was seen in consumption of other dietary sources of these vitamins between two groups. Conclusion -The results of this study indicated that although there was no significant difference between vitamin C and α-tocopherol serum levels in both groups, dietary intake of the main antioxidant sources in IBD patients was lower than healthy matched subjects. More advanced studies with more number of subjects are needed to explore the antioxidant status in this type of patients.

CONGENITAL EXCTRAHEPATIC PORTOCAVAL SHUNT PRESENTED WITH CYANOSIS: SURGICAL CLOSURE AND REVIEW OF THE LITERATURE

Osman M, Soleman H, Saleh S, Ibrahim T.
Department of HPB Surgery, National Liver Institute, Menoufiyea University

A 9-year-old boy presented with exertional dyspnea, bluish discoloration of the lips and nails, and mild bouts of encephalopathy. The parents reported that their kid was normally growing both mentally and physically until the age of 81/2 years-old, when he started exertional dyspnea and cyanosis that relived by squatting. General examination showed a mild degree of cyanosis in the lips and chest. abdomen examinations nails. Cardiac. and were echocardiography was completely normal for the child's age. Except for prolonged prothrombin time (PT activity 58%), the liver function tests were within normal ranges and viral markers were negative. Methaemoglobin level was also within normal value (1.1%). An ultrasound examination on the abdomen revealed mild degree of liver cirrhosis. A CT scan confirmed liver cirrhosis and the presence of three focal lesions in segments I, II, and IV of the left hepatic lobe, initially isodense and showed intense blush enhancement in the hepatic arterial phase suggesting a diagnosis of focal nodular hyperplasia (Fig.) On CT-Portography examination, a well-defined enhancing vascular structure was seen arising from the portal vein and extending along the posterior surface of the right lobe into the inferior vena cava, representing a persistent ductus venosus which suggests the presence of a persistent embryonic portosystemic shunt (PPS) (Fig.) Portal vein along with splenic, superior mesenteric and inferior mesenteric veins were patent. The left and right portal branches were atretic secondary to blood shunting. On completion of the Angiography, No PDA could be identified and the ascending aorta-pulmonary trunk and its main right and left branches were normal.

At laparotomy through a right subcostal incision, Kocherization of the duodenum was done followed by holding the hepatoduodenal ligament on a vascular tape. A bridge of liver tissue at the base of segment IV-V of the liver was found covering the vascular channel between the posterior aspect of the portal vein and the anterior aspect of the IVC just before the latter to become retrohepatic. The liver tissue was cut and the shunt identified, being about 1cm long and 1.3 cm width. After securing a few small collaterals, the shunt was first encircled and then double ligated -in continuity- by strong silk suture (Fig.). Liver biopsy was also taken, and proved later a normal hepatic tissue with preserved hepatic architecture. An intraoperative Color Doppler US was performed and revealed patency of the PV and its main Rt. and Lt. branches, but could not trace any further segmental or subsegmental tributaries. The abdomen was closed in layers without a drain.

CROSS-SECTION IMAGING TECHNIQUES IN EVALUATION OF THE PORTAL VENOUS SYSTEM

Adel El-Badrawy
Radiology Department, Faculty of Medicine, Mansoura University

Presenting author: Adel El-Badrawy

Aim of the work: This study was performed to evaluate the role of CT & MRI in studying the congenital & acquired anomalies of the portal venous system that 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). CT were done for all 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. Gastro-renal shunt in 13 patients. Lineorenal varices in 22 patients. Re-canalized umbilical veins in 20 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.

Biphasic CT is useful for distinguishing between benign & malignant thrombus. It is also 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 portosystemic collaterals in patients with chronic liver disease. Also, it is important in evaluation of other findings as cavernous transformation of P.V., aneurysm & thrombosis.

CT is better than MRI in evaluation the liver & other abdominal organs.

CYSTADENOCARCINOMA OF INTRAHEPATIC BILE DUCTS: RESULT OF FAILURE OF SURGICAL REMOVAL

Taher MY.

HPB Unit, Faculty of Medicine, Alexandria University, Egypt.

A female patient aged 42 yrs presented wit vague upper abdominal pain. On ultrasound examination, the gallbladder was seen chronically inflamed with multiple stones. A thick walled multilocular cystic lesion occupying nearly the gallbladder bed was seen. On CT scan examination the same findings were seen. Laboratory profile of the patient showed polymorphonuclear leucocytosis with mild normocytic normochromic anemia. There was no peripheral eosinophilia, ESR was 60, with negative IHT for hydatid disease, as well as Fascioliasis. Liver profile was within normal, HBs Ag and HCV antibodies were negative. A decision was taken to remove the cyst surgically as it was multilocular putting in consideration the possibility of being neoplastic in origin. Surgical exploration revealed a large multilocular cystic lesion that was involving nearly most of the right lobe with atrophic left lobe .Nothing could be done except for taking a surgical biopsy. Histopathology examination proved the presence of cystadenocarcinoma of the intrahepatic duct system.

Follow up one month later revealed wide intrahepatic dissemination of the cystic tumors to involve the whole liver.

DIAGNOSIS AND MANAGEMENT OF HYDATID DISEASE OF THE LIVER: EXPERIENCE WITH 63 PATIENTS

El-Sefi T¹,Osman M¹, Abou El-Ela K¹, El Riwini M², Abdel-Razyk AH² and Taher MY³

Dept. of Surgery¹, National Liver Institute, Menoufiya University, Depts. of Surgery² and Hepatobiliary Medicine³, Alexandria University

The treatment of choice of hepatic hydatid disease is surgery, but the optimal surgical procedure remains unsettled. The medical records of 63 consecutive patients who presented to our departments with hepatic hydatid disease were reviewed. Four asymptomatic patients with small intrahepatic cysts were excluded from the study and discharged on medical treatment. The remaining 59 patients (34 men and 25 women) ranged in age from 7 to 72 years with a median of 36. Three patients (5%) had recurrent hepatic hydatid cysts. Cysts were solitary in 43 patients (73%) and multiple in 16. Six patients (10%) had concomitant splenic cysts. All diagnoses were established by ultrasound and/or computed tomography. In 14 patients (24%), communication between the cyst and biliary tree was found on endoscopic retrograde cholangiography (ERC) with migration of daughter cysts in nine patients. Two of the 9 patients were declined from surgery as complete evacuation of the cyst contents was achieved endoscopically. Endoscopic sphinctrotomy (ES) and clearance of the common bile duct was performed in the remaining 7 patients. Radical procedures in the form of pericystectomy or liver resection were performed in 22 patients while conservative procedures were employed in 35 patients. There was no mortality. Morbidity consisted of biliary leak in 4 patients (one liver resection and 3 endocystectomy), subphrenic collection in 3, and wound infection in three patients. The biliary leak was controlled after ES. Within a mean follow-up of 84.3 months, there is no evidence of recurrence.

Ultrasound and CT are the most reliable diagnostic modalities in hepatic hydatid disease. Perioperative ERC and related therapeutic maneuvers have a place in the diagnosis and management particularly when cystobiliary communication is expected from the history or the clinical presentation. Radical procedures are safe and valid options for patients with hepatic hydatid disease.

DO FARM CHICKENS HAVE A ROLE IN THE EPIDEMIOLOGY OF WEST NILE VIRUS IN EGYPT?

Amr Ali M. Mourad ., Mohamed Nasr Eldin Bekhit., Fayza El-Gohary., Mohamed Emam Farghaly., Sami Issa and Graham RR*.

Departments of Tropical Medicine, Zagazig University, Zagazig, Egypt. and NAMRU-3, Cairo. Egypt.*

Presenting author: Nasr El-Din Bekhit

The present study was designed to evaluate the role of farm chickens as an amplifying reservoir host for West Nile virus and if such chickens can be used as sentinel host. The study was conducted on a chicken farm located in a rural area in Sharkia governorate east to the Nile Delta of Egypt. The surveillance involved determining the prevalence rate of West Nile virus IgG in about 200 chickens at the end of each of 6 cycles of 45 days each, throughout a one-year study period. IgG seroprevalence in human volunteers was studied in 4 ecologically similar sites. The first was a residential area in close proximity to the farm (site-1, 160 volunteers), in addition to 3 villages at 1 km (site- 2, 52 volunteers), 3 km (site- 3, 50 volunteers) and 5 km (site- 4, 76 volunteers) away from the chicken farm. Arthropod surveillance was also conducted in each study site. There was a low seroprevalence rate for West Nile virus among chickens with the mean of 1% with a non-significant difference in the seroprevalence of IgG among different cycles. There was a non-significant difference in the seroprevalence of West Nile virus IgG among volunteers from the four study sites with the mean of 52%. The most prevalent mosquito species were Cx antennatus, Cx perexiguus, An. tenebrosus, An. pharoensis, and Cx pipiens respectively. From the results at hand it may be concluded that; 1- Exposure of humans to West Nile virus is highly prevalent in the four study areas of Sharkia governorate being around 52%. 2- Farm chickens seem to have no role as an amplifying reservoir host for West Nile virus. 3- Farm chickens, probably, cannot be relied upon as a sentinel bird to indicate the endemicity of West Nile virus.

EPIDEMIOLOGY OF HOSPITAL ACQUIRED INFECTION (HAI)

Muna Ali Youef, Fatma Yousef Ziyo Al-Jala hospital Benghazi

Presenting author: Muna Ali Youef

The study aimed to find out the point prevalence of hospital acquired infection (HAI) at 2006, to find out the magnitude of HAI and characteristics of patients acquired infection, common sites of HAI and common department effected. Methodology: A cross - sectional descriptive survey at all department of Al- jala hospital at a point of time. All cases, which develop signs of infection after admission to the hospital by 48 hours were included by use of WHO criteria (1). The study carried out at November 2006. Results: The study found that the point prevalence of hospital acquired infection was 20.6 %. Among those infected patients, 46.15 % from general surgical wards, 19.23 % from ICU, and 19.23 % from neurosurgery ward. The study reported that 23.1% of the cases aged 60 and more than two third were males and the most common site was superficial infection. The most common sites were superficial infection, pneumonia and bacterimia. the most common micro-organisms were staph. auras and klebsiella sp. Conclusion: one fifth of admitted patients get infected at hospital. Majority of these HAI cases from general surgical ward and ICU. We recommend training program for health workers on precautions of prevention of spread of HAI and a longitudinal study to find out the causes and to initiate a surveillance program.

ENDOSCOPIC THERAPY OF BLEEDING OESOPHAGO-GASTRIC VARICES

Ahmed Abdel Samie EgyptAir Hospital

Presenting author: Ahmed Abdel Samie

Variceal bleeding is one of the most critical complications of portal hypertension. It comes on the top of the list of causes of upper GIT bleeding in Egypt "51%" by Zakaria et al. (1987). Endoscopic therapy for bleeding oesophageal varices includes mainly sclerotherapy and band ligation. Success rate of sclerotherapy in active varieal bleeding ranged from 75 to 90% in different studies. Intra-variceal, perivariceal or combined techniques are used, and the needle must be short and tangential to avoid perforation. Endoscopic band ligation proved to be easier, more safe and needs less experience than sclerotherapy. Band ligation is superior to sclerotherapy for eradication of oesophorgeal varices, while sclerotherarpy may be more applicable during active bleeding. Prophylactic band ligation for dangerous oesophagial varices is recommended in some studies. Fundal extensions of oesophageal varices are common sites of bleeding and must be looked for in every case with active variceal bleeding. Long extensions are treated with histoacryl injection while band ligation may be used for short ones. Fundal varices are found in about 10% of patients with oesophageal varices, and are more frequent with prehepatic block. Rarely fundal varices are isolated without oesophageal varices. The endoscopic therapy of choise for fundal varices is histoacryl injection, although other options like endoloop and modified band ligation are under evaluation. Injection of histoacryl must be strictly intravariceal and complete solidification is essential.

EVALUATION OF ENDOSCOPIC BAND LIGATION PLUS ARGON PLASMA PHOTOCOAGULATION VERSUS SCLEROLIGATION FOR ERADICATION OF ESOPHAGEAL VARICES: A PROSPECTIVE RANDOMIZED CONTROLLED STUDY

Sherif El Saadany, Fouad K. Harras*, El Shazly A. Sheta, Mona H. Shehata, Mahmoud Selim*, Loai Mansour Departments of Tropical Medicine & *Internal Medicine, faculty of Medicine, Tanta University.

Presenting author: Sherif El Saadany

Background/Aim: Bleeding from esophageal varices is the most severe and lethal complication of portal hypertension. The aim of this work was evaluation the technique of endoscopic band ligation plus argon photocoagulation versus scleroligation as a new methods used for eradication of esophageal varices. Patients & Methods: This study was conducted on 200 patients out of 294 studied patients. Patients who fulfilled the inclusion criteria were randomized to four groups; Group I: comprised of 50 patients who were subjected to endoscopic injection sclerotherapy, Group II: comprised of 50 patients who were subjected to variceal band ligation, Group III: comprised of 50 patients who were subjected to combined endoscopic sclerotherapy and band ligation, Group IV: comprised of 50 patients who were subjected to endoscopic band ligation plus argon plasma photocoagulation. Results: Comparison of the endoscopic number of therapeutic session between different studied groups showed that group III was significantly lower in number of sessions. As regard post treatment complications during the follow up period, Group I showed the high incidence of transient pyrexia, transient dysphagia and/or retrosternal pain and ulceration, while group II showed the higher incidence of re-bleeding was demonstrated. The higher incidence of recurrence rate of esophageal varices after eradication during the follow up was detected in group II, while the higher mortality incidence was detected in group I & II. In this study the follow up incidence did not significantly differ between the different studied groups. Conclusion: Scleroligation allows very rapid eradication of varices, and avoids the disadvantage of high recurrence rate of band ligation alone, and did not require special skill over sclerotherapy or band ligation but the total cost is higher than that required for sclerotherapy. While, Band ligation plus argon plasma photocoagulation is an excellent new treatment modality with recorded low recurrence rate, and no obvious recorded complications, but it has the disadvantage of being the most expensive technique and requires special machine which is not available except in few endoscopic centers.

EVALUATION OF THE EFFECT OF PARTIAL SPLENIC EMBOLIZATION ON PLATELET VALUES FOR CIRRHOTIC LIVER PATIENTS WITH THROMBOCYTOPENIA

Mohamed Nasr El-Din Bekhit *and Mohamed IbrahemTaema**
From the Departments of Tropical Medicine*, and Interventional Radiology**,
Faculty of Medicine Zagazig University, Egypt.

Presenting author: Nasr El-Din Bekhit

Congestive splenomegaly is the most common cause of hypersplenism. Although surgical splenectomy constitute effective treatment of hypersplenism, it has major drawbacks, it carries significant post operative morbidity and longterm risk of overwhelming infection. Our study aiming to elucidate the role of partial splenic embolization (PSE) procedures as an alternative method for treatment of thromboctyopenia in cirrhotic patients, and to determine the effective embolization area for platelet values improvement. Blood parameters and liver function indicators were measured on twenty one cirrhotic patients (13) in Child-Pugh grade A and 8 in grade B) with thrombocytopenia (platelet values < 70 × 103/µL) before embolization. Computed tomography scan was also done to assesst the splenic baseline size and follow up . After 2 to 3 days, angiography and splenic embolization were performed. A second computed tomography scan was made to confirm the embolization area after 3 to 4 weeks of embolization. The blood parameters of patients were also examined monthely during the one year follow-up period. All patients were divided according to the computed tomography images after partial splenic embolization, into two groups: low (< 30%), and high (≥ 35%) embolization area groups. The platelet values were increased by 3 times compared to baseline levels after 4 weeks of embolization in high embolization area group. In addition, there were significant differences in platelet values between low and high embolization area groups. ALT values decreased significantly in all patients after 4 weeks of embolization. The improvement in platelet and ALT values still persisted until one year after PSE. In addition, 5 of 8 (62.5%) Child-Pugh grade B patients regressed to grade A after 2-4 months of PSE. The complication rate in < 30% was lower and accepted than in ≥ 35% embolization area groups .We concluded that partial splenic embolization is an effective method to improve platelet values and ALT values in cirrhotic patients with thrombocytopenia and the ≥ 35% embolization area is meaningful for platelet values improvement. Also; PSE is a suitable technique for patients with advanced liver disease (Child C) with hypersplenism, in whom surgery is absolutely contraindicated.

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EVAULATION OF BONE MARROW-DERIVED STEM CELLS (BM-HSC) IN HEPATOCYTE REGENERATION IN PATIENTS WITH END STAGE LIVER DISEASE

Hala Gabr; MD** Mona A Amin; MD* Nouman El Garem ; MD*, , Nagwa Ramadan MsC*

Cairo University

Presenting author: Hala Gabr

Background: Due to limitations of liver transplantation for patients with end stage liver disease, BMSC therapy is considered as an innovative modality of treatment for those patients. Objective: This study was done to evaluate the role of bone marrow derived stem cell (BM-HSC), as a source of autologous transplantation in hepatocyte regeneration in patients with end-stage liver cell failure .In this study, escalating doses of stem cells were injected in a trial to optimize the cell dosage required. Methods: Sixteen patients with Child C class liver cirrhosis divided into two groups: Group 1: 10 patients who received 2 million cells Group 2: 6 patients who received 5 millions cells and control group : 10 patients on their ordinary medical treatment. Bone marrow aspiration was done from the posterior superior iliac spine, The mononuclear cell fraction was collected, counted and cultured for 7days with 5 ng/ml hepatocyte growth factor . Evaluation of hepatocyte transformation was done by: staining with Hx/Eo to evaluate cell size, Immunohistochemical stain to demonstrate AFP production in these cells, Measurement of albumin concentration in the culture supernatant. Cells were adjusted to 1X106/ml, patients were injected with 2-4 ml under sonographic guidance into their spleen . Patients were followed up by clinical examination, quality of life, and laboratory assessment for 1 year. Results: Baseline serum albumin level was 2.3 ± 0.48 gm/L in group I, 3.01 ± 0.42 in group II and 2.1 ± 0.36 in the control group. Its level 6 months after BMSC transplantation was 2.54± 0.41 in group I, 2.8 ± 0.54 in group II and 2.11±0.48 in the control group who were receiving exogenous albumin infusion frequently. The baseline prothrombin concentration was 43.54±11.08 seconds in group I, 39.6 ± 6.55 in group II and 41.74±12.81 in the control group. Its level six months after BMSC transplantation was 50.5±8.98 in group I, 40.23± 20.18 in group II and 26±4.12 in the control group who were receiving plasma transfusion frequently. The mortality rate was 40% in group I, 16.6% in group II and 80% in the control group during the short term follow-up. Conclusion: Stem cell transplantation has a beneficial effect on the synthetic function of the liver and possibly improves survival and quality of life of patients with end stage liver disease.

GETTING OUT OF THE TROUBLE IS A CHALLENGE TO ENDOSCOPY

Yousry Taher Alexandria UN, Alexandria University

May be disease related ,latrogenic , Trauma related .Disease related Biliary complication include :

Strictures ,Lithiasis formation ,Leak,Fistulisation ,Congenital anomalies

Team work is needed for Proper Evaluation and decision making .Endoscopy is an important tool to get out of Biliary Complication it has diagnostic and therapeutic impact .Bile duct injury is most common after Cholecystectomy is the most catstrophic complication. The changing pattern of surgical management is very important factor as laparoscopic Cholecystectomy is more commonly performed compared to open surgery with increased risk of injury . Symptoms are more vague compared to open surgery .Abdominal pain ,distension jaundice Biliary fistula ,fever Leucocytosis, bile ascites are usually the main symptoms .Diagnostic tools include :USG,CT,ERCP,MRCP,Fistulogram. 80% of injuries are not detected at the time of initial surgery Average delay in diagnosis ranges ber This long term results should be considered as patients with Biliary strictures are usually young with long life expectancy .More aggressive Endoscopic treatment by increasing numbers of stents (at each exchange the maximum possible number of stents in relation to the tightness of the stricture and diameter of the bile duct is inserted) until complete disappearance of Biliary stricture; may improve the long term results for patients with postoperative biliary strictures .In the first four years success rates for both endoscopy and surgery are similar (88 % for endoscopy vs 74 % for surgery). While at 5 years success rate with dilatation 55% vs 80-90 % for surgery .In conclusions To get out of biliary problem team work is needed Endoscopist and surgeons back up each other .We should admit failures and complications

ICAM-1 AND VCAM-1 IN SCHISTOSOMAL COR PULMONALE

Zein El-Dein S, and Sharaki O*
Departments Of Tropical Medicine, And Clinical Pathology*, Faculty Of Medicine, Alexandria University, Egypt

Pulmonary (micro)vascular endothelial cells probably play a central role in the regulation of the granuloma induced inflammatory response, by expressing specific adhesion molecules including ICAM-1 and VCAM-1 on their surface particularly when activated by tumor necrosis factor- α (TNF- α). These molecules interact with circulating immune cells, thus permitting the binding and transmigration of leukocytes at sites of inflammation. So, this study aimed at assessment of soluble intercellular adhesion molecules-1 (ICAM-1) and vascular cell adhesion molecules-1(VCAM-1) in patients with schistosomal cor pulmonale (CP) in order to evaluate their possible role in the pathophysiology of this disease. Material and methods: This work enrolled 60 subjects (46 males & 14 females), forming three groups: first group (20 patients with schistosomal CP), second group (20 schistosomal patients without CP), and third group (20 normal subjects as control). Beside the routine clinical and laboratory work up, patients with CP were subjected to echocardiography. Soluble ICAM-1, and VCAM-1 were assayed in the plasma of all patients and controls by means of an immunoenzymatic assay. Results: The mean value of sICAM-1 was 328.8±134.04 ng/ml in patients with schistosomal CP, 434.8 ±126.13 ng/ml in hepatosplenic patients, and 181.7 ±31.96 ng/ml in the control group. The mean sVCAM-1 was 466.6 ±148.98 ng/ml in schistosomal CP, 538.2 ±142.16 ng/ml in patients with schistosomal hepatosplenomegaly, and 257.3 ±60.29 ng/ml in the control group. There were significantly higher mean values of sICAM-1 and sVCAM-1 in both groups of schistosomal patients as compared to the controls, (p= 0.001). Moreover, patients without CP had significantly higher values of adhesion molecules than those with CP. Further statistical studies revealed absence of significant correlations when sICAM-1 and sVCAM-1 were correlated with the echocardiographic parameters of CP. In conclusion, this study demonstrated higher levels of sICAM-1 and sVCAM-1 in schistosomal patients with and without cor pulmonale as compared to the controls. No significant relation was found between these adhesion molecules and echocardiographic parameters of schistosomal cor pulmonale. Hence, sICAM-1 and sVCAM-1 were thought to have a role in cellular recruitment of the schistosomal granuloma, rather than a direct relation to the disease process.

IDENTIFICATIO OF CRYPTOSPORIDIUM AMONG IMMUNOCOMPROMISED INDVIDUALS

Abdul salam M.AL-Mukhtar, Nihad S. S. AL-Sherefat

Presenting author: Abdul salam M. AL-Mukhtar

Objective; to investigate the occurrence of cryptosporidium oocyst in patients with malignant disease before and after receiving chemotherapy. Methods; A follow up study of 107 patients before and after 2-3 months from receiving chemotherapy compared with 100 healthy subjects studied as a control. Results; 1-The study revealed a significant increase of cryptosporidium oocyst (18.37%) in patients after receiving chemotherapy in comparison with ($8.39\,\%$) in patients before receiving chemotherapy and($5\,\%$) in control group . 2- In our study we used loden stain

IMMUNE MEDIATED LIVER DISORDERS

Ahmed Abdel Samie EgyptAir Hospital

Presenting author: Ahmed Abdel Samie

Liver can be considered as an effector immune organ because kupffer cells account for 80% of the capacity of the tissue resident monocytes. Liver can also be affected by immunity as manifested in autoimmune liver diseases, in unique hepatic disorders with immuno-compromised patients, as well as in chronic hepatitis due to HBV or HCV where the hepatic insult is mainly immune mediated. Autoimmune liver diseases include autoimmune hepatitis, primary biliary cirrhosis, primary sclerosing cholangitis, autoimmune cholangitis and over lap syndromes. The clinical significance of autoimmune hepatitis comes from the fact that it is one of the causes of chronic hepatitis and cirrhosis, it overlaps with and simulates other chronic liver diseases, it can be initiated or exacerbated by acute viral hepatitis, and the most improtant is that proper diagnosis and initiating steroid therapy is life saving in acute exacerbations. Histopathology is not pathognomonic but it is helpful before starting therapy to assess staging and grading of activity, as mild cases do not need therapy. Liver biopsy is also needed before termination of therapy to ensure absence of activity. Criteria to diagnose autoimmune hepatitis type I include high liver enzymes (may reach 10 folds), high serum gamma globulins > 2.5 gm./dl, ANA and ASMA in high titre "> 1/80", and clinical manifestations of other autoimmune disorders. Overlap syndromes fulfill only some of these criteria with features of other chronic liver disorders.

INSULIN RESISTANCE, STEATOSIS AND FIBROSIS IN EGYPTIAN PATIENTS WITH CHRONIC HEPATITIS C VIRAL INFECTION

Ahlam M Ahmed, Magda S Hassan, Alaa Abd-Elsayed, Huwayda I Hassan, Ahmad F Hasanain and Hebatallah G Rashed

Assuit University Hospital Tropical Med, Pathology Depart and Clinical pathology Depart.

Presenting author: Magda Hassan

Background: Nonalcoholic fatty liver disease (NAFLD) and hepatitis C are common liver diseases, and their coexistence is expected. There is some controversy with regard to the influence of NAFLD on of chronic hepatitis C (CHC) progression. Steatosis can be a cause or a marker of disease progression. Aim: To study the effect of NAFLD on CHC disease severity (necroinflammation and fibrosis) and to study the relative contribution of insulin resistance syndrome (IRS) to occurrence of NAFLD in patients with chronic hepatitis C virus (HCV) infection. Methods: From June 2004 to June 2006, untreated consecutive adults with chronic HCV infection admitted for liver biopsy were included in this study. Before liver biopsy, a questionnaire for risk factors was completed prospectively, and a blood sample was obtained for laboratory analysis. Results: Our study included 92 patients (all are males). Mean age was 42 years. Mean aspartate aminotransferase (AST) level was 68 U/L and mean insulin resistance index (IRI) was 5.9. Fifty four percent of patients had steatosis and 65% had fibrosis. In multivariate analysis, steatosis was associated with insulin resistance (IR) and fibrosis was associated with high AST level, age ≥40 years, and steatosis. Conclusion: In patients with chronic HCV infection, steatosis is a characteristic histopathologic feature. Insulin resistance has an important role in the pathogenesis of steatosis. Steatosis is a significant determinant of fibrosis which can be predicted with high AST level. Ageing is a significant contributing factor to fibrosis.

LIVING RELATED LIVER TRANSPLANTATION IMPACT ON NUTRITIONAL STATUS OF CHILDREN WITH CHRONIC LIVER DISEASE

Behairy E. Behairy, Mohamed A. Algendy, Olfat M. Hendi*, Elsayed I. Salama and Asharf A. Elmeery:

National liver Institute, Menoufyia University

Presenting author: El-Sayed Salama

ABSTRACT Background: Chronic liver diseases in infants and children are often associated with poor growth, protein calorie malnutrition and vitamin deficiencies. Although liver transplantation (LTx) has become standard therapy for end stage liver disease in children, growth after living related liver transplantation (LRLT) remains an area of concern, and the present study tries to elucidate this issue. Methods: The children included in this study classified into: Transplant group: (Group 1), Awaiting group (Group 2) and Control group (Group 3). Those patients were assessed by thorough history, anthropometrical measures and complete clinical examination. Also assessed for post transplant infections, graft dysfunction and immunosuppressive regimen. Food intake was registered (24 hour recall) and caloric requirement was calculated according to the Egyptian food composition table. Results: The mean height, weight, (MAC) and caloric intake were significantly lower in the pre transplant cases when compared to the post transplant. The Z-score in the 8 patients included in the transplant group show improvement in height, weight, MAC and caloric intake. The mean height, weight, MAC and caloric intake in the awaiting group were lower after one year follow up than during the preparation for transplant. The Zscore in the 15 patients included in the awaiting group show shift to the more negative side in height, weight, MAC and caloric intake. The mean levels of albumin, Fe, Zn and Se were elevated significantly in the post transplant group when compared to the pre-transplant cases. The mean levels of albumin, Fe, Zn and Se were low in the Awaiting group when compared to the control group. Persistent growth failure post transplantation is multifactorial and is related to preoperative malnutrition, feeding problems and post operative complications. In conclusion: Liver diseases may compromise growth and nutritional status. An improvement occurred in many parameters of growth and MAC nutritional status after LRLT especially and caloric

LOWER GIT BLEEDING

Ahmed Abdel Samie EgyptAir Hospital

Presenting author: Ahmed Abdel Samie

Lower Git Bleeding Lower GIT bleeding may be overt or occult, acute or chronic, mild or severe, and may originate from the anal canal, the colon or the small intestine. Lower GIT bleeding presentations include fresh red bleeding per rectum "hematochezia" indicating left colon source, maroon colored dark blood pointing to right colon origin, melena if blood comes from the small intestine, occult bleeding with iron deficiency anemia, or shock if bleeding is severe. The most common causes of acute lower GIT bleeding include diverticular disease and angiodysplasia of proximal colon, while chronic bleeding common sources include anal fissures and piles, colon infections and inflammatory bowel disease, but the most serious source is colo-rectal neoplasia. So, any sign if rectal bleeding is considered as a red flag or a danger sign that indicates total colonoscopy to pick up premalignant adenomas or early curable colo-rectal cancer. Fecal occult blood test is a valuable test for screening of colo-rectal cancer, but it must not delay imaging of GIT in case of danger signs, as bleeding is intermittent and FOBT is positive in only 25% of cases of colo-rectal neoplasia. Diagnostic tools for lower GIT bleeding include colonoscopy, enteroscopy, enteric capsule, barium studies, angiography, isotopic scan and intra- operative endoscopy, but still the detection of source of bleeding particularly in the small bowel is still problematic in some cases. Management of lower GIT includes resuscitation for acute bleeding, then colonoscopy to identify source of bleeding. Endoscopic therapy includes polypectomy for bleeding polyps, adrenaline saline injection, clipping, argon beam, sclerotherapy or band ligation. Surgery and angiographic therapy may be needed in some intractable situations.

MESOTHELIAL CYST OF SPLEEN: IMMUNOHISTOCHEMISTRY STUDY OF LINING EPITHELIUM

L. Seada

Pathology Department Benha Faculty of Medicine

Presenting author: L. Seada*

Background and Objectives: Non-parasitic cystic lesions of the spleen are unusual. They are classified essentially as primary (true, epithelial) and secondary (pseudo, non-epithelial) based on the presence or absence of lining epithelium. Among these, the primary ones are rare and appear as asymptomatic masses in the left hypochondrium. We here report a case of splenic cyst (10x10cm) of a 37 year old male patient treated by total splenectomy. Immunohistochemical staining for Pan Cytokeratin, Epithelial Membrane Antigen(EMA), Vimentin, CD34 and Carcinoembryonic Antigen (CEA) was performed in an attempt to elucidate the aetiopathogenesis of these cysts. Methods: Formalin-fixed paraffin-embedded material from the cyst are stained with the pan cytokeratin, EMA, Vimentin, CD34 and CEA using the standard peroxidase/DAB chromogen technique. All antibodies and kits are purchased from Lab vision, UK. Results: Lining of the cyst was a monolayer ,mesothelial type epithelium. Immunohistochemical staining for Pan-cytokeratin, EMA& CEA were positive. Vimentin and CD34 were negative. This confirms the epithelial nature of the cyst and excludes a hemangioma. Positivity for CEA is in accordance with previous studies Conclusion: True non-parasitic, nonepidermoid, mesothelial cysts of the spleen are extremely rare. We reported a case of mesothelial cyst of the spleen, and using immunohistochemical methods, was positive to epithelial markers and Carcinoembryonic antigen, thus favoring the hypothesis of a metaplasia of the surface epithelium of the spleen. It is likely that true splenic cysts originate from invagination of the capsular mesothelial lining. The cyst lining cells were negative for CD34 and thus offered no support for an origin from endothelium.

NEW TRENDS IN DIAGNOSIS AND TREATMENT OF CHRONIC INTESTINAL STRONGYLOIDIASIS STERCORALIS IN EGYPTIAN PATIENTS

Ahmed MaSSoud, Atef El-Shazly, Soha Awad, Ayman Morsy, Gehan Sadek and Tosson Morsy

Egyptian society for medical ethics

Presenting author: Ahmed MaSSoud

Strongyloidiasis, caused by Strongyloides stercoralis, is diag-nosis considered as a challenge to clinician and laboratory tech-nician. Because the auto-infective larvae are difficult to eradi-cate, one regimen dose may be in-sufficient and retreatment of patients on two occasions, at 1 and 2 months after the initial treatment dose was recommended. This re-treatment regimen has yet to be proven in clinical trials. This study was performed on 24 patients who completed the study and having Strongyloid-es larvae in their stool obtained from Mansoura University Hos-pitals. Each stool sample was examined by direct saline smear, the formalin-ether sedimentation technique and agar plate cul-Oture. Patients were treated with Mirazid® double course for a month to be followed up by stool examination by traditional me-thod and agar plate culture for three consecutive months. In this study five cases out of 24 were asymptomatic (20.8%). Sym-ptoms include abdominal manifestations as nausea and vomiting (16.7%), epi-gastric pain and nausea (12.5%), generalized abdominal pain (12.5%), chronic diarrhea (16.7%), irregular bowel habit (8.3%), and urticaria with abdominal pain (4.2%). Agar plate culture gave 100% positivity, even in cases were negative by coprological methods either direct smear and/or sediment-tation technique. All cases were cured by Mirazid® given for one month except three resistant cases. Only one case responded to repeated course of Mirazid®, while the other two cases still had larvae in their stool by agar culture plate. On combined therapy of both Mirazid® and Mebendazole®, larvae could be eliminated from their stool as approved by agar plate culture.

OBSTRUCTIVE SLEEP APNEA IN PATIENTS WITH LIVER CIRRHOSIS

Hassan R. Mohamed2, Abd El Baset M. Saleh1, and Mahmoud M. El-Bendary2. Chest Medicine1 and Tropical Medicine2 Faculty of Medicine Mansoura University

Presenting author: Abdel Baset Mohamed Saleh

Study objectives: Evaluation of obstructive sleep apnea in patients with liver cirrhosis and relation between apnea hypopnea with grading of liver cirrhosis Methods: Demographic, laboratory, Abdominal ultrasound, pulmonary function, ABGs and polysomnographic study were done for 40 subject, 30 patients with liver cirrhosis(10 child A,10child B and 10 child C and 10 healthy non cirrhotic subjects Results: Significant difference between Child classes and control as regard sleep efficiency, AHI, apnea (non REM) and total obstructive, total wake time after sleep onset, stage REM, stage 2 and slow wave sleep. There was positive correlation between Child score and AHI but negative correlation between albumin and AHI. Also, there was significant increase in AHI in cirrhotic patients with ascites than without ascites. Conclusions: There is decrease sleep efficiency and increase snoring, and obstructive sleep apnea in cirrhotic patients than normal persons. Decrease serum albumin and increase serum bilirubin are potential etiologies for increase apnea hypopnea index in liver cirrhosis. Increase in AHI in cirrhotic patients with ascites than without ascites

PREVALENCE OF AND RISK FACTORS FOR HEPATITIS C IN RURAL PREGNANT EGYPTIAN WOMEN

Sonia K. Stoszek, Mohamed Abdel-Hamida, Shaker Narooz, Mai El Daly, Doa'a A. Saleh, Nabiel Mikhail, Enas Kassem, Yousry Hawash, Sherif El Kafrawy, Ahmed Said, Manal El Batanony, Fatma M. Shebl, Mohamed Sayed, Soraya Sharaf, Alan D. Fix, G. Thomas Strickland

International Health Division, Department of Epidemiology and Preventive Medicine, School of Medicine, University of Maryland, Baltimore, USA - National Hepatology & Tropical Medicine Research Institute, Cairo, Egypt -National Liver Institute, Menoufia University, Shibin El Kom, Egypt - Faculty of Medicine, Cairo University, Egypt

Presenting author: Doa'a Ahmed Essawi Saleh

Prevalence and risk factors for hepatitis C virus (HCV) infection were studied in 2587 pregnant women from three rural Egyptian villages being admitted to a prospective cohort study of maternal-infant transmission; 408 (15.8%) had antibodies to HCV (anti-HCV) and 279 (10.8%) also had HCV-RNA. Fewer than 1% gave a history of jaundice or liver disease. Risk factors for anti-HCV included increasing age, low socioeconomic status and a history of blood transfusion or injection therapy for schistosomiasis. Sub-analyses after stratification of subjects by village revealed risks associated with specific venues for medical care, having a previous delivery attended by a traditional birth assistant (TBA), receiving medical care in a temporary clinic located in a mosque, overnight admission to a private doctor's clinic, and circumcision by a TBA or a 'health barber'. Our results suggest HCV causes very little detected illness in young adult Egyptian women and some sources of HCV transmission in rural Egypt in the past were associated with the provision of medical care and varied by location. Prevention should be focused on providing appropriate resources and health education should be given to formal and informal healthcare providers and should be sufficiently broad to adjust for local variations in exposures.

PREVALENCE OF COELIAC DISEASE IN ADULT SAUDI PATIENTS WITH SYMPTOMS OF IRRITABLE BOWEL SYNDROME; PILOT STUDY

Shendy Mohammed Shendy, Nihal AL-Assally Tropical M. and Clinical chemistry Departments, Theodor Bilharz Research Institute Cairo Egypt and Elite medical center, Riyadh, S.A.

Presenting author: Nihal AL-Assally

Few recent studies have found higher prevalence of coeliac disease among patients with diagnosis of irritable bowel syndrome (IBS) than general population (3-11% vs. 0.2-0.6%). Similar studies showed that coeliac disease is as common in Middle Eastern countries as in Europe; in both the general population and atrisk groups. The aim of this work is to estimate the prevalence and the potential clinical consequences of coeliac disease testing in adult Saudi patients with IBS. Materials and methods: This is a prospective pilot study including 320 Arab patients with features compatible with IBS as defined by Rome III criteria without any other co-morbidity. The age of patients ranged between 18-70 years. All patients were subjected to good history taking, clinical examination, and some investigations if needed such as stool, urine, CBC, liver enzymes, kidney function tests, ECG, electrolytes, H pylori serology, upper and lower endoscopy when indicated. Those diagnosed as having persistent criteria of IBS were tested for coeliac disease by IgA and IgG anti-gliadin antibodies, anti endomysial antibodies (EMA) IgA and anti-TG2 (IgA and IgG). Upper endoscopy and duodenal biopsies were done and gluten free diet was implemented for only those with positive serological test. The same tests were repeated after period of about 6 months. Results: Anti-gliadin antibodies were found positive in 15/320(4.69%) patients (14 with IgA and 13 IgG), EMA IgA in 13/320 (4.06%), anti-TG2 IgA in 12/320 (3.76%) and anti- TG2 IgG in 13/320 (4.06%). Abdominal pain, diarrhea, dyspepsia, postprandial distress, epigastric pain, distension and chronic diarrhea were significantly higher and more common in combinations in those with positive serology in comparison to serologically negative patients (P < 0.05). Haemoglobin level, serum iron, albumin and calcium were found to be significantly lower in those with positive serology in comparison to serologically negative patients (P < 0.05). All these parameters improved significantly after gluten free died (GFD) for about 6 months (P< 0.05). Only 11 patients (74.44% of those with positive serology and 3.49% of total patients) were diagnosed by biopsies as compatible with coeliac disease of which, two patients have family history of coeliac disease in first degree relatives. After gluten free died (GFD) for about 6 months, seroconversion to negative tests occurred in 6 patients for AGA-IgA, 4 for AGA- IgG, 3 for EMA IgA, 5 for Anti-TG2 IgA and 5 for Anti-TG2 IgG. Also, the grade of histopathology showed complete healing in 4 patients and improvement to lower grades in 4 patients after GFD. Worsening occurred in one case and still 7 cases showed the same grade of the disease.

PROGNOSTIC VALUE OF P53, C-MYC PROTEIN DETECTION AND DNA PLOIDY IN SOME CASES OF HYPERPLASTIC AND NEOPLASTIC COLONIC POLYPS

Saleh SA, Kamel NA.

Pathology department, Faculty of Medicine, Alexandria University.

Introduction: One of the most important mechanisms of tumor cell loss is apoptosis. This is commonly seen in adenomas and malignant large bowel tumors. Two particularly important mediators of apoptosis are the oncogenes c-myc and the tumor suppressor gene p53. DNA aneuploidy represents one of the earliest detectable cellular changes that may be considered as a specific marker for malignant transformation .The use of computerized image analysis (CIA) has proven a highly accurate quantitative and objective assessment of DNA content and has proven to be a reliable method for determination of ploidy in colorectal tumors. The present study aimed at correlating all types of colonic polyps; hyperplastic, adenomatous and malignant using CIA measured ploidy pattern and DNA index (DI), as well as using immunohistochemical detection of c-myc and p53 antibodies.

Material and Methods: The present work included 30 cases of colorectal polyps and one control case of colitis. All were obtained as formalin-fixed specimens. The included specimens were classified as 3 groups: Group I: 10 cases of hyperplastic colonic polyps, Group II: 10 cases of adenomatous colonic polyps(5 tubular, 2 tubulovillous and 3 villous)and Group III: included 10 cases of malignant polyps (6 well differentiated, 2 moderately differentiated and 2 poorly differentiated), and One control case of colitis. All the included specimens were subjected to routine preparation and staining by H&E, Image analysis evaluation was done to determine DNA content by staining sections of 5um thick of the polyps by Feulgen's stain, and Immunohistochemical studies were carried out on 5um thick sections of formalin-fixed paraffin embedded specimens using antic-myc and p53 antibodies as described in their specification sheets. Results: all hyperplastic cases were diploid, negative for p53,and 8 out of 10 cases showed focal strong cytoplasmic c-myc immunostaining. Adenomatous polyps showed 4 diploid and 6 aneuploid cases. P53 nuclear immunostaining was seen in 2 cases and c-myc cytoplasmic immunostaining was positive in 8 cases. All carcinomatous cases were aneuploid, p53 was positive in 4 cases, whereas cmyc pan cellular immunostaining was seen in 7 cases.

RELATION OF SERUM RESISTIN CONCENTRATION TO STEATOSIS AND INSULIN SENSITIVITY IN PATIENTS WITH CHRONIC HEPATITIS C

Naglaa Allam ¹, Tary Abdel-Hamid Salman ², Gasser El Azab¹, Nermine Ehsan³, Nermine Hossam⁴ and Om Kolsoum El-Haddad¹

¹ Hepatology, ² Tropical Medicine, ³ Pathology, National Liver Institute, Menoufyia University, ⁴Clinical Pathology, Faculty of Medicine, Alexandria University

Hepatitis C virus (HCV) infection increases the risk of developing type 2 diabetes mellitus (DM type II) and insulin resistance. Resistin has been implicated in the pathogenesis of obesity-mediated insulin resistance and DM type II. Moreover, plasma resistin concentration is positively correlated with hepatic fat content in those patients. The aim of the present study was to assess the relationship of resistin to insulin resistance and steatosis in HCV-infected patients. Patients & Methods: Forty untreated patients with chronic hepatitis C were included in this study. Insulin sensitivity was evaluated using the homeostatic model assessment (HOMA) system and serum resistin concentration was measured. Liver biopsy was performed to evaluate the grade of activity (HAI), the stage of fibrosis using the modified Knodell scoring system and steatosis was graded as minimal (less than 10% of hepatocytes), mild (<30% hepatocytes involved), moderate (30 - 60% of hepatocytes involved) or severe (>60% of hepatocytes involved). Results: Patients with steatosis (n = 23) had higher body mass index (BMI) compared to patients without steatosis (n = 17); 30.19±3.96 kg/m² vs 24.69 \pm 1.84 kg/m² (p = <0.001). The HOMA-insulin level positively correlated to BMI (r = 0.67: p = 0.001). There was no significant difference in serum resistin level between male and female subjects (15.75±10.73 ng/ml vs 11.64±6.08 ng/ml, p = 0.22). No significant correlation was found between resistin and BMI (r = 0.24, p = 0.17) or HOMA level (r = 0.37, p = 0.87). Resistin level did not vary significantly with different stages of hepatic fibrosis or grades of inflammation (p = 0.48, p =0.1 respectively). Resistin level showed a trend to be higher with increasing severity of steatosis however, these differences were not statistically significant (p = 0.57). Conclusion: The present study demonstrated that resistin level was not associated with steatosis in patients with chronic hepatitis C. Further studies on the contribution of resistin at a larger scale with higher degrees of steatosis are warranted.

SELF EXPANDING METAL STENT IN ADVAVANCED BILIARY TREE CARCINOMA. I BELIEVE IT IS THE OPTIMUM PALLIATIVE TREATMENT

Khaled Safwat

Presenting author: Khaled Safwat

ABSTRACT PURPOSE: To determine the usefulness of self-expanding metallic stents in patients with advanced malignant hilar and perihilar biliary obstruction and to evaluate changes of quality of life in those patients. MATERIALS AND METHODS: eighteen patients with malignant hilar and perihilar biliary obstruction were diagnosed by after completion of full laboratory and radiological investigation (work-up) endoscopic cholangiopancreatography (ERCP) to detect the extent of biliary ductal involvement were involved in this study. All patients underwent ERCP, and 16 of 18 patients also underwent endoscopic biliary drainage metallic stent placement in same session. In the other 2 patients percutanous drainage (PTD) was done in one of them stent successeded to pass and in the other only drainage was done due to tight stricture with failure to pass a guide wire. RESULTS: ERCP was adequate in helping to predict the extent of biliary ductal involvement in all patients and showed the extent of the disease with no reported diagnostic failure. The metallic stent placement was successful in 17 of 18 (94.4%) patients; the other patient (PTD) only was performed to guard against possibility of cholangitis and to relief jaundice.

SERUM TUMOR MARKERS IN HEPATOCELLULAR CARCINOMA

Mohamed M. El-Sawy Alexandria University

Presenting author: Mohamed M. El-Sawy

Hepatocellular carcinoma (HCC) is one of the most frequent malignant tumors. Therefore, it is very important to detect the disease at its very earlier periods of development. Plenty of serum markers have been developed for early detection of HCC. Old and new emerging markers will be presented and discussed.

STEATOSIS AMONG INCIDENTALLY DETECTED ASYMPTOMATIC HEPATITIS B SURFACE ANTIGEN (HBSAG) POSITIVE SUBJECTS (IDAHS)

Shiha G¹, Seif S¹, Gaber M², Monis A³, El-Fakhry A¹, Elatek M⁵ and Zalata K⁴ Internal Medicine Department, El-Mansoura ¹, Tanta ² and Ein Shams ³ Universities and Pathology Department ⁴, El-Mansoura University, Tanta Fever Hospital⁵, Egypt

Background: Steatosis is considered a frequent pathological finding in chronic hepatitis C and could be correlated to the hepatitis C genotypes. In chronic hepatitis B, steatosis is not extensively studied especially in which D is the main genotype in Egypt. Aim: To characterize steatosis among incidentally detected asymptomatic hepatitis B surface antigen positive subjects (IDAHS) in Egyptian patients with genotype D. Methods: We studied 44 consecutive IDAHS patients who were long term HBsAg carriers. Tests for liver functions, serological markers for HBV, HCV, HDV and schistosomaisis were done for all patients. Liver biopsy specimens were studied and scored by modified Knodell score and METAVIR score. Steatosis and steato-hepatitis were searched for and scored according to Brunt et al., 1999. Steatosis were correlated with serological and other pathological parameters. Results: Steatosis was identified in 11 out of 44 patients (25%) with only one patient shown massive steatosis and most of them exhibit mild steatosis. There is no evidence of steato-hepatitis. No significant correlation was identified with age, sex, body mass index, HAI or fibrosis stage. Conclusion: Steatosis is not a rare event in IDAHS but mostly mild and not associated with steato-hepatitis.

STEM CELL TRANSPLANTATION FOR LIVER FAILURE: IMPACT ON LIVER FUNCTION AND QUALITY OF LIFE

Hala Gabr; MD**, Mona A Amin; MD* Nouman El Garem; MD*, Ehab Elsayed, MsC* Internal medicine*, Clinical pathology** Cairo University
Faculty of Medicine, Cairo University

Presenting author: Hala Gabr

Background: Stem cell transplantation for support in patients with endstage liver failure is becoming an acceptable bridge for patients on organ transplant list. Previous studies in our centre have focused on evaluation of clinical condition and liver function tests for follow-up of patients undergoing stem cell therapy. However, it has been observed that the improvement in patient wellbeing is more than can be explained by these parameters. Objective: This study was done to evaluate the role of stem cell therapy for patients with end-stage liver cell failure, on the quality of life of these patients in correlation with the laboratory and clinical assessment. Subjects & Methods: Twenty seven patients with Child C class liver cirrhosis were included. MELD score of the patients varied from14 to 33. In addition, 20 controls covering the same MELD score categories were included. Bone marrow aspiration was done, the mononuclear cell fraction was collected, counted and cultured for 7days with 20 ng/ml hepatocyte growth factor. Detection of hepatocyte progenitors was done by immunohistochemical stain for AFP and measurement of albumin concentration in the culture supernatant. Cells were adjusted to 2X106/ml, patients were injected with 2-4 ml under sonographic guidance into their spleen . Patients & controls were evaluated before therapy and monthly for 6 months using the Health-related quality of life questionnaireand MELD score; in addition to clinical and laboratory evaluation. Results: (48%) of patients showed improved serum albumin level, (36%)patients showed improved INR ,(42%) patients showed improved MELD score, while (64%) patients showed improved quality of life score. This improvement started before pronounced laboratory improvement. The mortality rate was 40% in the patient group and 80% in the control group during the short term follow-up. Conclusion: Stem cell transplantation has a beneficial effect on the synthetic function of the liver and possibly improves survival and quality of life of patients with end stage liver disease .This improvement may be multifactorial: immunomodulatory effect of bone marrow-derived stem cells, paracrine action of these cells on endogenous liver stem cells, and direct effect of injected cells.

STUDY OF ENDOSCOPIC ASPECTS AND THERAPEUTIC OPTIONS OF ECTOPIC GASTROINTESTINAL VARICES

Sidkey F, and *Osman MO.

Internal Medicine Department, Faculty of Medicine, Alexandria University, and * National liver Institute, Menofya University.

Ectopic varices are best defined as large proto-systemic venous collaterals occurring anywhere in the abdomen except in the cardio-esophageal region. We studied eighteen cases of ectopic varices in portal hypertensive patients. Ten patients presented with gastrointestinal bleeding, while in eight patients, varices were asymptomatic and accidentally discovered during endoscopic examination for other purposes. Ectopic varices were located in the gastric antrum in two patients, in the duodenal bulb in three, in the descending duodenum in four, in the anorectal region in seven, and at the site of a percutaneous enterostomy (stomal varices) in two patients. Non-bleeding varices were managed conservatively. Management of bleeding ectopic varices included endoscopic injection sclerotherapy in four, endoscopic endoloop ligation in two, and surgical ligation of the bleeding varix after failure of endoscopic treatment in two patients. Local injection of a tissue adhesive was successful to control bleeding in two patients with stomal varices. An excellent outcome was observed in all patients without any reported morbidity or mortality. Bleeding did not recur in any of the patients studied during a follow up period of one year.

SURGICAL MANAGEMENT OF LIVER METASTASIS WITH METASTATIC BILIARY THROMBUS FROM RENAL ORIGIN: A CASE STUDY AND REVIEW IN THE LITERATURE.

Sharaan M¹, Suc B², Muscari F², Fourtanier G².

Department of Hepato-Biliary surgery ¹, faculty of Medicine, Alexandria University, Egypt. Service de Chirurgie Digestive ², Hôpital Rangueil, CHU Toulouse, France

A male patient, 73 years old, was hospitalized for liver metastasis from cancer kidney. It was a renal cell carcinoma of the left kidney operated on 1999. The history started when the patient complained 7 years after the operation (during his follow up) by fever, and anemia. Abdominal U/S revealed a right hepatic lobe mass with a thrombus in the right hepatic duct that extends into the common hepatic duct. CT abdomen revealed a mass of 7cm in the right lobe of the liver (hypo echoic). Biopsy of this mass confirmed the diagnosis of hepatic metastasis from renal origin. So a volumetric CT evaluation to assess the volume of the RT lobe was done and revealed a lesion of 7 cm in segment VII and VIII invading the Right and Middle Hepatic Veins. A decision of Right hepatectomy extended to segment IV with extraction of the biliary thrombus from the Right hepatic duct was taken. Exploratory Laparotomy was done through a Rt subcostal incision with midline extension to the xiphoid process, the liver was fatty, the Left lobe was enlarged. We started by a classical cholecystectomy, intraoperative cholangiography noted a defect in the upper part of the Common Hepatic Duct and the carina with non opacification of the Right hepatic duct. Intraoperative U/S showed the metastatic mass invading the Right and Middle Hepatic Veins, and also showed the Right Hepatic Duct thrombus. Rt hepatectomy was done with ligation of Middle Hepatic Vein (3 periods of pringles each of 15 mm) with the Hanging technique. Parenchymal transection was done by Hydro jet (water jet). Bipolar coagulation, and ligature of vicryl 2/0 and 3/0 prolene 5/0. At the end of the parenchymal transection, exposure of the glissonian sheath of the Right portal pedicle and palpation of the thrombus in the Right Hepatic Duct was done followed by opening of the right Hepatic Duct by scissors then extraction of the thrombus by Fogarty catheter. The Rt portal pedicle was closed by vascular TA stapler. At the end of parenchymal transection, the Right Hepatic Vein was divided after its stapling by vascular TA stapler. Over running sutures over the staples line of the Right Hepatic Duct were applied by PDS 5/0 then methylene blue test was done that permitted us to add 1 point of PDS 5/0 over a site of leakage in the staple line. Intraoperative Cholangiography was repeated which proved the integrity of the Left Hepatic Duct, the duct of segment IV and the disappearance of intraluminal defect. Insertion of a trans-cystic drain number 6 in the cystic duct was done

THE RELATION OF NITRIC OXIDE LEVEL AND BLOOD PRESSURE TO LIVER CIRRHOSIS

Faiza Abdel Reheem*, Samia Abdel Sadek*, Zeinab A. Yousry *and Samia Abdel Kawy**.

Presenting author: Zeinab Ahmed Yousry

Background: Nitric oxide is a highly reactive free radical which is produced from L-arginine by one of 3 nitric oxide synthase isoforms, encoded by at least 3 different genes and falls into two families of enzymes, constitutive and inducible isoforms (Rockey, 2003). The most characteristic findings in cirrhotic patients are vasodilatation with low systemic vascular resistance, tendency towards hypotension, high arterial compliance and increased cardiac output (Weist and Groszmann, 2002). Objectives: The aim of this work was to clarify the relation of nitric oxide (NO) level and blood pressure in liver cirrhosis. Patients and methods: This study was conducted on 140 patients with liver cirrhosis, 94 males (67%) and 46 females (33%), their ages ranged from 39-63 years with mean value 48.9±95.58. We also studied 30 apparently healthy persons as control, 19 males (64%) and 11 females (36%), their ages ranged from 36-54 years with mean value 44.03±5.77. Control persons and all patients are classified into two groups : group I which included control persons and group II which included all patients. Patients are further subdivided according to Child- Pugh classification into three classes: Class A (20 patients), Class B (71 patients) and class C (49 patients). RESULTS: Control persons had highly significant values than all patients groups in: systolic, diastolic and mean arterial blood pressure (p<0.01).they also had lower mean values of serum biliruben than patients which was HS (p<0.01) SERUM albumin was significantly increased in control group .Prothrombin time was significantly lower in control persons(p<0.01).as regard serum Na+ there was HS increase in controls(p<0.01) Serum k+ was S low in controls(p<0.01) Serum creatinine and serum nitric oxide were significantly lower in control group.

TUMOR NECROSIS FACTOR ALPHA AND NITRIC OXIDE IN SPONTANEOUS BACTERIAL PERITONITIS PATIENTS: IS THERE A DIAGNOSTIC AND PROGNOSTIC VALUE?

Mohamed Nasr El-Din Bekhit., Mostafa H. El-Shamy., Mohamed Emam Farghaly., Abeer M. Nafee., Hala I. M. Hussein., and Youssry Abu El-Magd*
Tropical medicine and biochemistry* departments, Faculty of Medicine, Zagazig University., Egypt.

Presenting author: Nasr El-Din Bekhit

Hepatorenal syndrome (HRS) is an uncommon but potentially fatal complication of decompensated cirrhosis. The major pathogenetic factor is systemic arterial vasodilatation with effective arterial underfilling and renal vasoconstriction. Nitric oxide (NO) and tumor necrosis) have been implicated in the pathogenesis of this circulatoryαfactor alpha (TNF alteration. We carried out this study to evaluate the suggested role of serum and ascitic fluid levels of TNF-α and NO in the diagnosis and prognosis of SBP. Fifty nine patients with liver cirrhosis and ascites with and without SBP were included in this work and 10 age and sexmatched healthy volunteers served as a and NO were measured inαcontrol group. Serum and ascitic fluid levels of TNF all subjects and were re-evaluated in patients with SBP, 48 hours after and NO levels wereαCefotaxime treatment. Baseline serum and ascitic fluid TNF significantly elevated in all studied patients compared to the healthy controls, with significantly higher levels detected in patients with SBP compared to those with sterile ascites. In SBP group, the antibiotic treatment resulted in and NO α significant reduction of both serum and ascitic fluid levels of TNF after 48 hours compared to baseline levels. Renal impairment occurred in 17 out of 39 patients with SBP, 12 of them (30.8%) developed type I HRS. Both serum and and NO levels were relatively higher, before and afterasscitic fluid TNF antibiotic treatment among renal impairment patients compared to patients with and NO correlated positively withanormal renal parameters. Serum levels of TNF serum bilirubin, prothrombin time, serum creatinine, total leucocytic count and ascetic fluid polymorphonuclear cells. HRS was the most important predictor of hospital mortality in our SBP patients with 75% (10 out of 15) of patients died of renal failure during hospitalization compared with 25% mortality from other and NO baseline levels were significantly acauses. Serum and ascitic fluid TNF higher in the deceased patients compared to the survivors. Our results further and NO in the development of HRS and irreversible affirm the importance of TNF renal failure in cirrhotic patients with SBP. It also postulates that measuring and NO levels may have a diagnostic as well as aαserum and ascitic fluid TNF prognostic value in this patient population.

UPPER GASTROINTESTINAL BLEEDING (UGIB), IN ADEN YEMEN: A RETROSPECTIVE STUDY OF ENDOSCOPY RECORDS

Salem Ben Selm
Department of Internal Medicine, Faculty of Medicine and Health Sciences, Aden
University

Presenting author: Salem Ben Selm

Abstract Background: Upper gastrointestinal endoscopy has a crucial role in the diagnosis and treatment of upper gastrointestinal bleeding; however epidemiological studies are still limited in our country. Objective: The aim of this study is to identify the main causes of the upper gastrointestinal bleeding among our patients and their distribution according to sex, age, diagnosis, and possible seasonal occurrence. Methods: All the medical records of patients underwent upper gastroendoscopy during the period of January2000-December2003. were reviewed and analyzed. Results: The most of patients were males (73.3%), with a mean age of 39.7 years. Among them, 57(37%) endoscopies revealed esophageal varices, 43(27.9%), revealed erosive gastritis, 26(16.8) revealed peptic ulcer, and 6 (3.9%) revealed upper gastrointestinal malignancies. More patients with (UGIB), presented in January through June (62%), whereas the number of patients declined in November through December (16%). Conclusion: The important conclusion which could be stated in consequences of such study is that a greater proportion of (UGIB) can be attributed to bleeding from esophageal varices, similar to what reported from other regions where chronic liver diseases were more frequent.

USE OF ANTICANCER NANOMEDICINE FOR TREATMENT OF HEPATOCELLULAR CARCINOMA

Khaled Greish ¹, Emad El-Kady ², Ahmed El-Dory³ and Hiroshi Maeda ¹ ¹Sojo University, Japan ² International Medical Center-Cairo ³ Ein Shams University, Cairo

Presenting author: Khalid Greish

The development of a wide spectrum of nanoscale technologies is beginning to change the foundations of disease diagnosis, treatment, and prevention. The lately developed polymeric macromolecular drugs (polymer conjugates, micelles), liposomal anticancer drugs as well as the new class of naonodevices such as carbon nanotubes and quantum dots, all are the front frontier of this new class of anticancer nanomedicines.

Anticancer nanomedicines can be used for treatment of Hepatocellular Carcinoma (HCC), which Many reports describe its high incidence among Egyptian, 2-5 fold increases of HCC incidence is expected over the next 5 years. SMANCS is a nanosize anticancer agent that proved most effective against HCC (about 90 % response rate) with least side effect. The drug is especially valuable for patients with compromised liver functions (Child B and C) due to HCV infection, as it possess very high safety profile when properly used. The presentation includes review of the clinical results of using SMANCS since 1994 in Japan, as well as the prospects of new investigational anticancer nanomedicines for treatment of HCC.

VALUE OF C - REACTIVE PROTEIN IN GRADING AND FOLLOW UP OF ULCERATIVE COLITIS

Taha Kh, Zein Eldein S, Albordainy M¹, Younis L². Departments of Tropical Medicine, Clinical Pathology¹, and Pathology². Faculty of Medicine, University Of Alexandria, Egypt.

C-reactive protein (CRP) is one of the most important proteins that is rapidly produced by hepatocytes during an acute phase response upon stimulation by IL-6, TNF- α , and IL-1 β originating at the site of inflammation or pathology. CRP is therefore thought to be a good indicator for measuring disease activity. So, this study aimed at assessing the value of CRP determination in the evaluation and follow up of ulcerative colitis. Material and methods: The study enrolled 39 patients with ulcerative colitis. Clinical, endoscopic. and histological assessments of the disease were done in all cases. Qualitative and quantitative estimation of C-reactive protein (CRP) was measured and correlated with clinical, endoscopic and histological activities of the disease. Results: The disease was clinically active in 36 patients (92%), and 3 patients (8%) were in remission but they were previously diagnosed to have ulcerative colitis of moderate activity. An elevated CRP (> 8 mg/L) was found in 49% of the patients (19/39), while normal CRP (≤ 8mg/L) was found in 51% of the patients (17/39). The colonoscopy findings of active UC were recorded in 34 patients (87%), while 5 patients (13%) showed near normal colonoscopic examination but they were previously diagnosed as UC and so labeled ulcerative colitis in remission. Among those with endoscopic activity, 18 (53%) had elevated CRP and 16 (47%) had normal CRP level. The extent of the disease was pan-colonic or extensive in 18 patients (46%), left sided in 11 (28%), and proctitis in 5 (13%). Overall, 32 patients (82%) had histological evidence of colonic inflammation, and inactive ulcerative colitis was found in 7 patients (18%). Statistical analysis showed that elevated CRP was associated with clinical disease activity, endoscopic findings of active ulcerative colitis, and to a lesser extent with histological inflammation particularly when the cutoff was lowered to 6 mg/L. Conclusion: CRP should be seen as an additive marker to our clinical, endoscopic, and histological findings but could not completely replace them. Studies larger than our study are needed to better elucidate the relationship of CRP and ulcerative colitis, and these studies should also explore the potential usefulness of highly sensitive CRP with a lowered cutoff for predicting activity of the disease.