# CLINICAL USE OF QUANTITATIVE SERUM (HBsAg) AS NEW MARKER FOR ASSESSMENT OF IMPROVEMENT IN PATIENTS WITH CHRONIC HEPATITIS B TREATED WITH LAMIVIDINE

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Background Approximately one third of the world's population has experienced HBV infection, and nearly 350-400 million of them are HBV surface antigen (HBsAg) carriers (1). HBsAg is a protein surrounding hepatitis B virus, and the main marker in both acute and chronic HBV infection diagnosis (2). Recently, there was an evidence indicating that quantitative HBsAg levels can be used to define inactive carriers (3) and to be used to evaluate response to treatment.

Objective: The Aim of The study was to assess clinical use of quantitative serum (HBsAg) as new marker for assessment improvement in patients with chronic hepatitis B treated with lamivudine.

Patients and Methods: The study was done on 50 chronic hepatitis B infected patients over 18 years old with PCR more than 2000 IU /ml, SGPT more than two fold of normal, negative pregnancy for females, no evidence of cirrhosis or HCV, HIV, HDV co infection . All were treated with 150 mg lamivudine for 24 weeks. Included: Full history taking, clinical evaluation, laboratory investigations including, quantitative PCR for HBV DNA, quantitative HBsAg, ALT, AST .Ultrasound abdomen, follow up period was 24 week. And all these parameters reevaluated during 3, 24 weeks.

Results: there was, improvement regarding SGPT level as it was reduction during treatment especially after 24 weeks, significant reduction of HBV viral load and HBsAg during different phases of the study, Statically significant positive correlation between PCR value and HBsAg after 3 weeks and after 24 weeks (p value:0.001)

Conclusion: The combined use of HBsAg and HBV DNA assessment in patients with CHB treated with lamivudine can guide the clinician to evaluate the chances of treatment response with the possibility to individualize therapy strategies, such as (continue and follow up), (add on, switch or stop and follow up).

### DEXILANT A NEW ERA OF PPI MANAGEMENT OF GERD

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Persistent heartburn two or more days a week, despite treatment and diet changes, could be gastroesophageal reflux disease (GERD), also known as acid reflux disease (ARD). Prescription DEXILANT capsules are used in adults for 4 weeks to treat heartburn related to GERD, for up to 8 weeks to heal acid-related damage to the lining of the esophagus (called erosive esophagitis or EE), and for up to 6 months to continue healing of EE and relief of heartburn. Most damage (erosions) heals in 4–8 weeks. Individual results may vary.

### DIAGNOSTIC VALUE OF RIZ1 GENE EXPRESSION AS A POTENTIAL MARKER FOR PATIENTS WITH HEPATOCELLULAR CARCINOMA

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Introduction: There is still a need for novel biomarkers to improve the early detection of hepatocellular carcinoma (HCC). The retinoblastoma protein-interacting zinc finger gene (RIZ1) expression and activity are reduced in many human cancers. Its role in HCC is still unclear. Aim: To evaluate RIZ1 gene expression in patients with HCC. Methods: RIZ1 gene expression was assessed by real time PCR in 50 consecutive patients with HCC, 25 patients with HCV-related liver cirrhosis, and 25 healthy controls. Results: Patients with HCC and cirrhosis and controls were comparable regarding sex (males, n (%): 40 (80), 19 (76) and 22 (88) respectively, P=0.54) and age (58.3±10.2, 54.8±9.0 and 54.0±10.8 respectively, P=0.15). RIZ1 gene expression was significantly lower in patients with HCC (1.51±1.45) compared to patients with cirrhosis (18.58±9.26, P

#### DIFFICULT CHOLECYSTECTOMY

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No consensus is found among surgeons on how to manage difficult laparoscopic cholecystectomy. latrogenic injuries and conversion rate can be reduced depending on the surgeon's experience, special techniques, and intraoperative investigations. Subtotal cholecystectomy, antegrade or fundus first techniques, and peroperative cholangiogram significantly reduced the complications and conversion rate.

#### **EARLY DETECTION OF CANCER CHILDREN & SURVIVAL**

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Background: Early diagnosis is the key for any successful therapy and hence better results. This much more manifest in malignancy and cancer children is the best example for this. Objective: The aim is to confirm and raise awareness of the importance of early detection of cancer in children and the impact of this on survival and prognosis.

Results: The overall 5/years survival of cancer children in Egypt and other developing countries is 35-39%. It is much lower than that in the western countries which is 65-75%.

The causes of this low survival has been studied and reported.

Conclusion: Raising awareness of early presentations of cancer in children is crucial for the physicians, pediatricians and general practitioners to achieve better results and more survival

### EFFECT OF MEDICAL TREATMENT OF CROHN'S DISEASE ON THE OUTCOME OF SURGERY

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Patients affected by Crohn's disease (CD) require lifelong medical therapy, but they can also often require abdominal surgery. The effect of CD therapy on postoperative course is still unclear. The aim of this presetation is to illustrate the effect of preoperative medical therapy on the outcome of intestinal surgery in these patients. In some seriessome medical treatment seemed to be associated to early reoperation after intestinal surgery. This may be due to a worst disease severity in patients who needed surgery in spite of biological therapy. Preoperative tapering of budesonide dose seems a safe option before elective abdominal surgery for CD.



# ENDOSCOPIC ULTRASOUND GUIDED ABLATION OF INSULINOMA; AN EGYPTIAN EXPERIENCE

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Background: Endoscopic ultrasound is the most accurate imaging modality for the diagnosis of pancreatic insulinoma, and endoscopic ultrasound-guided fine needle injection has already been used for palliative interventions. Surgical resection is currently the standard treatment for pancreatic insulinoma

Many Case reports have been published about the success of endoscopic ultrasound-guided alcoholic ablation, but it has not been reported previously in Egyptian literature.

Intervention: 63-year-old man who has done a previous partial pancreatectomy but later on, he has repeated attacks of hypoglycemia.

EUS revealed a hypoechoic lesion (6.7 \* 5.8 mm).

Patient is not fit for another surgery, he has Dilated Cardiomyopathy and ischemic heart disease.

A total of 2 mL 95% ethanol was injected into the tumor.

Results: No post EUS ablation complications were reported; No pain, Normal serum lipase (38+\_2) and amylase(47+\_ 4) 3 and 7 days post endoscopic ablation. No repeated attacks of hypoglycemia for 3 months follow up.

Conclusion: This case history confirms that endoscopic ultrasound-guided alcoholic ablation is a novel, minimal invasive alternative treatment for patients with pancreatic neuroendocrine tumors in whom surgery is not feasible.

### EVALUATION OF FIBRINOGEN AND C-REACTIVE PROTEIN IN ELDERLY TYPE 2 DIABETIC PATIENTS AND THEIR RELATION TO PERIPHERAL ARTERIAL DISEASE

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Diabetes Mellitus is a multifactorial disease, associated with a number of microvascular (retinopathy, neuropathy and nephropathy) and macrovascular (ischemic heart disease, cerebrovascular disease and peripheral vascular diseases) complications. Patients with T2D often present with hypercoagulability, which may be related to changes in inflammatory biomarkers. Patients with vascular disease and T2D presented with higher values of inflammation markers when compared with patients without vascular disease. Fibrinogen and non-HDL cholesterol have synergistic effects, as factors accelerating the progression of carotid atherosclerosis. Fibrinogen increases atherogenic dyslipidemia in diabetic patients. Aim of the work: The purpose of this study is to determinate the influence of inflammatory biomarkers: fibrinogen and CRP on development of PAD in Elderly type 2 diabetic patients as measured with changes in ABI values. Patients and Methods: The study was conducted on 50 patients aged 65 years old or above selected from Alexandria main university hospital they are divided into two groups :Group 1: 25 patients have type 2 diabetes mellitus with PAD :Group 2: 25 patients have type 2 diabetes mellitus without PAD .Evaluation include: Full history taking with special stress on age, sex, onset of diabetes, duration of illness, the presence of diabetic complications (micro or macrovascular), family history, hypertension, history of cerebrovascular stroke. Complete physical examination: (general and local)-.ECG -Laboratory investigations include Routine investigations: (fasting blood sugar-2 hour postprandial sugar) -HbA1C- lipid profile: (Serum cholesterol –serum triglyceride-LDL-HDL)--liver profile: (serum albumin-serum Bilirubin-SGOT-SGPT)- Kidney function test :(Blood urea -serum creatinine)- Specific laboratory investigation include measurement of CRP by nephelometry (BN prospec) -measurement of serum fibrinogen by siemens coaglumeter (sysmex CA-1500). Diagnostic imaging: will be done if neededDoppler and Ultrasound (Duplex) imaging of lower limbs -Ankle-brachial index (ABI). Results: There is positive but non-significant relation between age, Diabetic control, diabetic duration and ABI. Also there was positive but non-significant relation between fibringen, C-RP and ankle brachial index also there was positive but non-significant relation between fibringeen and C-RP and all other parameters including lipid profile, diabetic profile, liver function and renal function. Conclusion: The risk of PAD increased as the age of the elder diabetic patients increased. The longer the duration of type 2 diabetes in the elderly, the risk of PAD was increased. Elder diabetic patients with poor glucose control were associated with atherosclerosis and development of PAD. Inflamatory biomarkers play an important role not only in the development but also in the progression of PAD.

### Abstracts

### GIANT CAECAL LIPOMA WITH OVERLYING ADENOCARCINOMA: A CASE REPORT AND REVIEW OF RELEVANT LITERATURE

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Colonic lipoma is a rare benign tumor that are generally asymptomatic however large tumors (more than 2 cm) can results in symptoms like abdominal pain, change in bowel habits, gastrointestinal bleeding, melena and anemia. The significance of colonic lipoma is that it could be mistaken with malignancy especially with large ulcerated tumor. We report a case of 50 years old patient with huge caecal lipoma that was associated with overlying adenocarcinoma presented as a case of severe iron deficeny anemia.

#### HELICOBACTER PYLORI TREATMENT AS A PREVENTION OF GASTRIC CANCER

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Epidemiologic studies have shown that individuals infected with H. pylori have an increased risk of gastric adenocarcinoma (1,2,8–12). The risk increase appears to be restricted to non-cardia gastric cancer. For example, a 2001 combined analysis of 12 case—control studies of H. pylori and gastric cancer estimated that the risk of non-cardia gastric cancer was nearly six times higher for H. pylori-infected people than for uninfected people .Additional evidence for an association between H. pylori infection and the risk of non-cardia gastric cancer comes from prospective cohort studies such as the Alpha-Tocopherol, Beta-Carotene (ATBC) Cancer Prevention Study in Finland . Comparing subjects who developed non-cardia gastric cancer with cancer-free control subjects, the researchers found that H. pylori-infected individuals had a nearly eightfold increased risk for non-cardia gastric cancer

#### **HEPATITIS C IN EGYPT**

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Viral hepatitis is among the most significant public health problems facing Egypt. Most morbidity and mortality result from the chronic form of viral hepatitis caused by hepatitis B virus (HBV) and hepatitis C virus (HCV) infection. According to DHS 2015, Egypt has prevalence of hepatitis C (HCV) 4.4% of its population between 15-59 years chronically infected; most of them are not aware of their infection and receiving no treatment. Persons living with viral hepatitis are at increased risk for cirrhosis and liver cancer, and although not all persons infected with viral hepatitis develop these conditions, the medical and economic burden incurred by those who do is significant.

The Egyptian National Committee for control of viral hepatitis NCCVH was established in 2006. The NCCVH (MOHP) introduced the first approved highly effective direct antiviral agent (Sofosbuvir) for nationwide treatment of HCV infection at 1% of its international price (USD 900); this medication has been shown to cure over 90% of those receiving the treatment. The MOHP is also introducing other approved highly effective medications consecutively during 2015, in addition to encouraging the local manufacturers to produce highly effective prequalified generics to effectively implement the elimination program in the shortest. A web-based registration system was established by the MOHP in mid-September 2014 and launched in October 2014 to schedule patient's appointments to be screened for eligibility to receive treatment at its specialized units. To prepare the Action Plan for the Prevention, Care & Treatment of Viral Hepatitis in Egypt, MOHP Viral Hepatitis Unit convened expert workgroups from various national and international agencies during September and October 2012. The National Hepatitis Program was established in 2014 including a Viral Hepatitis Unit, a group of program provincial coordinators and multi-sectorial task forces specific to each program component. These technical, multi-sectorial task forces are supposed to guide and oversee the implementation process of all program activities across all sectors (MoHP, university, Health Insurance Organization and private sectors), in addition to some other sectors e.g. police, and other ministries & agencies providing health care services.



# HYPERBARIC OXYGEN THERAPY STIMULATES COLONIC STEM CELLS AND INDUCES MUCOSAL HEALING IN PATIENTS WITH REFRACTORY ULCERATIVE COLITIS: A PROSPECTIVE CASE SERIES.

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BACKGROUND: Hyperbaric oxygen (HBO) is used as part of treatment in a variety of clinical conditions. Its use in the treatment of ulcerative colitis has been reported in few clinical reports.

OBJECTIVE: We report the effect of HBO on refractory ulcerative colitis exploring one potential mechanism of action.

DESIGN: A review of records of patients with refractory ulcerative colitis who received HBO was conducted. Clinical and histopathological scoring was utilised to evaluate the response to HBO therapy (HBOT).

RESULTS:All patients manifested clinical improvement by the 40th cycle of HBOT. The median number of stool frequency dropped from seven motions/day (range=3-20) to 1/day (range=0.5-3), which was significant (z=-4.6, p<0.001). None of the patients manifested persistent blood passage after HBOT (z=-3.2, p=0.002). The severity index significantly improved after HBOT (z=-4.97, p<0.001). Histologically, a significant reduction of the scores of activity was recorded accompanied by a significant increase in the proliferating cell nuclear antigen labelling index of the CD44 cells of the colonic mucosa (p=0.00) CONCLUSIONS: HBOT is effective in the setting of refractory ulcerative colitis. The described protocol is necessary for successful treatment. HBOT stimulates colonic stem cells to promote healing. KEYWORDS: CHRONIC ULCERATIVE COLITIS; GASTROINTESTINAL BLEEDING; INFLAMMATORY BOWEL DISEASE; ULCERATIVE COLITIS

### IATROGENIC BILIARY INJURIES: MULTIDISCIPLINARY MANAGEMENT IN A MAJOR TERTIARY REFERRAL CENTER

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Background: latrogenic biliary injuries are considered as the most serious complications during cholecystectomy. Better outcome of such injuries have been shown in cases managed in a specialized center.

Objective: Evaluatation of biliary injuries management in major referral hepatobiliary center. Patients& Methods Four hundred seventy two consecutive patients with post-cholecystectomy biliary injuries were managed with multidisciplinary team (hepatobiliary surgeon, gastroenterologist and radiologist) at major Hepatobiliary center in Egypt over 10 years period using endoscopy in 232 patients, percutaneous techniques in 42 patients and surgery in 198 patients.

Results: Endoscopy was very successful initial treatment of 232 patients (49%) with mild/moderate biliary leakage (68%) and biliary stricture (47%) with increased success by addition of percutaneous (Rendezvous technique) in 18 patients (3.8%). However, surgery was needed in 198 (42%) for major duct transection, ligation, major leakage and massive stricture. Surgery was urgently in 62 patients and electively in136 patients. Hepaticojejunostomy was done in most of cases with transanastomatic stents. One mortality after surgery due to biliary sepsis and postoperative Stricture was in 3 cases (1.5%) treated with percutaneous dilation and stenting.

Conclusion: Management of biliary injuries was much better with multidisciplinary care team with initial minimal invasive technique to major surgery in major complex injury encouraging for early referral to highly specialized hepatobiliary center

#### **IGG4 RELATED HEPATOPATHY**

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The hepatic parenchyma findings of Autoimmune pancreatitis (AIP), the existence of a new hepatopathy was demonstrated, with lesions consisting mainly of infiltrating IgG4-positive cells. This inflammation involves not only the biliary system but also extends to the hepatic parenchyma. To encompass these features, the new disease concept of IgG4-related hepatopathy was proposed. IgG4-related hepatopathy is thought to represent a combination of some of the features of sclerosing cholangitis and AIH. Additional investigations are required to understand the relationship between AIH and IgG4-related AIH.

### Abstracts

### IMMUNOHISTOCHEMICAL STUDY OF IL-8 AND COX-2 EXPRESSION IN HELICOBACTER PYLORI GASTRITIS

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Purpose: This study aimed to evaluate immunohistochemical expression of IL-8 and COX-2 in Helicobacter pylori gastritis and to correlate the findings with the different grades of gastritis, atrophy, intestinal metaplasia, dysplasia and gastric cancer.

Material and Methods: The study comprised gastric endoscopic biopsy specimens (antral specimens) obtained from 37 patients with helicobacter pylori gastritis (15 prospective cases confirmed by positive rapid urease test; and 22 retrospective cases). Ten helicobacter pylori negative endoscopic gastric biopsies were used as control. Ten cases of gastric carcinoma were included for comparison of the immunohistochemical results.

Results: A significantly higher expression of IL-8 was observed in the H.Pylori gastritis group compared to the control group (F=15.907, P<0.021) and in the gastric cancer group compared to the H.Pylori gastritis group (F=15.907, P<0.001). In addition, A significant higher expression of Cox-2 was detected in the H.Pylori gastritis group compared to the control group (F=15.471, P<0.001) and in the gastric cancer group compared to the H.Pylori gastritis group (F=15.471, P<0.043).

Conclusions: our study confirmed the presence of high expression of COX-2 and IL-8 in patients with H. pylori-induced gastritis.

### IMPACT OF CHRONIC KIDNEY DISEASE ON THE OUTCOME OF CORONARY ARTERY STENTING IN ELDERLY PATIENTS

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Percutaneous coronary intervention (PCI) became one of the most of effective revascularization procedures in treating coronary artery disease. Elderly patients with chronic kidney disease (CKD) make up an increasing percentage of population undergoing (PCI) whom represent the fastest growing segment of the population worldwide with high prevalence of coronary artery disease. A number of studies showed significant lower rate of restenosis by using drug eluting stent (DES) compared to that of bare metal stent (BMS) in (PCI). Indicating that using (DES) in old (CKD) patients may reduce the adverse outcome of (PCI). Aim of the work: Study aimed to determine the impact of chronic kidney disease on clinical outcome of percutaneous coronary intervention (PCI) in elderly patients ≥ 60 years old whom presented with chronic stable angina or acute coronary syndrome using either drug eluting stents (DES) or Bare Metal stents (BMS). Patients and methods: We examined 60 elderly patients whom underwent stent implantation. Patients were divided into 2 groups, group I included 30 patients with normal renal function and group II included 30 patients with (CKD). They were subjected to: complete history taking, through clinical examination. Laboratory investigations, coronary angiography, (PCI) according to standard technique, follow up during hospitalization and after 3 months were done to all patients. Results: There were statistically significant age differences between the two groups. No significant difference was found in revascularization after PCI in CKD patients compared to normal renal function patients in both in-hospital and 3-month follow up. While significant reduction in 3months follow up angina, repeated hospitalization, revascularization, and total major adverse cardiac event (MACE) associated with use of DES compared with BMS in patients with CKD, but not normal renal function patients was observed. Conclusion: CKD was more common among older age group. With the use of DES compared with BMS in patients with CKD, we found significant reduction in 3-months follow up angina, repeated hospitalization, revascularization, and total (MACE), but not in normal renal function patients

#### IMPACT OF DAAS ON LONG TERM CONTROLLED HCC PATIENTS ON FOLLOW UP

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A reduced but persistent long-term risk of developing HCC after achievement of SVR in patients with HCV-related cirrhosis. This risk persisted at least 8 years after SVR had been achieved in some patients. This indicates that continued surveillance for HCC should be maintained during prolonged time periods.....The duration needed for long-term surveillance for HCC after SVR requires further studies.it is well considered that if a patient has cirrhosis & then achieves SVR they should receive followup forever every 6 months .The effects of DAAs on recurrence and overall survival are not yet fully understood. Therefore this presentation will disscuss the imapc of DAAs on long term controlled HCC patietns from our experience in Alexandria.

## IMPACT OF MYOFIBROBLAST ON HEPATIC FIBROGENESIS IN HCV INFECTED PATIENTS: MULTIPLE IMMUNOFLUORESCENCE AND ULTRASTRUCTURAL STUDY

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The present work deals with the simultaneous ultrastructure and triple immunofluorescence study of the three main hepatic fibrogenic cells: hepatic stellate cell, myfibroblast (MF) and fibroblast in a group HCV RNA positive patients. As, their exact interrelation behavior in vivo with the progress of hepatic fibrosis is still inadequate. To our knowledge this is the first study which tackles the study of these three hepatic fibrogenic cells simultaneously at the level of electron microscopy and confocal laser scanning microscopy using multiple fluorochromes staining. The quantitative assessment of a smooth muscle actin immnoreactive cells conforming with myofibroblasts, whatever its origin, revealed respectively moderate and good significant correlation with the corresponding morphometric image analysis of liver tissue collagen, serum levels of HA and the stage of hepatic fibrosis. These results were confirmed by EM examination of liver sections in which myofibroblasts and myofibroblasts transdifferentiated from activated HSCs represented the main encountered cells. Also, for the first time cells having morphological characteristic of MF and not bone marrow fibrocytes were revealed in liver portal vessels. This represents strike for the reevaluation of the available knowledge concerning bone marrow fibrocyte. Also, the distribution, cellular interrelations and the fate of MF were highlighted.

#### INFECTION CHALLENGES IN CIRRHOTIC PATIENTS

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Liver cirrhosis is considered as an immunocompromised state, and ultimately this will lead to a variety of infections which account for a much higher mortality as compared to the patient without infection. Based on data approximatel 1 out of 3 patients who will develop an infection ultimately will not survive. I think apart from early recognition and better treatment of spontaneous bacterial peritonitis leading to better survival

Patients with liver cirrhosis are at the highest risk of developing infection, especially in those with GI bleeding. Bacterial infections occur anywhere from 30% of admitted patients with cirrhosis and clearly up to 45% in patients with GI hemorrhage. And if you look at these infection rates as compared to other infection rates in hospitalized patients these are clearly higher because the usual infection rate is somewhere between 5 and 7% in a patient who is hospitalized. Hence it's fair to say that the prevention, diagnosis and management of infections in patients with end stage liver disease form the large unmet need.

#### INSULIN RESISTANCE IN NON-OBESE, NON-DIABETIC CHRONIC HEPATITIS C VIRUS-INFECTED PATIENTS : ROLE OF APELIN

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Chronic hepatitis C (CHC) is a multi-facets disease associated with numerous clinical maifestations including insulin resistance (IR). Some investigators suggested a relationship between IR and progression of liver disease in hepatitis C virus (HCV) infected patients. Apelin, an adepokine that is up regulated under conditions of hyperinsulinemia, has been suggested to be associated with fibrosis progression and cirrhosis. Aim of the work: The aim of this work is to study the role of apelin in insulin resistance in non-obese, non-diabetic chronic HCV-infected patients and in liver injury. Material and methods: The present study included 35 patients with CHC who were previously submitted for liver biopsy before combined pigellated interferon/ ribavirine antiviral therapy and 35 cirrhotic patients with different stages of chronic liver disease according to Child-Pugh classification. Liver biopsies were taken when indicated and submitted for histopathological examination and to compare with CHC as regards apelin expression. Also, 15 age and sex matched healthy non-obese subjects were enrolled in the study as a control group provided that non of them has recently received vitamins or antioxidants. Results: Serum apelin and IR levels are significantly higher in HCV patients when compared with controls. Cirrhotic patients had serum apelin and IR values significantly higher than CHC patients. Serum apelin values are positively correlating with steatosis grade and Metavir activity and fibrosis score. Non-parenchymal apelin values are positively correlating with hepatocyte apelin in CHC patients and Child A cirrhotic patients. Apelin values varies among stages of CHC, which contribute to fibrosis progression. Conclusion: Apelin is significantly expressed in HCV- infected patients with IR and correlates with disease severity. Insulin resistance in non-obese, non-diabetic chronic hepatitis C virusinfected patients; role of apelin.



# INTERACTION OF YOUNG AND ADULT BIOMPHALARIA ALEXANDRINA SNAILS WITH SCHISTOSOMA MANSONI

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Schistosomiasis mansoni is one of the greatest health problems in Egypt. Biomphalaria alexandrina represents the intermediate host snail of Schistosoma mansoni in Egypt. Targeting this snail by different means can for sure decrease the risk of disease transmission. To make this goal a reality, snail bionomics should be thoroughly studied. Therefore, this work aimed at studying the impact of Biomphalaria alexandrina snails' age on their compatibility to Schistosoma mansoni infection, using different parasitological parameters. These included; pre-patent period, infection rate and total cercarial production. Susceptible and resistant snails were reared singly for self-reproduction. Of their progeny, four subgroups underwent our experiment. These are; young susceptible, adult susceptible, young resistant and adult resistant subgroups. Young susceptible subgroup showed the highest infection rate being 92%, the shortest pre-patent period and the highest total cercarial production of 151002. This was followed by the adult susceptible subgroup with infection rate of 74% and total cercarial production of 41732. Young resistant subgroup possessed infection rate of 37% with total cercarial production of 9877. While adult resistant subgroup contained only resistant members. These results give a clue for the higher resistance found in adult aged Biomphalaria alexandrina snails when compared to their young peers even if they were obtained from the same parents. Identification of most susceptible snail's age determines best timing for applying molluscicides. Moreover, adult resistant snails could be beneficial in biological snail control. Hence, these results provide potential implications in Biomphalaria

Keywords; Biomphalaria alexandrina, Schistosoma mansoni, age, susceptibility, resistance

#### INTRAHEPATIC CHOLANGIOCARCINOMA: AN EMERGING PROBLEM

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Intrahepatic cholangiocarcinoma (ICC) is an emerging problematic malignant tumor which arises from the epithelial cells of intrahepatic bile ducts (beyond the second order bile ducts). The incidence of ICC is reported to be only about 10% of primary liver cancers. But, recent studies from several countries have indicated that the incidence of ICC is increasing which cannot be solely explained by reclassification and improved detection[. The rate of ICC for males is greater than that for females; but ICC is less distinct than hepatocellular carcinoma and usually occurs after the sixth decade of life.It is reported that in addition to the established risk factors such choledochal cysts, chronic cholangitis, inflammatory bowel disease, primary sclerosing cholangitis (PSC) parasitic infections, drug or toxin exposure, and genetic risks, other conditions such as biliary cirrhosis, cholelithiasis, alcoholic liver disease, nonspecific cirrhosis, are significantly associated with ICC. The incidence of diabetes, thyrotoxicosis, chronic pancreatitis, obesity, chronic nonalcoholic liver disease, HCV/HBV infection, chronic typhoid carrier state and smoking, is increasing, suggesting that these conditions might partly explain the trends of ICC in incidence

### ITOPRIDE IN FUNCTIONAL GASTROINTESTINAL DISORDERS

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Itopride has a benzamide structure and has been known to be a gastroprokinetic agent.6 Itopride stimulates the release of endogenous acetylcholine release by antagonizing dopamine D2 receptor on post-synaptic cholinergic neurons, and also has an anticholinesterase activity, making ACh accumulate at cholinergic receptor sites. Itopride has been known to improve symptoms in patients with functional dyspepsia, characterized by early satiety, postprandial fullness, bloating, and nausea. Several studies reported that itopride enhances gastric emptying in dogs, rats, and humans, 10 therefore itopride may be useful for the treatment of functional gastrointestinal disorders.



### LAPAROSCOPIC SLEEVE GASTRECTOMY AS A REVISION SURGERY

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Bariatric revision surgery is associated with several complications that can be attributed to decreased quality of tissue and complexity of the surgery. A laparoscopic sleeve gastrectomy is a simple technique with potential advantages. Indications for the LSG were insufficient weight loss (34 patients, group 1) or vomiting (17 patients, group 2) following a laparoscopic adjustable gastric banding (LAGB) or vertical banded gastroplasty (VBG). Complications included bleeding (six) and leakage of the staple line (seven). Mean follow-up was 13.8 (2-46) months. LSG as revision surgery for insufficient weight loss resulted in extra weight loss of 52.7%, and the overall extra weight loss was 49.3%.

### LARGE BENIGN HEPATOCELLULAR TUMORS IN CHILDREN. REPORT OF A RARE CASE.

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PURPOSE: Benign liver tumors are very rare in children. Most focal nodular hyperplasia (FNH) remain sporadic, but predisposing factors exist, as follows: long-term cancer survivor (with an increasing incidence)

Case; 4 years old boy presented with abdominal enlargement especially on the right hypochondrium.CT abdomen revealed large left hepatic focal lesion with fine septations 9.5x7.5 cm.CT guided biobsy FNH .Decision was abdominal exploration and left hepatectomy.

On operation; there was large It, hepatic vascular tumor 10x 8 cm and resection of the mass with good safty margin after vascular control with pringle maneuver.

The patient had smooth postoperative course.

CONCLUSION: Benign liver tumors are very rare in children .Surgery is usually performed on large hepatic lesions.

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

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Background: Obstructive jaundice is a common problem in the medical and surgical gastroenterological practice. Malignant obstructive jaundice can be caused by cancer head of pancreas, periampullary carcinoma, carcinoma of the gall bladder and cholangiocarcinomas.

Objective: to review the etiological spectrum of malignant obstructive jaundice in NCI Cairo university during a period of 3 years (2008 till 2010).

Patients and methods: retrospective study including 232 patients who presented with malignant obstructive jaundice between (2008 to 2010). Data were collected from the biostatistics and cancer epidemiology department.

Results: out of 232 patients; 156 (67.2%) were male and 76 (32.8%) were female; the median age of the study population was 49 years (range 19\_80years).

The commonest cause of malignant obstructive jaundice was pancreatic head cancer, 72% (167/232), followed by the ampullary carcinoma 15% (36/232). The last cause was cholangiocarcinoma12.5% (29/233). Regarding the commonest symptom; clay colored stools (98.7%) was more frequent in patients with malignant disease whereas abdominal pain (97.7%) was 2nd common symptom.

Conclusion: Obstructive jaundice is more common among males and cancer head of pancreas is the commonest malignancy.US, ERCP and CT-Scan are important diagnostic modalities for evaluation of patient with obstructive jaundice with ERCP having the additional advantage of being therapeutic as well.

Keywords: Obstructive jaundice, ERCP, Ca Head of pancreas, Ca

### METABOLIC ASPECTS OF PPIS AND ITS IMPACT ON GERD MANAGEMENT

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Differences are emerging with respect to the mode of metabolism of proton pump inhibitors. All, except rabeprazole, are metabolised primarily by the hepatic cytochrome P450 enzyme system, and common genetic polymorphisms of the CYP 2C19 iso-enzyme affect their clearance and bio-availability. This has been demonstrated to lead to inconsistency in terms of acid suppression across the CYP 2C19 genotypes for all proton pump inhibitors except for rabeprazole. Omeprazole and, more markedly, esomeprazole, differ from the other proton pump inhibitors in that their bio-availability increases over the first week of treatment. This is due to a progressive reduction in their hepatic clearance with repeat dosing. This reduced hepatic clearance appears to be due to the S-enantiomer of omeprazole-esomeprazole impairing the activity of hepatic CYP 2C19.

#### NAFLD AS A MULTISYSTEM DISEASE

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Non-alcoholic fatty liver disease (NAFLD) is the hepatic manifestation of the metabolic syndrome. Visceral adiposity and hepatic fat result in a systemic inflammatory state which appears to predispose individuals with NAFLD to extra-hepatic disease.

NAFLD has been found to be significantly associated with the pathogenesis and development of CV disease, cardiac diseases (e.g. LV dysfunction and hypertrophy, atrial fibrillation and heart valve calcification), diabetes mellitus, chronic kidney disease, colorectal cancer and endocrinopathies, (e.g. hypothyroidism and PCOS).

Individuals with NAFLD have higher CV mortality and malignancy and lower rates of liverrelated complications compared with those with other types of chronic liver disease.

The links between NAFLD and these extra-hepatic complications will not only help develop new pharmacological treatments for this liver disease per se, but may also help decrease the global burden of these very common diseases that we now know share a 'common soil' with NAFLD.

#### NON PARASITIC LIVER CYST

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Objectives: The aim of this work is to study the clinico-pathological data of nonparasitic liver cysts (NPLC), its different management modalities and outcome.

Methods: This is a retrospective study of patients that were diagnosed to have NPLC from 2000 to 2015. The clinic-pathological data, operative and non-operative treatment, and outcomes of these patients were studied.

Results: NPLC was present in 118 patients. The female patients were (78, 66.1%), and the mean age was 48 years. Simple liver cysts (SLC) were the majority of cases (95, 80.5%) and its management was; conservative treatment with follow up (51 patients, 53.7%), percutaneous aspiration, puncture aspiration injection and reaspiration (PAIR) or pigtail catheter drainage (26 patients, 27.4%), and surgical treatment (18 patients, 18.9%) either by laparoscopic deroofing (12 patients) or open surgery (6 patients). Six patients (5.1%) with intra-hepatic biloma underwent percutaneous aspiration or pigtail drainage. Five patients (4.2%) had cystadenoma that underwent resection or pericystectomy. Five patients (4.2%) with post traumatic hematoma and underwent conservative treatment. Three patients (2.5%) with polycystic liver disease (PCLD), 1 of them underwent laparoscopic deroofing of large ones, and 2 patients had conservative treatment. Two patients (1.7%) had Caroli's disease that were prepared for liver transplantation. Two patients (1.7%) had cysts with biliary atresia that underwent Kasai operation with excision of the cyst.

Conclusions: Most of the nonparasitic liver cysts are SLC, which can be managed conservatively if it was asymptomatic and small, or by Percutaneous radiological intervention or laparoscopic deroofing for large symptomatic or recurrent ones. Open or laparoscopic resection or pericystectomy is reserved for cystic neoplasms which is not common.