Abstract Submitted for
Iranian Congress of Gastroenterology and Hepatology - ICGH 2009
10-13 November 2009

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## Schedule of Abstracts Presentation - ICGH 2009

### Day 1: Wednesday, November 11/Aban 20
- W-F-001 to W-F-040
- 7-21

### Day 2: Thursday, November 12/Aban 21
- T-S-041 to T-S-078
- 21-34

### Day 3: Friday, November 13/Aban 22
- F-T-079 to F-T-117
- 35-48

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### Abstract Categories

1. **Clinical Practice**
   - 1.1 Epidemiology
   - 1.2 Management strategies
   - 1.3 Evidence-based clinical practice
   - 2. Cell/molecular biology/pathology
   - 2.1 Dyspepsia
   - 2.2 Reflux disease - diagnosis
   - 2.3 Reflux disease - treatment
   - 2.4 Reflux disease - complications
   - 2.5 Gastrroduodenal malignancies
   - 3. H. Pylori
   - 3.1 Epidemiology/natural history
   - 3.2 Pathogenesis: microbial factors
   - 3.3 Diagnosis
   - 3.4 Management strategies
   - 3.5 H. pylori-associated malignancies
   - 4. Intestinal
   - 4.1 Coeliac disease: malabsorption syndromes and food enteropathies
   - 5. IBD
   - 5.1 Diagnosis and monitoring
   - 5.2 Treatment
   - 5.3 Management

6. **Colonic and Anorectal Disorders**
   - 6.1 Other colonic and anorectal disorders

7. **Liver**
   - 7.1 Molecular and cell biology - fibrosis
   - 7.2 Nutrition - metabolism - pharmacology
   - 7.3 Metabolic/genetic disorders
   - 7.4 Hepatotoxicity/alcohol - regeneration - apoptosis
   - 7.5 Cirrhosis and complications: basic aspects
   - 7.6 Cirrhosis and complications: clinical aspects
   - 7.7 Viral hepatitis: basic aspects
   - 7.8 Viral hepatitis B: clinical aspects
   - 7.9 Viral hepatitis C: clinical aspects

10. **Nutrition**
    - 10.1 Nutrients and gut function

16. **Oncology-Clinical**
    - 16.1 Malignant disease: epidemiology - screening and prevention
    - 16.2 Diagnosis of malignant disease

17. **Nerve Gut and Motility**
    - 17.1 Functional gastrointestinal disorders (clinical - management)

21. **Endoscopy and Imaging**
    - 21.1 Endoscopy - Colon
    - 21.2 Endoscopy - ERCP
    - 21.3 Endoscopy - MRCP
    - 21.4 Endosonography
1.1 Epidemiology

Prevalence of Celiac Disease in Patients with Different Types of Dyspepsia

Ghahremani R, sadoogh abbasian A, Shafai S

1 Gastroenterologist, Arak
2 Internal medicine, Isfahan

Introduction: Celiac disease may be presented with dyspepsia. This study was done to evaluate the prevalence of celiac disease and its association with different types of dyspepsia and also the need for duodenal biopsy in patients with non-ulcer dyspepsia.

Method: All patients with dyspepsia were classified as ulcer dyspepsia (duodenal ulcer and gastric ulcer) and non-ulcer dyspepsia (dysmotility-like non-ulcer dyspepsia and ulcer-like non-ulcer dyspepsia). Distal duodenal biopsy was done for all patients. Then, specific serologic factors for celiac disease (Anti-Gliadin Antibody and tissue Transglutaminase Antibody) were checked in patients with villous atrophy. Finally, the prevalence of celiac disease and its association with different types of dyspepsia were evaluated.

Results: Of the 810 patients with dyspepsia, 703 had non-ulcer dyspepsia and 107 had peptic ulcer. Six (5.6%) of the patients with peptic ulcer and 54 (7.7%) of patients with non-ulcer dyspepsia had villous atrophy and positive Anti-Gliadin Antibody or tissue Transglutaminase compatible with celiac disease, but there was no significant deference between celiac disease and different types of dyspepsia (P = 0.05). In non-ulcer dyspepsia, odds ratio for Celiac disease was 1.4, in comparison with the peptic ulcer.

Conclusion: During endoscopic examination for non-ulcer dyspepsia, if indicated, endoscopists should carefully inspect the duodenum for CD findings. Although, routine serologic screening can not be recommended; it may be appropriate for the patients with refractory dyspepsia.

Send Date: 2009/09/05

1.1 Epidemiology

Survey of Incidence of Irritable Bowel Syndrome among the Students of the Faculty of Medical Sciences

Ghadiri MR, Rahim AA, Hamidi MH, Ghanoomi AH

1 Gastroenterology, Assistant professor of gastroenterology, Qom university of medical sciences
2 Qom Free University of Medical Sciences

Introduction: Irritable bowel syndrome (IBS) is one of the most common gut functional diseases, affecting 10–20% of people worldwide. Although most patients do not seek medical help, the disease accounts for huge costs for both patients and health-care systems and worsens significantly patients’ quality of life. As studying at university, particularly in different fields of medical sciences, is accompanied with a greater level of stress, the purpose of the present study is to investigate the incidence of Irritable Bowel Syndrome (IBS), which is closely associated with mental factors, among students of medical sciences.

Method: The population of the present study included 730 students studying medicine, nursing, midwifery and laboratory science, who were assessed on a field basis by means of a special questionnaire and based on the Rome III criteria. At the same time, likely factors involved in the emergence of the symptoms of the disease such as simultaneity with monthly menses, field of study, distance from permanent place of residence, and the students’ number of years of studies, were also assessed.

Results: The mean incidence of the Irritable Bowel Syndrome in the students was 22% of which 66% were female and 34% male. Among the patients, 20.6% suffered from predominant constipation, 28.4% from predominant diarrhea, and 40% from a mixed condition. Among the students of medicine, nursing, midwifery and lab science, 14%, 26%, 32% and 16% suffered from IBS, respectively. Furthermore, 20% of the local students, 25% of non-local students being less than 300 km away from their home, and 26% of non-local students being more than 300 km away from their home suffered from IBS. The findings showed that the greater the distance between the students’ main place of residence and their place of study, the more their susceptibility to IBS (P = 0.000). There was a similar relationship concerning the students’ years of studies, i.e. newly admitted students were prone to IBS to a greater extent (P = 0.000).

Conclusion: The percentage of incidence of IBS in students of medical sciences is nearly twice as high as in the general population. All these findings might be indicative of the existence of a stressful condition which is a significant factor contributing to either the emergence or continuation of the symptoms of the disease. As a result, the knowledge of such relationships and the existence of a difficult condition in the fields of medical sciences call for a greater attention to be paid to modifying and reforming medical education.

Send Date: 2009/09/06

1.1 Epidemiology

Gallstone Prevalence In Non-Alcoholic Fatty Liver Disease: A Case Control Study

Darvish Moghaddam S1, Zahedi MJ2, Hayatbakhsh MM1, Enhesari A1, Moradhaseli F2

1 Associate professor of gastroenterology, Kerman Medical University
2 Radiology specialist, Kerman Medical University

Introduction: Obesity, Insulin resistance, hyperlipidemia and sedentary lifestyle are risk factors for both non-alcoholic fatty liver disease (NAFLD) and gallstone disease (GD). This study was designed to assess the prevalence of GD in patients with NAFLD.

Method: One hundred and five patients with fatty liver in the absence of known etiologies, diagnosed by transabdominal ultrasound, recruited as the case group. Ninety eight subjects without history of any systemic or liver diseases were enrolled as the control group. Anthropometric indices and resting blood pressure (BP) were measured in the both groups. GD was diagnosed by abdominal ultrasound or on the basis of previous cholecystectomy due to GD. Fatty liver severity was graded upon sonographic findings and results of biochemical variable in the cases.

Results: The mean age of cases (42 women, 63 men) was 38.76 ± 9.89 and of control subjects (42 women, 56 men) was 38.59±10.8 years. The prevalences of GD in the case and control groups were 10.5% (11/105) and 3% (3/98) respectively. The difference was statistically significant (P= 0.033), GD was more prevalent in women than in men ( female to male ratio: 13/1). The mean of anthropometric indices in the case and control groups was: body mass index (BMI); 30.78 vs. 25.51, weight; 84.4 vs. 69.28 kg and waist
circumference; 100.1 vs. 83.59 centimeter (P<0.001). Thirty four (35.7%) subjects of the cases and 3 (2.9%) subjects of the controls had high BP (P<0.001). According to International Diabetes Federation, 64.8% of cases (68/105) and nobody of control group fulfilled the criteria of metabolic syndrome. GD occurrence was associated with increased BMI (P=0.032) and high BP (P=0.005). Positive corelation was found between GD and severity of fatty liver (P=0.038). Severity of fatty liver was correlated with serum level of triglyceride (P=0.018), fasting blood glucose (P=0.033), alkaline phosphatase (P=0.017) and big BP (P<0.001).

Conclusion: In this study prevalence of GD was more common in NAFLD than in normal population. Women were affected more common than men. GD also showed a positive corelation with sonographic grading of fatty liver. Most NAFLD cases had metabolic syndrome.

Send Date : 2009/09/12

1.1 Epidemiology

W-F-004

Is The Low Level Of Serum Selenium In Non-Cardia Gastric Cancer Related To Helicobacter Pylori Infection?

Darvish Moghaddam S1, Hoseininejad Z2, Zahedi MJ1, Hayatbakht MM1, Nazari M1

1 Associate professor of gastroenterology, Kerman Medical University
2 Biochemistry Department, Kerman Medical University

Introduction: Gastric cancer (GC) stands as the most common cancer in Iran. As in other parts of the world Helicobacter pylori (H. pylori) infection accounts as the main causative factor in non-cardia gastric cancer (NGC) in Iran. Besides, a growing body of evidence has shown that higher serum selenium level decreases the risk of GC. We carried out this study to assess the serum selenium level in NGC patients and control subjects with and without H.pylori infection in Kerman, the largest province of Iran.

Method: In this cross sectional study 65 (22 women, 43 men) pathologically proven non-cardia gastric adenocarcinoma patients were enrolled as cases. Sixty five (24 women, 41 men) age matched non-cancer subjects with minor upper digestive symptoms; pain, burning, nausea and without abnormal findings in physical, lab, imaging or endoscopic evaluations were recruited as controls. Those with a concomitant malignancy and underlying systemic diseases were excluded from the study. Serum selenium level was measured by using atomic absorption spectrophotometer (Varian 220 AA, Australia). All individuals were also assessed for H.pylori infection by anti-H. pylori IgG antibody in sera by quantitative enzyme immunoassay (EIA) (Monobind 1425-300 USA).

Results: The serum selenium levels in the case and control groups were 111.29 ± 27.8 and 129.43±31.7 µg/L (Mean±SD) respectively (P<0.001). On the other hand 46% (n=30) of cases and 68% (n=44) of controls were infected to H.pylori (P=0.009). In order to determine the serum selenium levels according to H.pylori status, the following subgroups were evaluated: the NGC patients with positive (n=31) and negative (n=34) H.pylori infection had serum selenium levels as 110.96±30.45 and 111.58±25.55 µg/L (Mean±SD) respectively (P=0.92). The above values in the control subjects for positive (n= 43) and negative (n= 22) H.pylori infection were 133.12±32.31 and 122.18±29.78 µg/L (Mean±SD) respectively (P=0.19).

Conclusion: According to the results serum selenium level was significantly lower in NGC patients. Meanwhile the higher frequency of H.pylori infection in controls could be explained by selecting the subjects with minor digestive symptoms. These findings suggest that lower serum selenium may be involved in NGC cancer occurrence. However it probably acts independently from the effect of H.pylori infection.

Send Date : 2009/09/1

1.1 Epidemiology

W-F-005

Prevalence of Gastric Precancerous Lesions in First Degree Relatives of Patients with Gastric Cancer in Guilan, the North province of Iran

Mansour-ghanaei F*, Baghaee SM, Yousefi-mashhour M, Joukar F, Jafarshad R

Gastrointestinal and Liver Diseases Research Center, Guilan University of Medical Sciences, Razi Hospital, Rasht, Iran

Introduction: Gastric cancer is the most common cancer in Iran. Hereditary and environmental factors are responsible for it. Gastric precancerous lesions (GPLs) that formed before gastric cancer establishment are probably preventable. This study is performed to determine the GPLs in first degree relatives of gastric cancer patient, so we can probably prevent the formation of gastric cancer especially with eradication of Helicobacter Pylori (HP).

Method: In a descriptive study, 503 persons of first-degree-relatives of gastric cancer patients were selected. After physical examination upper gastrointestinal (GI) endoscopy was performed. Reverse Urease Test (RUT) and 6 biopsies were taken and divided into several groups according Sydney system biopsies for premalignant lesions including HP infection, chronic gastritis, Atrophy, intestinal metaplasia and dysplasia . SPSS 14 was used for analysis and P<0.05 were statistically considered significant.

Results: Of 503 individuals, 264 (52.5%) were female. Precancerous lesions were found: 90.3%, 78%, 20.3%, 7.4%, and 4% for chronic gastritis, HP infection, intestinal metaplasia, atrophy, and dysplasia, respectively. Relation of chronic gastritis, atrophy, intestinal metaplasia with HP infection was statistically significant.

Conclusion: prevalence of GPLs in Guilan is almost similar to other Northern provinces of Iran while irreversible lesions such as intestinal metaplasia is higher in this study comparing other provinces.

Send Date : 2009/09/16

1.1 Epidemiology

W-F-006

Frequency of Irritable Bowel Syndrome’s Subtypes in Patients Referred to Razi Gastrointestinal Clinic during 2007 till 2008, Guilan, North province of Iran

Aminian K*, Mansour-ghanaei F, Joukar F, jafarshad R, Ghahbari A, Rouhipour S

Gastrointestinal and Liver Diseases Research Center, Guilan University of Medical Sciences, Razi Hospital, Rasht, Iran

Introduction: Irritable bowel Syndrome (IBS) is one of the most prevalent gastrointestinal disorders characterized by abdominal pain and altered bowel habits without any structural pathology. Based on RomeIII criteria there are 4 subtypes for IBS; diarrhea- Predominant, constipation-predominant, mixed and
unsubtyped. This study is done to identify IBS’s subtypes based on Rome III criteria. 

**Method:** In a descriptive cross-sectional study patients referred to the Razi gastrointestinal clinic during Oct 2007 to Mar 2008 has been enrolled. The questionnaire, containing patients’ information and diagnostic criteria for IBS and its subtypes, was filled for patients under supervision of gastroenterologist. Patients with structural disorders in endoscopy, colonoscopy and other diagnostic methods were excluded from study. Finally patients with diagnosis of IBS based on Rome III criteria divided into four subgroups. Data was analyzed by SPSS-14 software.

**Results:** 104 patients had diagnosis of IBS, 80 patients (76.9%) were female. Of those 104, 50 patients (48.1%) had mixed-IBS. 34 patients (32.7%) had diarrhea-predominant IBS and 20 patients (19.2%) had constipation - predominant IBS.

**Conclusion:** The most prevalent subgroup of IBS in this study was mixed-type and pattern of diarrhea-predominant occurred more frequently than constipation.

Send Date: 2009/09/19

1.1 Epidemiology

**Clinical Analysis of 279 Cases with Liver Abscess over a 28-Year Period**

Salahi R*, salahi H, Anvary-ardekani HR, Sabet B shiraz university of medical science

**Introduction:** Liver abscess causes significant morbidity and mortality and recent reports have emphasized the changing epidemiology, treatment and prognosis of liver abscess. Thus a study on liver abscess in our city to determine the epidemiology, etiology, most common presenting symptoms and signs, types of treatment and complication seems to be necessary.

**Method:** A retrospective chart review was performed on all patients admitted at three Shiraz university teaching hospitals of Shiraz University Medical Science with diagnoses of liver abscess from 1970 to 2008. The diagnosis was based on characteristic clinical, ultrasonographic, in addition to positive laboratory tests and presence of pus drained from the abscess cavity.

**Results:** In this study 279 patients with an average age of 46 years were studied. They were consisted of 238 patients with pyogenic liver abscess and 41 cases of amebic liver abscess. The most common known cause of pyogenic liver abscess remains biliary tract disease. The most common organisms isolated from pyogenic abscesses were klebsiella and then E-coli respectively. The most abnormal Laboratory findings in patients were increased alkaline phosphatase (84.9%), leukocytosis (82.2%). The most common presenting symptoms were fever and chills. Ultrasound was successful in diagnosis of liver abscess in all patients. The associated disease included diabetes mellitus (15 patients), coolies anemia (7 patients), cirrhosis, malignancy and immune deficiency (each in 5 patients), perirectal abscess (4 patients), and pyelonephritis (3 patients). Surgical drainage was done in %39.4, percutaneous drainage in %43.3. However, %15.4 of patients didn’t need any drainage of abscess. During following up of patients recurrence of liver abscess was seen in 5 patients. The overall hospital mortality rate was 6% (17/279).

**Conclusion:** It seems that the pattern of liver abscess in our society is not so different from other countries. We found a trend in age range downward in pyogenic liver abscess.

Send Date: 2009/09/23

1.1 Epidemiology

**Familial aspects of colorectal cancers in southern littoral of Caspian Sea**

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**Introduction:** Every year, about 50000 new cases of cancers occur in Iran and the most common system being involved by cancers is the gastrointestinal (GI) tract (38%). Colorectal cancers (CRC) account for the 3rd and the 4th most prevalent cancers in Iranian men and women, respectively. Since CRC has some well-known hereditary forms with differences in their prevalence according to regional heterogeniety, we designed a study to assess familial aspects of this cancer in Guilak people who live in Mazandaran.

**Method:** All CRC patients visited in a private GI clinic during 1999-2007, in whom the diagnosis of colorectal adenocarcinoma was pathologically confirmed, were interviewed about their family history of colorectal cancers and the age of their family...
Introduction: Psychiatric disorders are prevalent in IBS patients. Prevalence of psychiatric disorders varies in different societies. We conducted this study to determine the prevalence of psychiatric disorders (anxiety-depression) in IBS patients.

Method: In a cross-sectional study, 256 IBS patients were selected (using diagnosis criteria of revised Rome II) and evaluated for psychiatric disorders. In the first phase, subjects were screened by GHQ28. In the second phase, those who scored 23 and more than it, were assessed through semi-structured psychiatric interview. Socio-demographic characteristics including age, gender, marital status, educational level and occupation, were recorded as well. P-value<0.05 was significant statistically.

Results: 30(11.7%) of 256 subjects have not psychiatric problems. Demographic variables in comparison with other subjects (226) considering gender (P<0.03), occupation (P<0.001) and intensity of IBS (P<0.003) had significant statistical differences. Out of 226(88.3%) of subjects (83 male, 143 female) suffered from psychiatric problems(cut point≥ 23) out of 226 subjects, 149 (65.9%) were suffering from anxiety disorders and 101 (44.7%) were suffering from depressive disorders. In anxiety disorders, GAD (35.4%) and in depressive disorders, dysthymia (23.9%), had the most frequencies. There were significant differences between the prevalence of anxiety disorders and age groups (P<0.01). There were significant statistical differences between the prevalence of depressive disorders and age groups(P<0.002), educational level (P<0.05) and marital status (P<0.05). There were significant statistical differences between anxiety disorders and type of IBS (diarrhea-predominant) (P<0.045).

Conclusion: Comparing to other studies, our study indicated that anxiety–depressive disorders are more common in our subjects. There were a significant differences between anxiety disorders and age groups and types of IBS and depressive disorders and age groups, educational level and marital status. Further study is needed to determine the relations of demographic variables and types of IBS with psychiatric disorders and more attention of internal specialists about psychiatric disorders in patients suffering from IBS.

Send Date: 2009/10/03

1.1 Epidemiology
W-F-012

HBeAg-negative Chronic Hepatitis B; The First Report from Northeast of Iran
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Introduction: In spite of importance of epidemiology of HBeAg-negative patients, there are few data concerning these patients in northeast of Iran. The present study aims to investigate epidemiology of HBeAg-negative chronic Hepatitis B in this region.

Method: From 2005 through 2008, 182 patients with chronic hepatitis B were enrolled. Clinical characteristics were reviewed and liver biochemical tests, and ultrasonography were performed. HBV serological markers were detected using...
Conclusion: Meshkinshahr that is a district near to the silent volcano of Sabalan. Of esophageal cancer was significantly higher in northern parts of the lower third was consisting of 32.6% of cases that was the origin of tumor was in middle third of esophagus and the lower third was consisting of 32.6% of cases that was significantly more common in men whereas in middle third of esophagus the risk of women was higher than men. The incidence of esophageal cancer was significantly higher in northern parts of the province and the highest rate (26.7/100,000) was related to Meshkinshahr that is a district near to the silent volcano of Sabalan.

Results: One hundred thirty-five patients (74.17%) were HBeAg-negative. Patients with HBeAg-negative chronic Hepatitis B were significantly older (p value= 0.000) with mean age of 36.9±12.03 year. There was no significant relationship between HBeAg-negativity and sex, fatigue, nausea, vomiting, anorexia and jaundice as well as the serum level of AST and ALT. Moreover there was no relationship between HBeAg status and liver fibrosis.

Conclusion: This is the first report from northeast of Iran on frequency of HBeAg-negative chronic hepatitis B patients. The results show that the prevalence of HBeAg-negative chronic hepatitis B lies much higher than previous reports from other area. As in patients with chronic HBV hepatitis, serum HBeAg is one of the markers of virus replication, high prevalence of patients with HBeAg-negative in our area make this diagnostic tool ineffective and necessitate the replacement of this marker with more accurate and appropriate one.

1.1 Epidemiology
W-F-013

Epidemiology of Esophageal cancer in Ardabil province, a report of population based cancer registry in northwest Iran
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Introduction: Esophageal cancer is the 8th most common malignancy and 6th most common cause of cancer death worldwide. Previous studies have shown that Esophageal cancer is the second cancer in male and female in Ardabil province. We provide an update report of Ardabil population based cancer registry to obtain the geographic pattern of Esophageal cancer occurrence in Ardabil province.

Method: Data on all newly diagnosed Esophageal cancer cases between 2004 and 2006 was actively collected. Age standard incidence rate (ASR) was calculated for each 9 districts of Ardabil province and to provide a comparison between them standard rate ratio calculated for each district.

Results: During the period of study 608 new cases of esophageal cancer were registered. The age standardized incidence rate (ASR) of esophageal cancer was 19.5 in men and 19.7 in women per 100,000 person-years. The most common morphology in our cases was squamous cell carcinoma (74.7%) and esophageal adenocarcinoma consisted of 16.1% of all cases. In 33.9% of cases was squamous cell carcinoma (74.7%) and esophagus adenocarcinoma consisted of 16.1% of all cases. In 33.9% of cases the origin of tumor was in middle third of esophagus and the lower third was consisting of 32.6% of cases that was significantly more common in men whereas in middle third of esophagus the risk of women was higher than men. The incidence of esophageal cancer was significantly higher in northern parts of the province and the highest rate (26.7/100,000) was related to Meshkinshahr that is a district near to the silent volcano of Sabalan.

Conclusion: Esophageal cancer is the second common cancer in Ardabil and its incidence has been slightly increased in women since first official report in 2003. High incidence of esophageal cancer in the northern parts of province mandates further investigations of specific environmental and host factors.

Send Date: 2009/10/03

1.2 Management strategies
W-F-014

The Adjutant Role of Oral Levamisole on Response to Hepatitis B Virus Vaccine in Individuals with End-Stage Renal Disease: Meta-Analysis
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Introduction: Chronic dialysis patients often fail to produce protective antibodies to hepatitis B virus surface antigen after HB vaccination. Several authors have suggested benefit of oral levamisole as an adjuvant to HBV vaccination in end-stage renal disease (ESRD) patients. However, reliable information is still lacking.

Method: Only trials that weighted the seroprotection rate in study (oral levamisole plus HBV vaccine) against control (HBV vaccine alone) patients were included. We applied the fixed effects model of Mantel and Haenszel, with heterogeneity and sensitivity analyses. The rate of patients showing seroprotective anti-hepatitis B titers at completion and 6-10 month after completion of HBV vaccine schedule in study versus control groups was set as our end-point of interest and analyzed separately.

Results: We identified four studies that fulfill our inclusion criteria involving 328 unique patients with ESRD. Aggregating of study results showed a significant increase in response rates among study (oral levamisole plus HBV vaccine) versus control (HBV vaccine alone) patients (pooled Odds Ratio, 2.77 [95% CI 1.56- 4.94]) after completion and 6-10 month post-vaccination period (pooled Odds Ratio, 3.96 [95% CI 1.71- 9.18]). The P-value was 0.12 and 0.4 for our tests of heterogeneity.

Conclusion: Our meta-analysis determined that oral levamisole administration could improve HBV vaccine’s seroprotection and its permanency.

Send Date: 2009/08/31

1.3 Evidence-based clinical practice
W-F-015

Accuracy of Sonography in the Detection of Appendicitis according to Age and Sex
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Introduction: Although sonography usage in diagnosing appendicitis is economical, there is no common view between various sources but current sonography usage in diagnosing appendicitis. Considering the fact that accuracy of sonography diagnosis of appendicitis is dependant on the tool , the expert of radiologist and also patients cooperation, evaluating the diagnostic accuracy of performed sonographies can be useful to make decision on choosing a common method.

Method: In a retrospective method, from 2007 till 2008 inoperative sonography reports and intraoperative findings of 300 cases with diagnosis of appendicitis were compared with pathologic reports which is the gold standard method of diagnosis appendicitis. Sensitivity, specificity, positive and negative predictive value of sonography
findings were calculated according to age and sex

**Results:** In this study 300 patients with the average age of 26±12 years were evaluated. 46% were female. Among 254 patients with abnormal pathology of appendixes 160 patients had sonography report inflavor of appendicitis. Sensitivity, specificity, positive and negative predictive value of sonography according to age were as follows respectively: (≤29 years: %54.9, >29 years: %75.2), (≤29 years: %75.8, >29 years: %75), (≤29 years: %90.3, >29 years: %97.4), (≤29 years: %28.8, >29 years: %19.3). Sensitivity, specificity, positive and negative predictive value of sonography according to sex were: (male: %71.8, female: %57), (male: %72.7, female: %76.5), (male: %96.1, female: %91.4), (male: %21.6, female: %28.6)

**Conclusion:** Regarding this study, although history and clinical examination are very important to diagnose appendicitis, sonography is a reliable method in diagnosing appendicitis especially in male gender and old ages especially in situations which history and physical examination are not conclusive.

Send Date : 2009/09/23

1.3 Evidence-based clinical practice

**W-F-016 The Gastroenterology and Hepatology Subspecialty Training Status in I.R.Iran**

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6 Emam Khomeini, Tehran
7 Medical University, Tabriz
8 Medical University, Ahwaz
9 Medical University, Mashhad

**Introduction:** The training of adult gastroenterology and hepatology was started since 1987 in our country. Now nine centers in different universities are involved in this program. In order to describe the present status of this program in our country this study was performed.

**Method:** We gathered the number and ranking of academic staff, number and training level of fellows, presence of approved research centers, the number and type of diagnostic and therapeutic procedures (in the academic year of 2007-2008) through a special questionnaire.

**Results:** At the time of study 9 centers were involved in fellowship training programs in different universities (Tehran (Shariati and Imam Khomeini centers), Shaheed Beheshti, Shiraz, Mashhad, Gilan, Esfahan, Tabriz, and Ahwaz). 90 academic staff (17 professor, 21 associate professors and 52 assistant professors) were involved in these training programs. Sixty fellows were training in different centers of whom 33 persons were in the first year and 27 were in the second year. Irrespective of their distribution in different universities, for each trainee there are 1.5 trainers in this program. The number and type of diagnostic and therapeutic procedures in one academic year are summarized in the table.

**Conclusion:** The number of academic staff and the type and number of procedures which are routinely performing in the training centers in I.R.Iran seems to be enough for training of the core program (first level of training) to trainees in gastroenterology and hepatology subspecialty program. Training of advanced gastroenterology and hepatology needs more facility and training of trainers in all centers.

Send Date : 2009/10/20

2.1 Cell/molecular biology/pathology

**W-F-017 Epidermal Growth Factor Receptor (EGFR) mutations and expression in Squamous Cell Carcinoma of the Esophagus**

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**Introduction:** Mutations in Epidermal Growth Factor Receptor (EGFR) are therapeutic targets in lung cancers of never-smokers.

**Method:** We have analyzed EGFR mutations (exons 18-21) in 88 Esophageal Squamous Cell Carcinoma (ESCC) patients from high incidence areas in Iran and India.

**Results:** Four mutations were detected (5.7%): one in frame deletion (del746-750) and three missense mutations (G719D, L730F, P753L). EGFR overexpression was detected in 22/34 patients tested (65%) whereas no HER2 mutation was found in 54 Kashmiri cases.

**Conclusion:** The study suggests that ESCC patients with EGFR mutations may benefit from EGFR-targeted therapies.

Send Date : 2009/09/27

2.2 Dyspepsia

**W-F-018 Personality trait in functional dyspepsia**

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**Introduction:** Dyspepsia can be broadly defined as pain or discomfort centered in the upper abdomen. Dyspeptic patients with no clear structural or biochemical explanation for their symptoms are considered to have functional Dyspepsia. Functional Dyspepsia is synonymous with the term non ulcer Dyspepsia (NUD). NUD is a heterogenous disorder the one of its potential etiologies is psychosocial disturbances. The emotional states and personality traits may affect the physiology of gut and play a role in how symptoms are experienced, and can thus influence treatment. We evaluated the relationship between non ulcer Dyspepsia and personality traits.

**Method:** This analytic case- control study was performed in Shariati hospital, NUD was diagnosed using the Rome III criteria after exclusion of organic GI pathology, with upper endoscopy, personality traits and the score of each factor evaluated using the big five inventory.

**Results:** 86 patinet and 60 controls were studied. Subjects scored higher in neuroticism (P = 0.0002 (P < 0.05)) compared to our controls.

**Conclusion:** According logistic regression and chi-squar test and because P. value is lesser than 0.05 relationship between non ulcer...
Dyspepsia and personality traits with existing data is significant. Send Date: 2009/10/07

2.5 Reflux disease - diagnosis
W-F-019

Evaluation of diagnostical value of ultra sonography for esophagitis in children with suspicious symptoms of esophagitis in 17 th shahrivar’s educational and therapeutic center within 2 years, from march 2006 to March 2008.

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Introduction: Gastroesophageal reflux disease is the most common esophageal disorder, as well as one of the most common disorders of anykind affecting infants and children. Esophagitis, Secondary to gastroesophageal reflux (GER) is the most frequent type. The complications of esophagitis include: Poor feeding , FTT , anemia, gastrointestinal bleeding , esophageal strictures . Barret esophagus Reflux esophagitis should manage with medical or surgery One of the difficulties of GERD managements in children is its diagnosis. Endoscopy and biopsy is an invasive procedure. Because of that sonography has the value as equal as Barium swllaw and fluoroscopy for diagnosis of GERD and , trans abdominal sonography is a simpler and less expensive and noninvasive method. We measure the sensitivity and spicificity value of sonograph . for esophagitis in children with suspicious symptoms of esophagitis.

Method: In a cross – sectional survey during 2 years ,100cases, aged 2 months – 13 years, with suspicious symptoms of esophagitis and abdominal pain which referred to gastrointestinal clinic in 17-shahrivar hospital has been studied and they were candided for endoscopy , thickness of anterior and posterior and mucosal thickness were measured . other data had been collected and entered in SPSS software for analysis with suing of t – test.

Results: among 100 cases , 60 cases were in normal group and 40 cases were in diseased group. The GEJ. anterior wall thickness on sonography in normal group : 3/1+0/58mm versus diseased group: 3/5 + 0/72 mm . Cut off point was 1/36mm , a sensitivity 60% and specificity 77% for TAS . The GEJ mucosal thickness in normal group: 1/3 + 0/36 mm versus diseased group: 1/7+0/42 mm cut of point was 1/25 mm , a sensitivity 87% and specificity 59% for TAS.

Conclusion: according to sensitivity 87% and specificity 59% in TAS for GEJ mucosal thickness and sensitivity 60% and specificity 77% for GEJ anterior wall thickness , we can make this decision that sonography can be use as a reliable diagnostic tool in sceereing for patients with suspicious symptoms.

Send Date : 2009/09/14

2.5 Reflux disease - diagnosis
W-F-020

The Prospective Acid Reflux Study of Iran ( Parsi ): Baseline Report


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Introduction: To present the baseline characteristics of the PARSI database.

Method: PARSI is an ongoing cohort of GERD patients. The methodology has been published. Briefly all consenting patients with GERD presenting to 2 referral clinics in Tehran, Iran, underwent a detailed symptom assessment, upper GI endoscopy, and protocol biopsies. A symptom score was calculated for each participant based on severity and frequency of major and minor GERD symptoms. The participants were then treated according to a given protocol and followed every 3-6 months. Clinical response and adverse events are assessed on follow-up.

Results: 1,218 GERD patients have been enrolled (mean age: 39.3±14.7 years, 56.3% female, mean BMI: 25±4.7Kg/m2). At presentation, bloating, acid regurgitation, epigastric pain and heartburn were the most prevalent complaints (71.6, 71.2, 66.5 and 60.5% respectively). Most patients (75.9%) had symptoms several times a day. Daily major GERD symptoms (acid regurgitation [AR], heartburn [HB], noncardiac chest pain [NCCP] and dysphagia) were experienced by 283 (23.2%) participants. Daily epigastric pain was reported by 243 (20.0%). Mean general symptom score (GSS) was 72.5±44.7 (range 0-382) and mean major symptom score (MSS) was 23±18.8 (range 0-112). Mean symptom score was highest for epigastric pain, acid regurgitation, heartburn and bloating (10.1, 9.3, 8.7 and 8.7 respectively). Among 623 recorded dominant symptoms, epigastric pain (38.5%), heartburn (23.1%) and acid regurgitation (20.7%) were the most frequent. Non-erosive reflux disease (NERD) was present in 40.4 % of participants and was more frequent among women (67.8 vs 32.2%, p-value=0.0001), while BMI was not different. H Pylori was present in 57.3% (Rapid Urease Test or histology). Other concomitant findings were gastric erosions, gastric ulcer, duodenal erosions and duodenal ulcer in 23.9, 2.5, 15.9 and 10.4% of the patients respectively.

Conclusion: We have established a cohort of GERD patients and are successfully following them. Esophageal erosions are seen in 60% of this cohort. Epigastric pain is a common symptom alongside with other major GERD symptoms (i.e. AR, HB, NCCP and dysphagia) and needs special attention. Concomitant upper GI pathologies are seen in 24% of this cohort and warrant endoscopy to detect them in this Helicobacter Pylori prevalent area.

Send Date : 2009/09/22

2.6 Reflux disease - treatment
W-F-021

The role of helicobacter pylori and CagA in response to treatment in reflux esophagitis

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Introduction: Helicobacter pylori is one of the important pathogenesis factors in the digestive system. The aim of this study was to evaluate the impact of Helicobacter in response to treatment of esophagitis as a result of reflux in patients infected by Helicobacter.

Method: Patients having gastro esophageal reflux and medical endoscopic indications, 110 patients randomly were studied. Among them, 55 patients affected by Helicobacter pylori as treatment and other 55 ones non-affected by Helicobacter pylori as control, were introduced to the physician. From all patients, two biopsy samples from antr and two samples from corpus of stomach were prepared. One sample of each place was subjected to the urea solution test, immediately. In case it was negative, second sample in order to pathology and tissue detection of
Helicobacter pylori, was sent. Furthermore, 2 ml blood sample in order to determination of IgG anti body titration against Helicobacter pylori, was taken. The physician ordered 20 mg omeprazole two times a day for all patients. After 8 weeks, second endoscopy was done for all patients and the rate of esophagitis recuperation resulted from reflux based on Los Angeles grouping. Two types of positive and negative Helicobacter pylori patients were compared about omeprazole treatment. In affected by Helicobacter pylori, CagA+ and CagA- sub-groups were detected by serology method, as well.

**Results:** In esophagitis patients along with Helicobacter pylori infection, age average was 45.7+-14.4 and in esophagitis patients without Helicobacter pylori infection, it was 47.2+. Khi-square statistical results showed that changes in positive Helicobacter group was significant and x2=13.41, df=2 and p<0.001 and changes in negative Helicobacter group was significant, as well.x2 = 22.23, df=2 and p<0.005. Also, results revealed that CagA difference in esophagitis patients with Helicobacter pylori infection which were of positive CagA, was significant with patients affected by Helicobacter of negative CagA and x2=6.65, df=1 and p=0.009.

**Conclusion:** The rate of response of treatment in esophagitis patients without and with Helicobacter pylori infection was significant and the role of Helicobacter in response to esophagitis treatment was not effective. Response to treatment in esophagitis patients with Helicobacter pylori infection with CagA than those who have no CagA was more. Presence of CagA had preservative effect.

Send Date: 2009/10/25

2.7 Reflux disease - complications

**Association of gastroesophageal reflux disease symptoms with exacerbations of chronic obstructive pulmonary disease**

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**Introduction:** symptoms of Gastroesophageal reflux disease (GERD) are common in various chronic respiratory diseases but little is known about GERD in the setting of chronic obstructive pulmonary disease (COPD). The aim of this study was to determine the effect of GERD symptoms on COPD exacerbations and subsequent hospitalization and drug usage

**Method:** This retrospective study was conducted from Dec 2008 to Feb 2009 in Pulmonary Clinic of Dr. Shariati University Hospital,Isfahan,Iran. Consecutive patients who diagnosed to have COPD based on clinical features and pulmonary function tests were included. Patients were categorized to GERD positive and GERD negative groups based on Mayo gastro-oesophageal reflux questionnaire. Exacerbation of COPD, hospitalization, and drug usage were compared between the two groups.

**Results:** During the study period, 110 patients with COPD (mean age = 68.0 ± 8.4 years, 87.3% male) were included from them, 59 (53.6%) patients were GERD positive. There was not significant difference between GERD positive and GERD negative patients in age, gender, tobacco use, or body mass index; p > 0.05. GERD positive patients experienced significantly more acute exacerbations of COPD than patients who were GERD negative; p<0.001. Also, the rate of hospitalization due to OPD exacerbations was significantly higher in GERD positive patients and they had a more severe COPD; p < 0.05.  GERD positive patients received more short- as well as long-acting bronchodilators, corticosteroids, and oxygen therapy compared with GERD negative patients; p < 0.05.

**Conclusion:** Patients with GERD symptoms have more COPD exacerbations and subsequent hospitalizations and drug usage. Clinical trials and preventive strategies for GERD in patients with COPD are warranted.

Send Date: 2009/09/27

2.9 Other esophageal disorders

**Effect of Clinical Use of Proton Pump Inhibitors on Serum Level of Gastrin-17, Pepsinogen I, and Pepsinogen II**


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**Introduction:** Proton pump inhibitors (PPIs) change the physiology of acid secretion in the stomach. In this study the effects of PPI use on serum level of gastrin-17 (G-17), pepsinogen I (PGI) and pepsinogen II (PGII) were examined in a consecutive series of referred patients to a major endoscopy clinic in the Eastern Golestan province, Iran.

**Method:** A total of 322 patients' age 50 years or older were enrolled. A questionnaire on use of PPI was completed and the serum biomarkers for moderate/severe corpus atrophy were validated against pathology. Among those, 298 subjects (59.6% female, mean age 63.3 yrs) without severe/moderate gastric atrophy were diagnosed. Ever-tobacco use (smoking and chewing) was reported in 34.2% of subjects. Among non-tobacco users the serum levels of G-17, PGI, and PGII were compared between those who reported current use of PPIs, ex-users and those who never used.

**Results:** Of 195 non-atrophic/non-tobacco user subjects, 92 (60.8 % female, mean age 62.16 yrs) reported current PPIs use (median (25%-75%) duration of PPI use: 12 (1-24) months) and 74 subjects (62.2% female, mean age 62.01 yrs) reported ex-PPI use (median (25%-75%) duration of PPI use: 12 (2-36) months). Twenty nine subjects were reported as never PPI users (51.8% female mean age 65.68 yrs). The median (25%-75%) levels of G-17 among current PPI users, ex-users and never PPI users were 13.68 (7.39-33.24), 8.47 (3.47-21.98), and 8.22 (2.69-13.28) pmol/l respectively. The median (25%-75%) levels of G-17 among current PPI users, ex-users and never PPI users were 189.57 (130.67-247.42), 149.98 (110.43-223.82), and 141.58 & #956;g/l (90.62-199.51) respectively. G-17 and PGI were significantly higher among current PPI users compared to ex-users or never users (p<0.001). There was no statistically significant difference between serum level of G-17 and PGI among never PPI users and ex-PPI users. The PGI/PGII ratio didn’t differ among these three groups.
Conclusion: PPI use increases the serum level of G-17 and PGI among non-smokers without severe/moderate gastric corpus atrophy. PGI/PGI ratio remains unchanged. Lower level of G-17 and PGI among ex-PPI users suggests the possible reversible effect of PPI.

Send Date: 2009/09/22

2.9 Other oesophageal disorders

W-F-024

Recurrent Esophageal Webs and Ulcer as a presentation of Systemic Lupus Erythematosus

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Introduction: Multiple oesophageal webs are among the rare causes of Dysphagia. Previous reports have described different etiologies for oesophageal webs but this is the first time that systemic lupus erythematosus is presented as the cause of oesophageal webs.

Method: The patient was a 39-yr-old woman when first presented to a gastroenterologist in 2003 with longstanding history of dysphagia. There was no history of ingestion of erosive chemicals. A barium swallow revealed increased wall thickness of the upper third of esophagus. During endoscopy multiple membranous webs were found in all parts of esophagus with a severe narrowing in upper third. A piece of a web was also reported to consist of fibrinous material. Separation of webs was performed by endoscopic forceps and dysphagia improved. After about one to two months, dysphagia recurred with the same endoscopic findings. This was repeated for 14 months. She was referred to our center in 2008. In endoscopy, a severe ulcerated narrowing was noted at proximal 5 cm of esophagus with some fibrinous webs at the same place. It seemed that distal webs had disappeared and the pathologic process had become limited to the proximal 5 cm. A complete blood test was done which was normal except for increased titters of ANA and anti double stranded DND and decreased titters of Complement C3 and C4. No serologic or pathologic criteria of other diseases were found. We started prednisone 30 mg/day and hydroxychloroquine 600 mg/day.

Results: The patient started to feel better and interval between dilatations extended to about 5 months.

Conclusion: According to rheumatologic refferences this patient with two positive criteria (ANA, esophageal ulcer) is considered to be probable SLE. We concluded that both chronic fibrosis and ongoing inflammation resulted in recurrent dysphagia and anti inflammatory medications resulted in more efficacious dilatations.

Send Date: 2009/10/22

2.13 Gastroduodenal malignancies

W-F-025

Life Style Factors Influencing Survival of Oesophageal Squamous Cell Carcinoma

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Introduction: Northeastern Iran has some of the highest rates of oesophageal squamous cell carcinoma (OSCC) in the world. Life style factors including illiteracy, residential place, tobacco and opium use have been shown to be associated with OSCC risk in this area. The impact of these risk factors on OSCC survival remains unclear. We aimed to evaluate the influence of the life style risk factors on OSCC survival.

Method: Patients were defined as a part of population based study of esophageal cancer in eastern half of the Golestan province. Pathology confirmed OSCC patients, recruited from 2002 to 2007, were followed through telephone interview until death or June 2008. A total of 459 subjects were recruited. Follow up data was not available for 37 cases. Staging was mostly done clinically and its data was available in 36% of subjects. Mean age (y/o), percentage of male, rural residence, illiteracy, tobacco/opium use and oesophagectomy among subjects without staging data was 65.1, 47%, 69%, 91%, 46%, 21% and among subjects with staging data was 64.6, 54%, 75%, 91%, 48%, and 29%. The analysis was restricted to subjects with staging data. Survival rate was estimated using Kaplan-Meier method. The influence of life style factors on survival was evaluated using multivariate Cox proportional Hazards regression model. Age, gender, tumor stage, and treatment (chemo/radiotherapy and surgery vs. palliative or no treatment) were included in the model.

Results: Among 160 subjects with available staging data, the overall 3-year survival rate (95% CI) was 11.2% (6.6-17.2). OSCC stage was I/II in 27%, III in 38% and IV in 35% of patients. The hazard ratio (HR) and 95% CI for illiteracy was 2.1 (1.1-4.2). Living in rural area had a HR (95%CI) of 1.04 (0.7-1.59). The HR (95% CI) for ever tobacco users (either smoking or chewing) was 1.3 (0.8-2.2), for opium users was 2.5 (1.3-4.9), and for both tobacco and opium users was 1.3 (0.8-2.1). The overall 3-year survival rate (95%CI) among pure tobacco users and non-tobacco/opium users was 10% (2-26) and 23% (14-34) respectively.

Conclusion: Life style factors including education, tobacco and opium use might influence long term survival of patients with oesophageal squamous cell carcinoma

Send Date: 2009/09/22

2.13 Gastroduodenal malignancies

W-F-026

Immunohistochemical expression of vascular endothelial growth factor (VEGF) in gastric adenocarcinoma; correlation with clinicopathological variables

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Introduction: As a major worldwide cause of morbidity and cancer-related deaths, gastric cancer needs molecular-based approaches for predicting clinical outcome and guiding treatment
strategies. VEGF is one of the most potent angiogenic factors, and plays an important role in tumor growth, invasion, and metastasis. In spite of many studies on the topic, data about the significance of VEGF in gastric cancer is controversial. The purpose of the present study was to investigate VEGF tissue expression and its possible correlation with clinicopathological features.

**Method:** Paraffin-embedded tumor specimens from 32 patients with gastric adenocarcinoma who had undergone gastrectomy at Omid Oncology Hospital, Mashhad were studied. The immunohistochemical (IHC) expression of VEGF was investigated in extracted tumorol tissue. using the VEGF score, based on the intensity of reaction and percent of positive cells. Correlation of VEGF expression with clinicopathological parameters were analyzed using SPSS.

**Results:** The positive rate of VEGF was 65.6% (21 out of 32 cases with 23.8% diffuse and 76.2% intestinal type). All of cases with poorly differentiated tumors were VEGF positive (P=0.009).

A Significant correlation between VEGF expression and stage of tumors was seen (P=0.037). The intensity of VEGF expression was significantly related to differentiation and TNM staging of tumors (P<0.05). Although positive VEGF expression was correlated with history of dysphagia (P=0.013), There was no significant correlation between VEGF expression and other studied variables like tumor location and H pylori infection.

**Conclusion:** VEGF expression is significantly correlated to the malignant biological behaviors of gastric adenocarcinoma. These findings suggest that, the immunohistochemistry staining for VEGF can be useful for clinical diagnosis, and prediction of tumor progression to determine the patient with aggressive behavior for sever treatment.

Send Date : 2009/10/22

2.13 Gastrroduodenal malignancies

**W-F-028**

**Gastric lesions in dyspeptic patients regarding the family history of gastric cancer**

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**Introduction:** Symptoms of recurrent upper abdominal pain or dyspepsia are frequently experimented by the general population. However, in a community with high rate of gastric cancer, dyspepsia may be a symptom of a serious problem. This is in particular of greater importance among first-degree relatives of patients with gastric cancer. This study aims at evaluating the gastric mucosal changes in dyspeptic patients with a first-degree relative with gastric malignancy and comparing it to a control group.

**Method:** In an analytic-descriptive setting, 200 dyspeptic patients were evaluated in Tabriz Imam Reza Hospital. This included 66 patients with a first degree relative with gastric adenocarcinoma and 80 patients without such a history. Upper endoscopy was done in all patients and biopsies were taken from five different points of stomach.

**Results:** Sixty six patients in the case group (30 males, 36 female with a mean age of 39.18±10.85 years) and 80 patients in the control group (40 male, 40 female with a mean age of 40.01±11.58 years) were evaluated. The two groups were matched regarding age and gender. HP infection was determined in 75.8 and 67.5 percent of patient s in the case and control group, respectively (p=0.273).

Endoscopically determinable lesion was significantly more frequent in the control group (40.9% vs. 68.8%; p=0.001). Histological change of gastric mucosa in the case group were chronic gastritis, active chronic gastritis, atrophy, metaplasia and dysplasia in decreasing order. Atrophy and dysplasia were not observed in control group and no case of adenocarcinoma was detected at all. In comparison, frequency of active chronic gastritis was significantly higher in the control group (80.0% vs. 60.6%; p=0.01) while atrophy was more prevalent among patients with a cancerous relative (6.1% vs. 0.0%; p=0.04).

**Conclusion:** This study showed that the precancerous lesions (atrophy) of gastric mucosa are more prevalent in dyspeptic patients with positive family history of gastric cancer. Consequently such patients will benefit from earlier screening methods for gastric lesions.

Send Date : 2009/10/22

3.1 Epidemiology/natural history

**W-F-029**

**Iranian English medical journals in international medical audience**

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Introduction: While the number of scientific medical publication in the first decade after Islamic revolution was with less than 100 papers very low and no one Iranian medical journal was indexed by international publication institutes, the situation is dramatically changed in the last decade; more than 2000 publications from Iran were noted in Medline yearly and more than 14 Iranian English medical journals have reached access to indexing institutions ISI and/or Medline. It is of great interest to verify how the quality of research from Iran is reflected by international scientists through the citation in their publications.

Method: The number of all publications in 11 Iranian English medical journals during 3 years was noted. The citation of these papers in other international medical journals was determined (according to information by Ministry of Health).

Results: during 3 years, 1523 original papers (between 30 to 247 papers in each journal) were published in these 14 journals. 200 citations of these papers existed totally, among them 122 times belonged to self-citation and 78 to foreign citation in international journals. This means that at least 1323 manuscripts (95% of all) did not find any citation by foreign scientists and maximally 5% of the Iranian papers had only one citation.

Conclusion: The very few number of citations of Iranian research works by international scientific audience is a proof of low quality of our research. High qualified research needs long-term scientific background, scientifically oriented and educated personalities, for whom our society must prepare the appropriate atmosphere. These facts merit to be penetrated in the consciousness of all of us and in those being responsible for the research policy. When we want to make real progress, we have to be ready for fundamental change in the structure of our universities and research centers.

Send Date: 2009/10/11

3.2 Pathogenesis: microbial factors

W-F-031 Relation of Bab A2 genotype of Helicobacter pylori infection with chronic active gastritis, Duodenal ulcer and non-cardia active gastritis in Alzahra hospital Isfahan-IRAN

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Introduction: Bacterial virulence factors are important in determining disease outcome. The initial stage of colonization is binding of H. pylori to gastric epithelial cells surface receptors, the best defined H. pylori adhesin-receptor interaction found to date is that between the Leb blood group antigen binding adhesin, BabA. Heterogeneity among H. pylori strains in presence and expressing the BabA gene may be a factor in the variation of clinical outcomes among H. pylori-infected peoples. We investigated the presence of babA2 in clinical H. pylori isolates and their correlation with different diseases in Alzahra hospital Isfahan –IRAN.

Method: In the present study from 177 biopsy specimen, 95 samples were RUT positive and 87 samples were RUT and culture positive (51 male, 36 female). Ninety biopsy samples were culture negative. From 87 samples, six cultures had contamination and excluded from investigation. DNA extraction was done in 81 specimens (47 male, 34 female). 44 chronic active gastritis, 27 Duodenal and 10 non-cardia gastric cancer. Average, Min and maximum age in chronic active gastritis with Helicobacter infection were 41, 47, and 65 years old respectively. BabA genotype was obtained by using PCR method.

Results: We had 58 (71.6%) positive samples for BabA2 and 23 samples were negative (28.4%).Relative frequency of BabA genotype of H. pylori isolated from gastric biopsies of patients with chronic active gastritis duodenal ulcer, and non-cardia gastric cancer were 68.2%, 74.1% and 80%, respectively. In our study there is not a significant correlation between the babA2 genotype and clinical outcome ( P= 0.673 ) but there was a significant correlation between non-cardia gastric cancer and presence of BabA2 genotype. Our results showed that the prevalence of BabA2 genotype is corresponding with Asian countries but not with European and Latin America.

Conclusion: In conclusion, our data do not support the hypothesis that the virulence factors of H. pylori, BabA are strongly associated with gastritis and peptic ulcer disease but there is relation with non-cardia gastric cancer in our country. We need further study to determine other genes effect for prediction of clinical outcomes in our local area.

Send Date : 2009/09/27
3.2 Pathogenesis: microbial factors

Evaluation of cagA Tyrosine Phosphorylation DNA Motifs in Helicobacter pylori Isolates from Gastric Disorder Patients by PCR Assay in Chaharmahal va Bakhtiari province
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Introduction: Helicobacter pylori is involved in the pathogenesis of gastritis, peptic ulcer disease and is the risk factor of adenocarcinoma. The cytotoxin-associated gene (cagA) is a bacterial virulence factor and associated with more clinical outcome. The aim of this study was to determine the genetic diversity of cagA gene in patients who has gastric disorders in Chaharmahal va Bakhtiari province.

Method: This cross-sectional descriptive study was performed on 250 antral gastric biopsy specimens that were obtained from patients undergoing upper gastrointestinal tract endoscopy in Hagar hospital of Shahrekord. Initially, H. pylori strains were identified by RUT test and then analyzed for the presence of cagA and TPM subtypes (A, B and C) by PCR with established specific primers.

Results: Out of 250 samples, 207 (82.2%) samples were positive for H. pylori that 170 (82.1%) strains were cagA-positive. The frequency of the TPM-A, TPM-B, TPM-C, TPM-AB, TPM-AC, TPM-BC, TPM-ABC and non-TPM genotype cagA-positive strains were 28.5%, 12.5%, 56%, 2%, 15%, 4.8%, 4.8% and 15% respectively. Statistical analysis revealed that there is an association between TPM-C and gastritis.

Conclusion: The results revealed that more relationship between TPM-C and gastritis but this problem needs further research in other region of Iran.

Send Date: 2009/10/22

3.4 Diagnosis

Accuracy of Helicobacter pylori Stool Antigen (HpSA) test in the diagnosis of Helicobacter pylori infection in dyspeptic patients before treatment
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Introduction: Helicobacter pylori has been found to be associated with various gastrointestinal disease. Confirmation of Helicobacter pylori infection includes invasive and non-invasive methods. Non-invasive tests are more attractive for both patients and clinicians. The geographical differences among Helicobacter pylori strains have been emphasized recently. The aim of our study was to assess and compare the diagnostic accuracy of Helicobacter pylori stool antigen test by two other invasive and a non-invasive diagnostic method in Mashhad (Iran).

Method: A total of 51 untreated dyspeptic patients were included. Endoscopic biopsy samples were obtained from the antrum and the corpus of stomach for histology and rapid urease test. Urea breath test and Helicobacter pylori stool antigen test (using enzyme-linked immunosorbert assay) were performed according to the manufacturer’s protocol. Patients were considered Helicobacter pylori positive when two of the three tests (histology, rapid urease test or Urea breath test) were positive. Data analysis was executed in SPSS vs. 16.

Results: Twenty-two men and 29 women, with a mean (Standard Deviation) age of 42.1 (17.08) were enrolled in the study. The prevalence of Helicobacter pylori infection was 72.5%. The sensitivity, specificity and accuracy were 0.91, 1.00 and 0.94 for Helicobacter pylori stool antigen test, 0.97, 0.88 and 0.94 for rapid urease test and 1.00, 1.00 and 1.00 for urea breath test. All patients with borderline results of urea breath test (3 patients) or Helicobacter pylori stool antigen test (4 patients) were Helicobacter pylori positive. Helicobacter pylori status was not significantly associated with age, duration of symptoms and previous drug use.

Conclusion: In the studied patients, Helicobacter pylori stool antigen test proved to be highly accurate for diagnosis of Helicobacter pylori infection. This non-invasive and simple test can become an important tool for diagnosing Helicobacter pylori infection before treatment in dyspeptic patients.

Send Date: 2009/09/04

3.5 Management strategies

General Practitioners’ and Internists’ Knowledge and Practice about Helicobacter Pylori Infection
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Introduction: Helicobacter Pylori (HP) infection, occurring throughout the world and causing gastro duodenal diseases, is one of the most common chronic bacterial infection in human, the purpose of this study is to assess the general practitioners (GPs) & internists knowledge and practice about HP infection.

Method: A cross - sectional study on 421 GPs & 48 internists was performed in Rasht between December, 2007 and July 2008. They were requested to answer the 19 questions related to knowledge and 5 questions related to practice about HP. Every question had 1 point . all the data were analyzed by SPSS14 software. P value <0.05 were statically significant.

Results: 67.9% of GPs & 91.7% of the internists had good knowledge; 72, 4% of GPs and 95/8% of internists had good practice .In respect of GPs’ gender 77/6% of the male GP and 66/7% of the female GPs had good practice. 67/1% of physicians with less than 10 years experience and 79/1% of the physicians with more than 10 years experience had good practice, it was a significant relationship between the gender of the GPs and the years of their job experiences in their practices (p=0/006) . It was a significant relationship between the knowledge of the internists and place of their works (p=0/026) and between the practice of the internists and their source of getting the information (p=0/00).

Conclusion: naturally the knowledge of the internists was better than the general practitioners. Education and skills in diagnosis and treatment among GPs seem completely necessary.

Send Date: 2009/09/19

3.5 Management strategies

Evaluation of Helicobacter pylori eradication in improvement of Non ulcer dyspepsia symptoms
Introduction: Dyspepsia is an abdominal discomfort or pain which can be intermittent or episodic in 30-60% of the general population. Non-ulcer dyspepsia (NUD) is the fullness of the abdomen after meals, early satiety, bloating but no nausea or burning sensation, heart burn or pyrosis without epigastic pain. With regard to the possible role of Helicobacter pylori (HP) in the pathogenesis of NUD and an unsatisfactory treatment of the disease, eradication of HP in the improvement of NUD has been evaluated.

Method: This is a randomized clinical trial study including 90 patients of NUD diagnosed on symptoms, physical examination and after upper GI endoscopy to rule out other diagnoses. Upper GI endoscopy and rapid urease test is carried out and all patients were positive for HP. These patients were divided into two groups. Treatment group received drugs OFAB (Omeperazole 20 mg bd, Furazolidone 100 mg tds, Amoxicillin 1000 mg bd and Bismuth subcitrate 120 mg qid) for 14 days and followed two weeks of Omeperazole 20 mg bd. The eradication of HP was confirmed by 6 weeks after the end of treatment by upper GI endoscopy and antral, body biopsy for pathology. The controlled group was treated with Omeperazole 20 mg bd for four weeks. Both groups were treated with H2 antagonist for one year. The patients were Followed up at three, six and twelve months intervals.

Results: During Follow up of three, six and twelve months, the incidence of symptom improvement in control group was greater, mainly during the one year follow up. This improvement was statistically significant (satisfactory improvement 28 patients (70%), unsatisfactory improvement 12 patients (30%) in treatment group, in comparison with them Control group in which satisfactory improvement 16 patients (41%) and unsatisfactory improvement 21 patients (59%). P value=0.01). The rate of improvement in clinical symptom in both group had no relationship to the following variables including sex, education, psychiatric medications, occupation, cigarette smoking and the number of family members. But significant symptom improvement was seen in control group with the age which is due to the fact in the age of less than 39 years satisfactory improvement was higher (p-value=0.009).

Conclusion: In view of improvement in clinical symptoms with eradication of HP especially in one-year follow-up group, it can be recommended that eradication of HP in treatment of NUD could be considered.

Send Date: 2009/09/26

3.5 Management strategies

W-F -036

A Prospective Randomized Trial of Esomeprazole versus Lansoprazole and Omeprazole Based Triple Therapy for H. Pylori Eradication in an Iranian Population

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Introduction: There are many studies with various results regarding eradication of H. Pylori. Although triple therapy with one PPI and two antibiotics for one week has been introduced as the treatment of choice, quadruple therapy in Iran is the standard of treatment because of high resistance of the organism to treatment. Comparison of 3 different PPIs; Esomeprazole (Nexium), Lansoprazole (Prevacid) and Omeprazole (Prilosec) with longer duration of 10 days for eradication of H. Pylori in Iranian population.

Method: 294 patients with endoscopic evidence of peptic ulcer, non-ulcer dyspepsia, gastritis or acid reflux and confirmed H. Pylori, either by histology or a positive Urease test were selected from Feb. 2005 to March 2007. They were randomly divided into three groups with the following therapeutic regimens: Group I: 98 patients received Omeperazole 20 mg bid, Clarithromycin 500 mg bid and Amoxicillin 1000 mg bid. (OCA regimen) Group II: 97 patients Lansoprazole 30 mg bid, Clarithromycin 500 mg bid and Amoxicillin 1000 mg bid. (LCA regimen) Group III: 99 patients received Esompeprazole 40 mg bid, Clarithromycin 500 mg bid and Amoxicillin 1000 mg bid. (NCA regimen) Patients were examined on a weekly to assess any treatment side effects compliances and completion of the treatment course. Response to treatment was defined as Eradication of H. Pylori, confirmed by negative C14 urea breath test 40 days after the completion of the treatment courses.

Results: Per protocol eradication rate of H. Pylori was 91.9% for group I (OCA), 80.4% for group II (LCA) and 91.8% for group III (NCA) (p: 0.017%). Intention to treat eradication rate was 91% in group I (OCA), 78% in group II (LCA) and 90% in group III (NCA) (p: 0.012%). Patients’ compliance was 99% in group I (OCA), 97% in group II (LCA) and 98% in group III (NCA) (p: 0.614%). Adverse events were 36% in group I (OCA), 35% in group II (LCA) and 14% in group III (NCA) (p: 0.001%). Based on age and sex, eradication rate showed significant difference without considering various treatment protocols (p: 0.017% and 0.031% respectively). Eradication rate didn’t show any significant difference among the 3 groups by endoscopic findings (p: 0.166%)

Conclusion: Both Per protocol and Intent to treat eradication rates of H. Pylori were higher in the treatment groups of OCA and NCA compared to LCA. There were less adverse effects in the group III (NCA) compared to the groups II (LCA) group I (OCA). Eradication by NCA regimen was carried less side effects but more cost compared to OCA regimen. NCA is the recommend regimen for eradication of H. Pylori infection in Iran population.

Send Date: 2009/09/27

3.5 Management strategies

W-F -037

Metronidazole-Furazolidone-(Middle east regimen) or, Clarithromycin-Furazolidone-or, Clarithromycin-Based Regimens(Western regimen) for Eradication of H.pylori in Peptic Ulcer Disease:

A randomized double blind controlled trial


Tehran University of Medical Sciences

Introduction: Clarithromycin-Amoxicillin-Omeprazole combination is the most used regimen for H. pylori eradication in western countries with development of high resistant strains. Furazolidone is a very cheap drug with no development of resistant strains, largely proven and used in Iran. The aim of the study is to compare the effectiveness of clarithromycin-based...
(Western regimen) with Furazolidone-based regimen (Middle East Regimen) and their combinations for eradication therapy. **Method:** All consent patients with endoscopically verified DU or GU or erosive duodenitis and HP+ were randomized into 3 treatment groups: Group A: (OAB-M5F5) Metronidazole (M) (2×500mg) in the first five days and Furazolidone (F) (2×200mg) in the second five days. Group B: (OAC10) Clarithromycine (C) (2×500mg) for 10 days. Group C: (OAB-C5-F5) Clarithromycine (2×500mg) for first 5 days and Furazolidone (2×200mg) for the second five days. All patients were given additionally Omeprazole (O) (2×20mg) and Amoxicillin (A) (2×1gr). Bismuth Subcitrate (B) (2×240mg) was given to groups A and C and Bismuth Placebo to group B. Metronidazole, Clarithromycine and Furazolidone were given into similarly bottles. Patients and physicians were not aware of type of therapy. All subjects were followed after the end of therapy and asked about various complaints and its severity (no symptoms, mild, moderate or sever). Two months later C13-urea breath test was done. The total score of severity of side effects (only moderate to severe) was calculated (TSS).

**Results:** 319 patients were totally reenrolled; 92 out of 107 patients in group A, 85 out of 105 in group B and 87 out of 107 patients in group C completed the study. Eradication rate per protocol was in group A 91.3% (95%CI 83-91), in group B 90.4% (95% CI 82-95), in group C 88.7% (95% CI 81-94), and per intention to treat was 78.5% (95% CI 69-75), 80.9% (95% CI 72-87) and 81.3% (95% CI 73-87) respectively, not different from each others. Bad taste was the most side effect occurred in all groups, but more significant in group B and C than A (38%, 37% and 17% respectively, P<0.05). The mean TSS of side effects under therapy was 0.88 ± 2.05 in group A, 1.15 ± 1.40 in group B and 1.87 ± 1.62 in group C. The Costs of 5 days Clarithromycine is 5.6€ and of 5 days Furazolidone 0.07€ in Iran.

**Conclusion:** Middle East Furazolidone-based regimen is as effective as western Clarithromycine-based regimen. The combination of Furazolidone with Clarithromycine doesn’t increase the effectiveness, but the side effects. Furazolidone-based regimen is very effective and cheap. Clarithromycine is very expensive and leads to the development of high bacterial resistance. Therefore, its use is not recommended for H. pylori eradication in Iran.

Send Date: 2009/10/11

3.6 H. pylori-associated malignancies

**Prevalence of Helicobacter Pylori infection and gastric cancer precursor lesions in relative patients with gastric cancer in khostan province**

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**Introduction:** progression of helicobacter pylori associated gastritis is a major pathway for gastric cancer development. A positive family history of gastric cancer was identified in the cases of gastric carcinoma. In fact, relatives of individual with gastric carcinoma were reported to have an increase risk for gastric cancer of about 3-folds. Aim of this study was asses of the prevalence of precancerous gastric lesion in first degree relative of gastric cancer in comaprison with control groups.

**Method:** After gastric cancer was histologically confirmed in the index case, family relatives were invited to participate in the study and underwent gastric endoscopy and biopsy. Control groups were individuals attending for ERCP procedure but not showing evidence of peptic ulcer and not having family history of gastric cancer. Two biopsies taken from the antrum, Two form the corpus and two from the cardia of stomach during upper gastrointestinal endoscopy. Histological specimens were examined according to the updated Sydney system.

**Results:** Overall 184 patients included: 92 form relatives of gastric cancer with 92 form control groups. the mean age was similar between two group. (40/75±9/5, 40/39±11) but age distribution above 40 was more common among control group. (77/6% ratio to 52/4%). The prevalence of H. pylori infection was high in the relative patient's (73/9%) than the control (58/7%) group. H pylori infection rate in antrum, corpus cardia of patients with relative was 73/9%, 75%, 70% respectively, in comparision with group control 58/7%, 58/7%, 57/8%. (P=0/01, P=0/04) Although, pangastritis and density of lymphoid follicles were more frequent in relative patient (P=0/00) but intestinal metaplasia and dysplasia were prevalent in the corpus and cardia more frequent in relative group (P<0/01, P=0/041). The patients with intestinal metaplasia and dysplasia were female and older than the patients without intestinal metaplasia and dysplasia. (P=0/306, P=0/0857)

**Conclusion:** Although prevalence of H. pylori infection and chronic gastritis were more common in relative patients with gastric carcinoma, but we couldn't find out relative risk of precancerous lesions among this groups in our study. So other risk factors should be involved in the carcinogenesis.

Send Date: 2009/09/27

4.2 Coeliac disease/malabsorption syndromes and food enteropathies W-F-039

**Should we look for Celiac disease in Irritable Bowel Syndrome?**

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**Introduction:** Irritable bowel syndrome (IBS) has a high prevalence in general population. Consensus diagnostic criteria (ROME II) based on symptoms have been established to aid diagnosis. Celiac disease can be misdiagnosed as IBS. We aimed to assess the association between celiac disease and IBS in patients fulfilling ROME II criteria, Golestan province, Northeast of Iran.

**Method:** We undertook a case-control study, 161 consecutive new IBS patients who fulfilled Rome II criteria and 172 healthy controls (age and sex matched) were investigated for celiac disease. Demographic data were entered into questionnaires and Tissue transglutaminase antibody (tTG-Ab) was performed in all subjects by ELISA method, as an indicator of celiac disease.

**Results:** Mean age was 32.24 ± 11.75 years totally. Among cases, 87.7% were diarrhea predominant and others were constipation predominant. In both cases and controls only one had shown a positive titer of tissue transglutaminase (tTG) antibody. They did not accept to undergone endoscopy.

**Conclusion:** Our results showed that serologic prevalence of celiac is slightly low in Irritable bowel syndrome in our area. It should be
4.2 Coeliac disease/malabsorption syndromes and food enteropathies

A Case of Primary Sclerosing Cholangitis and Lichen Planus associated with Celiac disease

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Introduction: Primary Sclerosing Cholangitis (PSC) has been found to have a rare association with Celiac Disease (CD). There is also an association between Lichen Planus (LP) and chronic liver disease. However, these associations are rare or may be accidental. To the best of our knowledge coincidental involvements of all of these rare associations is not report so far. Hereby we reported a case of PSC, CD, LP and CBD stone.

Method: We report a 46 years old female, with chronic diarrhea, abdominal pain, bloating and skin lesions from several years ago.

Results: Skin biopsy revealed Lichen Planus. Total Colonoscopy and ileoscopy was normal. Upper endoscopy and biopsy showed intraepithelial lymphocytosis in duodenum (MARSH I). IgA Anti tissue transglutaminase and endomysial antibodies were positive. After gluten free diet (GFD) gastrointestinal symptoms subsided and CD was diagnosed. After 6 months she presented with severe RUQ pain and Serum aminotransferases raised. Ultrasonography showed irregularity, thickening and dilation of common bile duct (CBD) and intra hepatic ducts plus two stones. Abdominopelvic spiral CT scan demonstrated biliary ectasia, dilated CBD and thickening of duodenum. ERCP revealed a tight stricture in proximal part of CBD plus dilation and multiple stones in intra hepatic ducts. Balloon dilation size 6 and 8 was done, but at the third ERCP a metal stent size 8*80mm was placed because of restrictucture at the site of previous sphincterotomy. Now patient is symptom free. She is on GFD regimen, UDCA and prednisolon.

Conclusion: We report a case of PSC, CD, LP and CBD stone associated with Celiac disease. This is a very rare association and the coexistence of these conditions is very uncommon.

Send Date: 2009/09/16

4.2 Coeliac disease/malabsorption syndromes and food enteropathies

What is the Real prevalence of coeliac disease in Iron deficiency Anemia?

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Introduction: Coeliac disease (CD) is a common immune-mediated enteropathy, triggered by the ingestion of gluten-containing grains in genetically susceptible persons. Iron Deficiency Anemia (IDA) is one of the well recognized presentations of CD. In this study we aimed to determine the prevalence of CD among patients with IDA with unknown etiology.

Method: The study included a total of 130 patients presenting to the gastroenterology outpatient clinic of Poursina Hakim research institute. All participants have presented recurrent IDA. Data including demographics, clinical symptoms, complete past medical history and associated disorders, family history of CD were collected using a 60 questioned survey. Physical examination was carried for all patients and positive findings recorded in a data collection form. Fe, TIBC, Ferritin , Retic count, complete blood count (CBC), ESR, CRP, Calcium, phosphor, IgA anti-tissue transglutaminase (anti-tTG) antibody and 3-times stool examination were assessed in all patients. In all patients we measured serum levels of IgA to exclude a condition of selective serum immunoglobulin A deficiency. All patients were suggested to undergo a diagnostic upper gastrointestinal endoscopy and colonoscopy was done if it was necessary. Upper endoscopic examinations were performed in all patients and at least 4 biopsies were taken for pathologic examinations. Histopathology interpreted by Marsh calculation.

Results: A total number of 130 patients (42 female, 88 male) were enrolled in the study. Mean age was 35.5 (standard deviation 13.73). Eleven patients had anti t-TG positive test. In pathologic evaluation one of them had marsh I, two with marsh II and six patients with marsh III. Eight of them had good gluten free diet (GFD) response and confirmed to have CD. Of the remaining 119 patients with negative t-TG test, four patients had marsh I classification and four with marsh II. We also had two patients with marsh III in this group. Six patients have confirmed to have CD because of good response to GFD. The prevalence of CD was 10.7% among the study patients.

Conclusion: Our study showed that a high percentage of patients with IDA, suffered from CD. There is another point that serology can detected only 50% of these patients. Therefore if patients have clinically suspicious to CD endoscopy is recommended despite of serology result.

Send Date: 2009/10/05
drug-induced liver disease, biliary obstruction, and autoimmune or metabolic/hereditary liver disease; and (3) evidences of fatty liver by transabdominal ultrasonography.

**Results:** There were 83 females and 57 males, with a median age of 45 years (range 25–62 years). The median BMI was 29.2, with a range of 21.6–32.6. Forty and eight (30%) patients had diabetes mellitus (all of these 48 had type II diabetes mellitus), and 30 (20%) had hyperlipidemia. Obesity was found in 40 (27%) patients (10 males, 30 females). None of the patients had IgA deficiency; transglutaminase antibodies were positive in one male patient (0.75%) that his endoscopy was normal and 2nd portion duodenal biopsies was compatible with Marsh I.

**Conclusion:** The prevalence of celiac disease is 0.75% in patients with non-alcoholic steatohepatitis. According to the 1% prevalence of celiac disease in our population, it doesn’t seem that celiac sprue was associated with NASH.

Send Date: 2009/10/07

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4.2 Coeliac disease/malabsorption syndromes and food enteropathies

**T-S-043**

**Celiac disease in patients with osteoporosis**

Shahbazzhani B*, Khoncheh A, Shakeri R, Jamsheir AR, Malekzadeh R

DDRC, TUMS

**Introduction:** Celiac disease (CD) is an autoimmune enteropathy triggered by the ingestion of gluten-containing grains in susceptible individual; it is a rather common gastrointestinal disorder and can be asymptomatic. However, even among asymptomatic patients a long-term reduction in bone mineral density (BMD) is found. Non-invasive screening tests for CD are now available. We conducted a study to estimate the prevalence of celiac disease among patients with osteoporosis using newly advented screening test, tissue Transglutaminase.

**Method:** The sera of 361 consecutive patients referred to our outpatient rheumatology clinic for evaluation of osteoporosis were studied. In addition to the routine evaluation, patients completed a symptom questionnaire and underwent serological testing for the presence of the IgA anti tissue transglutaminase Ab (tTG). All patients with a positive tTG were supposed to undergo small bowel biopsy to confirm the diagnosis of CD and further staging according to the modified Marsh classification.

**Results:** Three patients had positive tTG test. None of them had a family history of osteoporosis or celiac. No one was smoker, one of them was diabetic patient and one another had anemia, Summary of GI problems of these patients are shown in table one.

<table>
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**Conclusion:** Our data do not support an increased prevalence of CD among asymptomatic patients referred for evaluation of low BMD.

Send Date: 2009/10/21

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5.4 Diagnosis and monitoring

**T-S-044**

**Prevalence of cytomegalovirus infection in patients with ulcerative colitis**

Mollakhalil P*, Adibi P, Tavakkoli H

AL-Zahra hospital, Esfahan university of medical science

**Introduction:** Cytomegalovirus infection is a common infection in relation to etiology & exacerbation of ulcerative colitis. Because of glucocorticoid and immunosuppressive drug use, some guidelines suggest serologic testing for diagnosis of CMV infection in exacerbation of ulcerative colitis.

**Method:** In a cross sectional study in 60 documented ulcerative colitis patients who referred to AL-Zahra hospital-Esfahan (sequential simple sampling), anti CMV IgG and IgM were checked and compared with control group.

**Results:** In 95% and 18.3% of patients with ulcerative colitis, IgG nd IgM anti CMV were positive respectively and rate of seropositivity was the same in male and females. But in control group the rate of IgG and IgM anti CMV seropositivity were 15.6% and 14.7% respectively.

**Conclusion:** CMV infection in patients with ulcerative colitis is significantly (p<0.05) more common than general population, but we cannot use serological tests for diagnosis of CMV seroconversion.

Send Date: 2009/09/07

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5.5 Treatment

**T-S-045**

**Disease modifying effect of Infliximab in refractory Ulcerative Colitis**


Gastroenterology section, Department of internal medicine, Medical school, Isfahan University of medical sciences, Isfahan, Iran

**Introduction:** Ulcerative colitis (UC), with its debilitating course features a challenging health problem. In best circumstances, 66% of patients will achieve clinical remission with medical therapy, and 80% of treatment-compliant patients maintain remission. In resistant cases, many becoming colectomy candidates, IV cyclosporine has been used. Limited evidence is available about its efficacy. Another medical approach is infliximab, an antitumor necrosis factor. antibody. In two specific trials, 60% responded to it. There is no published evidence of its use in our country. This study was designed to evaluate the disease modifying effect of infliximab in refractory Ulcerative Colitis.

**Method:** This multicenteric caseseries study included thirty patients of both sexes with UC receiving two to three of the drugs Prednisolone, AZT/6MP and 5ASA but yet having flare-ups. Some patients were colectomy candidates. First, some clinical and paraclinical data was gathered, then the drug was administered at weeks 0, 2 & 6 and same parameters gathered after each dose. Results at time zero and after third dose are analysed here.

**Results:** Clinical modification rate was determined according to reduction of defecation rate, rectal bleeding severity and colicky pain experience. In 25 patients (which had complete relevant records), 18 ones (72%) matched these. In paraclinical field, reduced or less than four RBCs/hpf in S/E and increased or unchanged hemoglobin were endpoints: fifteen cases had complete data and 12 (80%) achieved goals. Considering all five together, in ten cases information was complete and 5 (50%) of them met the setpoints. Two reactions (one leukopenic and one hypotensive) was recorded. Also ESR (16 records), showed significant reduction(p=0.002).
Conclusion: These data, shows considerable response compatible with the patients elevated subjective views ($p=0.007$) and colonoscopy results (presented in another article). Controlled studies are needed.

Send Date: 2009/09/24

5.5 Treatment

T-S-046

Promising effect of Infliximab on the extent of involvement in Ulcerative Colitis


Gastroenterology section, Department of internal medicine, Medical school, Isfahan University of medical sciences, Isfahan, Iran

Introduction: Ulcerative colitis (UC) has an annual incidence rate of 2-7 per 100,000 in the US, of which 15% is severe nonresponsive colitis. In spite of combined medical therapy, some eventually undergo total colectomy and ileal pouch anal anastomosis. Infliximab, an antitumor necrosis factor-antibody, has proved itself as a rescue therapy and even is introduced as early aggressive therapy for severe extensive UC in some studies. Meanwhile, there's concerns about it's complications such as serious infections. The debate around it goes on. Was to evaluate the effect of Infliximab on the extent of colon involvement in UC which is rarely done.

Method: This multicenteric caseseries study included thirty patients of both sexes with UC receiving two to three of the drugs Prednisolone, AZT/6MP and 5ASA but yet having flare-ups. Some patients were colectomy candidates. First, the extent of colon involvement was determined by colonoscopy, then the drug was administered at weeks 0, 2 & 6 and colonoscopy was repeated afterwards.

Results: In first endoscopy 18/30 patients (60%) suffered extent 4 (pancolitis) and none had normal results. In second examination (done on 20/30 Pts.), 2 (6.7%) were normal and only 8 of 20 (26.7%) had pancolitis. Of that 18 pancolitis, 4 (22.2%) missed of second colonoscopy and 8/14 remainders (44.4%) still showed pancolitis. Thus at least in 33.4% of patients the drug has reduced the extent. Also a wilcoxon signed rankstrevealed significant reduction of the disease extension with this treatment ($p<0.005$). There were only one leucopenic reactions in short term. Data was not enough to analyse the need to colectomy in longterm.

Conclusion: These data show the usefulness of the drug in refractory UC. Longer follow ups and controlled trials are needed.

Send Date: 2009/09/30

6.4 Other colonic and anorectal disorders

T-S-048

High prevalence of microscopic colitis among the patients with chronic non bloody diarrhea in Kurdistan province of Iran

Taheri A', nikkhoo B', nasirifar AR1, Farhangi E2

1 Kurdistan Digestive Research Center, Kurdistan University of Medical Science
2 Private Clinic, Kurdistan University of Medical Science

Introduction: Microscopic colitis is a cause for chronic non bloody watery diarrhea. Histological characteristics and clinical presentation of microscopic colitis have been well established, however, limited data is available regarding the prevalence, of the disease. The diagnosis is made only by histological examination and most of these patients are treated as irritable bowel syndrome. Several studies from Iceland and Sweden recently reported high prevalence of microscopic colitis in those areas. We aimed in this prospective study to determine the prevalence of collagenous and lymphocytic colitis among the patients with chronic non bloody diarrhea in Kurdistan province of Iran.

Method: Between, 2008 to 2009 one hundred and fifteen patients with chronic non-bloody diarrhea who had undergone colonoscopy without any obvious abnormality were included in this study. For diagnosis of microscopic colitis multiple biopsies were obtained from all colonic segments. On histopathologic examination, criteria for diagnosis of lymphocytic colitis and collagenous colitis were intraepithelial lymphocyte ≥ 20 per 100 intercryptal epithelial cells, and subepithelial collagen band thickness ≥ 10 μm respectively.

Results: Microscopic colitis was found in 50 patients (43.47%) with mean age of 34.8 year (range 17-87). Nineteen patients were female and thirty of them were male. Lymphocytic colitis was diagnosed in forty five(39.13%) patients (18 Female and 27Male, mean age was 35.44 year, range: 17-87) and collagenous colitis was diagnosed in only two female and three male patients (4.3%).
Conclusion: This study revealed very high incidence of microscopic colitis in Kurdistan province of Iran. This high incidence is contributed to high incidence of lymphocytic form of this disease not to collagenous colitis. Further evaluation for causes of such high prevalence of lymphocytic colitis in this area is highly recommended. It is also advisable to perform colonscopic biopsy in all patients with chronic non bloody diarrhea of unknown etiology before it will be considered as diarrhea predominant irritable bowel disease.

Send Date : 2009/09/21

6.4 Other colonic and anorectal disorders

Chronic Abdominal Wall Pain: prevalence in out patients

Adibi P1, Toghiani A

1 Medical school, Isfahan University of medical sciences, Isfahan, Iran, Gastroenterology section, Department of internal medicine

Introduction: Chronic abdominal wall pain (CAWP) is a frequent and confusing pain. It often leads to many diagnostic tests and some times some surgeries before an accurate diagnosis is achieved. Numerous had reported that patients with pain in abdominal wall are frequently treated like some one who is suffering from visceral pain.

Method: This was a cross-sectional study that is done in Isfahan in a governmental clinic. In this epidemiological study we were evaluating the prevalence of chronic abdominal wall pain. The region of the pain, patient’s sex, patient’s age and their associated problems such as psychiatric disorders, obesity, IBS, functional bloating has been checked in patients.

Results: Thirty patients with abdominal pain originating from the abdominal wall were observed between 998 patients in a period of 3 months (3% of patients who were referred to gastroenterologist used to have CAWP). The most prevalent Pain regions were upper left and right quadrates. 10 patients (33.3%) had report pain in left upper quadrate and 8 (26.6%) had report the pain in right upper quadrater. Obesity was seen in 50% of patients, 10 patients had MDD (33.3%), GERD was seen in 20% of patients and 5 patients were suffering from IBS (16.6% of patients).

Conclusion: There are many reasons for chronic abdominal wall pain such as nerve entrapment or lesions of surgeries. In our knowledge this is the first study that reports the CAWP patients in population, other studies were reporting CAWP patients between patients who were referring to a pain clinic. We think a population based study must be done for evaluating the prevalence of CAWP because our sample size is not big enough for reporting the prevalence.

Send Date : 2009/09/22

6.4 Other colonic and anorectal disorders

Squatting and Risk of Colorectal Cancer: A Case-Control Study

Sohrabi S, Malekzadeh R, Ansari R, Kamangar F

Digestive Disease Research Center, Shahriati Hospital, Tehran University of Medical Sciences

Introduction: Sitting position, rather than squatting, during defecation has been hypothesized to be a risk factor for colorectal cancer (CRC).

We conducted a case-control study to test this hypothesis.

Method: One hundred CRC cases from two hospitals in Iran, and 100 control subjects, selected from the coronary care unit of those same hospitals were selected for this study. A detailed questionnaire was administered to the study subjects asking for history of toilets use as well as other relevant confounders.

Results: In the logistic regression analysis, the crude and adjusted ORs (95% CIs) for using sitting toilets in any decade were 1.20 (0.89 – 1.61) and 1.07 (0.72 – 1.59), respectively. Also, the crude and adjusted ORs (95% CIs) for the years of using 10 more years of sitting toilets were as 1.16 (0.92 – 1.47) and 1.02 (0.74 – 1.40), neither of which indicated a statistically significant increase in risk.

Conclusion: Our study did not support an appreciable role for using sitting toilets as risk factors for CRC.

Send Date : 2009/09/27

6.4 Other colonic and anorectal disorders

The Prevalence of Small Intestinal Overgrowth in Irritable Bowel Syndrome VS Healthy Controls in Khuzestan Province

Masjedizadeh AR, Hashemi SJ, Hajiani E, Shasytaeh AA, Jorfei F

Division of Gastroenterology and Hepatology, Department of Internal Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahwaz, Iran

Introduction: To estimate the prevalence of small intestine bacterial Over growth (SIBO) among patients with irritable bowel syndrome (IBS) versus healthy Subjects by means a Glucose breath test (GBT) in our geographical area.

Method: This study include 80 consecutive patients (40 with IBS on the basis of Rome III criteria ) and 40 healthy control with 50g GBT for diagnosis of SIBO. The test was considered positive if the hydrogen concentrations in the expired air increased more than 20 ppm over basal values within 90 minutes or two distint peaks during the test.

Results: 40 patients with IBS and 40 healthy controls were selected (14 males and 26 females in each groups). They were aged between 22 and 66 (mean 34 years ) . the majority of patients with IBS had constipation predominant and mixed type (42.5%, 30% ) and 17.5% were diarrhea predominant. The prevalence of abnormal GBT result was higher in patients with IBS (47.5%) with respect to control subject (20%, p=0/009) 47% IBS- C, 42.9% IBS-D and 50% mixed groups had positive GBT (p=0/85).

Conclusion: This study show that about half of the patients with IBS have SIBO. We couldn't detect significant difference of SIBO amongs subgroups of IBS. SIBO should be always suspect in patients with IBS and GBT dose offer for these groups of patients

Send Date : 2009/10/01

6.4 Other colonic and anorectal disorders

The incidence of abdominal and pelvic surgery among patients with irritable bowel syndrome

Amirbaigy MK, Akhondi meybodi M, Salmanroughani H, Amirbeigy M

Shahid Sadoghi Hospital, Shahid Sadoghi Medical University

Introduction: Irritable bowel syndrome (IBS) is the most common disorder of GI tract. Irritable bowel syndrome is characterized by chronic pain associated with altered bowel
of Rac1 information of actin stress fibers, we examined the effect of adenosine on stress fiber formation and found that adenosine down-regulates HGF-induced Rac1. Due to the important role in inhibiting HGF-induced stress fiber formation, we also found that adenosine inhibits HGF-induced actin stress fiber formation. In addition, we demonstrated that adenosine inhibits cytosolic calcium signaling and induces the expression of some key endodermal and hepatocyte-specific genes in mouse and human MSC in vitro. We propose that the inhibition of MSC chemotaxis at sites of high adenosine concentration results in localization of MSC to areas of cellular injury and death in the liver. We speculate that adenosine might initiate the process of differentiation of MSC into hepatocyte-like cells.

Send Date : 2009/09/27

7.1 Immunology - autoimmune liver disease
T-S-054

Natural History of Autoimmune Hepatitis in Iran: A prospective study of 102 patients from Tehran
Digestive Disease Research Center, Shariati Hospital, Tehran University of Medical Sciences

Introduction: Prognosis of Autoimmune hepatitis (AIH) was reported recently to be very good on Immune suppressive therapy. We aimed to study the natural history of 102 patient with AIH in Tehran.

Method: 102 patients with a mean follow up of 55.33 month were included in the study. AIH was diagnosed using the international autoimmune hepatitis group criteria. Workup for patients included clinical, biochemical, viral markers, autoimmune markers and indirect immunofluorescence and liver biopsy if possible.

Results: 74 of patients were diagnosed to have AIH and 27 of them were diagnosed to have variant syndrome (19 patients have AIH+PBC and 8 patients have AIH+PSC). Two patients was observed to have AIH type 2. The mean age of patients was 29±15 and 73% of them were female. 38 patients have cirrhosis at presentation. The most common symptoms jaundice with (73.3%) and fatigue (67%). Spleenomegaly was found in 50% of patients in physical examination. Ascites was present in 14.7% of patients. Among 102 patients with AIH, 78.4% of them were on remission after 6 months. 19.6% of patients did not experience remission during 12 months. 2 patients received liver transplantation and 3 of them died at end of follow up course.

Conclusion: Survival in AIH is good, with early diagnosis, and improved medical therapy, such as using new immunosuppressive agents or liver transplantation for AIH will become a rare event in future. Final outcome of patient with or without cirrhosis was almost similar.

Send Date : 2009/09/27

7.1 Molecular and cell biology - fibrosis
T-S-055

Adenosine Inhibits Chemotaxis and Induces Hepatocyte-Specific Genes in Bone Marrow Mesenchymal Stem Cells
Mohamadnejad M1, Soleil M2, Watanabe A3, Krause DS4, Swenson ES2, Mehal WZ2
1 Digestive Disease Research Center, Tehran University of Medical Sciences
2 Department of Internal Medicine, Section of Digestive Diseases, New Haven, CT, USA, Department of Internal Medicine, Section of Digestive Diseases, New Haven, CT, USA

Introduction: Bone marrow-derived mesenchymal stem cells (MSC) have therapeutic potential in liver injury, but the signals responsible for MSC localization to sites of injury and initiation of differentiation are not known. Adenosine concentration is increased at sites of cellular injury and inflammation, and adenosine is known to signal a variety of cellular changes. We hypothesized that local elevations in the concentration of adenosine at sites of tissue injury regulate MSC homing and differentiation. Here we demonstrate that adenosine does not induce MSC chemotaxis, but dramatically inhibits MSC chemotaxis in response to the chemotactic factor HGF.

Results: Inhibition of HGF-induced chemotaxis by adenosine requires the A2a receptor, and is mediated via up-regulation of the cAMP protein kinase A pathway. This results in inhibition of cytosolic calcium signaling, and down-regulation of HGF-induced Rac1. Due to the important role of Rac1 in formation of actin stress fibers, we examined the effect of adenosine on stress fiber formation and found that adenosine inhibited HGF-induced stress fiber formation. In addition, we found that adenosine induces the expression of some key endodermal and hepatocyte-specific genes in mouse and human MSC in vitro. We propose that the inhibition of MSC chemotaxis at sites of high adenosine concentration results in localization of MSC to areas of cellular injury and death in the liver. We speculate that adenosine might initiate the process of differentiation of MSC into hepatocyte-like cells.

Send Date : 2009/09/27

7.1 Molecular and cell biology - fibrosis
T-S-055

Determination of normal range of serum alanine aminotransferase (ALT)in normal healthy population
Akhondi meyboodi M*, Amiriaghy MK, Askarzada MH
Shahid Sadoghi Hospital, Shahid Sadoghi Medical University

Introduction: The reason that ALT is used for a liver biochemical test is because the concentration of ALT in the liver cells is more than 3000 times higher than that in serum; therefore, it is a useful marker of hepatic necroinflammation. Based on recent data, the investigators suggested a new upper limit of normal, which was based on patient sex and BMI criteria. For example, in women with a BMI < 23, the appropriate upper limit of normal was suggested to be 32 IU/L, whereas for men with BMI > 23 the upper limit of normal was suggested to be 66 IU/L. This is a prospective study to determine the normal range of serum alanine aminotransferase (ALT)in normal population in Yazd in OCT 2008-to JUN2009.

Method: In this study 565 randomly apparently healthy people...
Management of CLD should include vitamin D assessment and replacement when necessary. Vitamin D inadequacy is a common problem in noncholestatic CLD and correlates with disease severity, but secondary hyperparathyroidism is relatively infrequent. Vitamin D insufficiency (50–80 nmol/L) was found in 61 (67.8%) patients: vitamin D deficiency (<50 nmol/L) was found in 46 (51.1%) patients and vitamin D insufficiency (50–80 nmol/L) was found in 15 (16.7%) patients. Secondary hyperparathyroidism (serum PTH >6.8 pmol/L) was present in 6 (6.7%) patients. The prevalence of vitamin D deficiency was significantly higher in cirrhotic vs. noncirrhotic patients (76.5% vs. 17.9%; P < 0.001). In Child–Pugh class B and C patients, vitamin D levels were significantly lower than in class A patients (P < 0.001). Serum 25(OH)D independently correlated with serum albumin (r = 0.485; P < 0.001).

Conclusion: Vitamin D inadequacy is a common problem in noncholestatic CLD and correlates with disease severity, but secondary hyperparathyroidism is relatively infrequent. Management of CLD should include vitamin D assessment and replacement when necessary.

**Evaluation of the pre-emptive effect of Acetaminophen codeine on the pain after liver biopsy**

**Introduction:** Liver biopsy is one of the most important diagnostic procedures for liver diseases. Pain is the most common complication of liver biopsy and it can lead to clear morbidity. Finding a way to reduce pain of liver biopsy its complication is very important for investigators. There are limited studies on evaluation of pre-emptive effect of acetaminophen on liver biopsy. The aim of this study was to investigate pre-emptive effect of Acetaminophen codeine on the pain of liver biopsy during the first 24 hours after biopsy.

**Method:** This was a double blind randomized clinical trial study from Oct 2007 to Oct 2008 in gastroenterology and liver disease unit of Tohid hospital in Sanandaj. Sample size included all the patients who were candidate for liver biopsy. Forty four patients (23 in experimental group and 21 in placebo group) were enrolled into the study on the basis of randomized blocking method. Exclusion criteria included any contraindication for liver biopsy or need of penetration of needle for two or more times for biopsy. Visual analogue scale (VAS) was used to assess pain after liver biopsy, 0,1,3,6, and 24 hours after biopsy. This study was conducted after approval of Ethical review Committee of Kurdistan University of Medical Sciences and obtaining the informed written consent from the patients. The patients received acetaminophen codeine or placebo one hour before biopsy. Data were analyzed by means of Chi square, t-test, analysis of variances, and nonparametric tests. Results: The mean value of the pains intensity in zero, one, three, six, and twenty four hours after biopsy in experimental group was higher than that of placebo group but there was no significant differences between two groups (P>0.05). Intensity of the pain after liver biopsy in females was higher than in males in the two groups but there was no significant differences between two groups (P>0.05).

**Conclusion:** Comparison of the results of the present study with those of other studies shows that acetaminophen codeine is not effective in reducing the pain of biopsy. Further clinical trial studies for determination of the effect of other analgesics drugs are recommended in the future.
کیفیت غذای درمانی، این، تغذیه ناشی از فلزات مدار، جلوگیری از آسیب‌ها، حمایت از آوردهای مختلف درمانی، درمان و بهبود سلامتی بدنی

发送日期: 2009/10/25

7.2 Nutrition - metabolism - pharmacology

T-S-060

کیفیت غذای درمانی، این، تغذیه ناشی از فلزات مدار، جلوگیری از آسیب‌ها، حمایت از آوردهای مختلف درمانی، درمان و بهبود سلامتی بدنی

发送日期: 2009/10/25

7.2 Nutrition - metabolism - pharmacology

T-S-059

با استرس اکسیژنلیا در میانلی ابتدا با که چرب غذا اکتیک

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发送日期: 2009/10/25

7.2 Nutrition - metabolism - pharmacology

T-S-061

بررسی میزان چربی عمومی و جلوگیری از سایر بیماری‌ها

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发送日期: 2009/10/25

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7.2 Nutrition - metabolism - pharmacology

T-S-059

با استرس اکسیژنلیا در میانلی ابتدا با که چرب غذا اکتیک

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Govaresh Vol. 14 Supplement Autumn 2009

Abstracts of Iranian Congress of Gastroenterology and Hepatology- 2009

7.2 Nutrition - metabolism - pharmacology

T-S-060

کیفیت غذای درمانی، این، تغذیه ناشی از فلزات مدار، جلوگیری از آسیب‌ها، حمایت از آوردهای مختلف درمانی، درمان و بهبود سلامتی بدنی

发送日期: 2009/10/25

7.2 Nutrition - metabolism - pharmacology

T-S-059

 با استرس اکسیژنلیا در میانلی ابتدا با که چرب غذا اکتیک

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Abstracts of Iranian Congress of Gastroenterology and Hepatology- 2009

7.2 Nutrition - metabolism - pharmacology

T-S-061

بررسی میزان چربی عمومی و جلوگیری از سایر بیماری‌ها

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发送日期: 2009/10/25

Govaresh Vol. 14 Supplement Autumn 2009
weight reduction (Diet & Exercise) in treatment of NAFLD

Antikchi MH, SalmanRoghani H, Amirbeigiafifi MK, Akhondi M, Shahid Sadooghi Hospital, Shahid Sadoogi University

Introduction: NAFLD is one of the most common causes of chronic liver disease in worldwide and can potentially progress to cirrhosis, liver failure and hepatocellular carcinoma.

Method: A randomized controlled trial was performed to compare the efficacy of prescriptive diet plus exercise alone with combination of prescriptive diet plus exercise and metformin or Vit E or Ursodeoxy cholic Acid (UDCA) in the treatment of NAFLD. A total of 100 patient with NAFLD participated in this study, forming four groipes: 25 patient were treated by a prescriptive weight-reducing diet and exercise, 27 cases given combination of diet, exercise and Metformin (1.5gr/day) , 25 were given combination of diet, exercise and Vit E (1000IU / day) and 23 patients given the combination of diet, exercise and UDCA (750mg/day) for six months.

Results: All patients had a complete work up including a clinical examination laboratory tests and body mass index (BMI) was calculated before and after study. A statistically significant progressive decrease in mean BMI(P=0.000), ALT (P=0.000) and ALP (P=0.000) was recorded from all 4 groups with NAFLD.

Conclusion: There is no significant different results between using Metformin or vit E or UDCA or weight reduction (Diet & Exercise) for treatment of NAFLD. It suggested that in treatment of fatty liver vit E or metformin could use in spite of UDCA. Base treatment of NAFLD is diet and exercise with weight reduction.

Send Date: 2009/10/06

7.3 Metabolic/genetic disorders

T-S-064

Prevalence of Nonalcoholic Fatty liver Disease in diabetic patients of diabetic center of Sanandaj in 1386

Sharifian A*, Shakiha N, Masaeli M, Salehi, Samadi H, Delavari AR, Jodeiri B, Kurdistan digestive disease research center (KDRC), Medical University of Kurdistan

Introduction: Nonalcoholic Fatty liver Disease (NAFLD) is one of the most common disorders of the liver. The most widely supported theory implicates insulin resistance as the key mechanism leading to hepatic steatosis, and perhaps also to steatohepatitis. Others have proposed that a "second hit," or additional oxidative injury, is required to manifest the necroinflammatory component of steatohepatitis. In this study we aimed to determine the prevalence of NAFLD in diabetic patients of diabetic center of Sanandaj in 1386.

Method: This is a convenient sampling, cross sectional study in 386 diabetic patients of diabetic center of Sanandaj. Patients with history of taking alcohol ,methotrexate , tamoxifen, valporic acid , nucleoside analogues , amiidoran , and vitamin A were excluded. After their agreement, selected patient’s data and blood samples were obtained and then they were referred for abdominal sonography.

Results: In this study 57.2% of diabetic patients had NAFLD. The age group of 51-60 had the most frequency. Greater Body Mass Index (BMI) was statistically significant in patients with NAFLD.

Conclusion: NAFLD has a high frequency in Kurdish diabetic patients, especially the fatter ones.

Send Date: 2009/10/06
The prevalence of Nonalcoholic fatty liver disease in patients with and without coronary artery disease
Hashemi SP1, Hajiani E1, Dawoodi M2, Seyyedian SM3, Abbasi M1, Masjedizadeh AR1
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2 Radiology, Jondishapoor University
3 Cardiology, Jondishapoor University

Introduction: Metabolic syndrome is a major risk factor for atherosclerosis and Nonalcoholic fatty liver disease (NAFLD). Some studies have shown that atherosclerosis specially carotid artery involvement is more common in patients with NAFLD and some studies indicated that fatty liver is associated with myocardial dysfunction and coronary artery disease. To evaluate the prevalence of NAFLD in cases with coronary artery disease (CAD) this study designed

Method: The study group selected from patients who underwent coronary angiography. A comprehensive investigation performed to rule out liver disorders secondary to Alcohol, toxins, drugs, viral infection, autoimmune and metabolic disease for all cases. Cases without any underlying disorders included in the study and Liver sonography and transaminase measurement performed for them. The patients with and without CAD matched for Gender, lipid profile, BMI, FBS and smoking. According to liver sonography and transaminase levels patients devided in 3 groups. Group A: Simple fatty liver with normal ALT. Group B: Fatty liver with elevated lever enzyme (ALT>40 U/dl) Group C: Normal sonography and liver enzyme. The prevalence of NAFLD was compared in patients with and without coronary artery disease

Results: A total of 314 patients (male = 161 and female = 153) with mean age of 55.8±9.4 year and mean body mass index of 28±4.2 were enrolled in the study. Coronary angiography shows different levels of stenosis in 236 cases and was normal in 78 patients. Simple NAFLD were seen in 66 (28%) and 27 (34.4%) of cases with and without coronary artery disease respectively. (p = 0.265). NAFLD with elevated ALT were seen in 55 (23.3%) and 13 (16.7%) of cases with and without CAD respectively (p = 0.199). Combination of NAFLD and elevated ALT was more prevalent in patients with 3 vessel disease than normal angiography (39.1% vs 16.7% P = 0.003)

Conclusion: Fatty liver disease may not be an independent risk factor for mild to moderate coronary artery stenosis
Send Date : 2009/10/07

Liver disease in children with cystic fibrosis
Farahmand F1, Eftekhari K1, Mir-nasseri MM2
1 pediatric Gastroenterology, Tehran University of Medical Science
2 Digestive Disease Research Center, Tehran University of Medical Science

Introduction: Cystic fibrosis (CF) is a multi - organ genetic disease. Liver involvement in CF is much less frequent than both pulmonary and pancreatic diseases that are present in 80-90% of CF patients. The aim of this study was to evaluate the causes and risk factors for liver disease (LD) in children with CF.

Method: During 10 years, from April 1998 to 2007, 254 patients with age range 1 month to 12 years of old (median 12 months±8.2 M) with diagnosis of CF in children's Hospital Medical Center were study. They included by retrospective analysis of clinical records and had twice positive sweet test. Other investigations included, serum aminotransferase, liver function tests and abdominal ultrasound were done in total of patient. Needle liver biopsies were done if needed.

Results: From total of patients, 165 cases (65%) were male and 89 cases (35%) were female. Liver disease (LD) affected, only one third of CF patients (84 cases [33%]), in this study 52 cases (20.47%) had fatty liver, 16 cases (6.29%) had neonatal cholestasis jaundice, mimicking biliary atresia. 11 cases (4.33%) had Gall-stone. Liver cirrhosis already present in 5 cases (1.96%). Factors found to be significantly associated with the development of CF – associated LD include, male sex, history of meconium ileus, pancreatic insufficienty and malnutrition confirmed. In patient with a positive history of meconium ileus, additional risk factors for development of LD may include abdominal surgery with extensive small bowel resection, poor nutrition in early life and prolonged total parental nutrition.

Conclusion: Recent observation, suggest that clinical expression of LD in CF patient may be influenced by multiple factors, their identification is an important, because it may allow recognition of patients at risk for the development of LD at the time of...
7.3 Metabolic/genetic disorders
T-S-068

Prevalence of Nonalcoholic Fatty Liver Disease in Women With Polycystic Ovary Syndrome
akhondi meybodi M1, sarfarazi Sh, antikchi MH, Salman roughani H, Amirbeigi MK shahid sadoghi hospital, shahid sadoghi medical university

Introduction: Insulin resistance has been implicated in the pathogenesis of both nonalcoholic fatty liver disease (NAFLD) and polycystic ovary syndrome (PCOS). We hypothesized that NAFLD would be common in women with PCOS. The aim of this study was to estimate the prevalence of and identify associated risk factors for hepatic steatosis in women with PCOS.

Method: This is a prospective study of 95 consecutive premenopausal women with PCOS. Clinical history, height, weight, and laboratory (FBS, TG, ALT) values were obtained. Fasting measurements of serum glucose was used to assessment of insulin resistance. Abdominal ultrasonography was used to determine the presence and severity of hepatic steatosis.

Results: Of the 95 women (median age, 35.3 years), 55 (57%) had steatosis; 8 (8.4%) of them were lean women. The presence of steatosis was associated with a greater body mass index (BMI) (P = 0.041), and a greater prevalence of impaired fasting glucose, and diabetes mellitus (P = 0.003) and 53 (55.8%) subjects had abnormal liver chemistries(ALT). Fatty liver was identified in 57% of subjects with PCOS, nearly 8.4% of whom were lean women. High BMI and greater prevalence of impaired fasting glucose, and diabetes mellitus appeared to be important associated factors.

Conclusion: Early recognition of NAFLD in this group of patients is warranted, and further investigation including liver biopsy might be indicated.

Send Date: 2009/10/22

7.4 Hepatotoxicity/alcohol - regeneration - apoptosis
T-S-069

Abnormalities of liver enzymes in coal tar refinery workers
Tavakkoli H1, Emami MH1, Galedhari H2, Haghghi M1, Sadkarb M2, Adibi P1

1 Poursina Hakim Research Institute, Isfahan University of Medical Sciences
2 Industrial Medicine, Oil refinery Company
3 Radiology Department, Isfahan University of Medical Sciences
4 Gastroenterology Department, Isfahan University of Medical Sciences

Introduction: Occupational exposure to coal tar refinery products may play an important role in liver enzyme abnormalities.

Method: The coal tar refinery workers in Central part of Iran (Isfahan) underwent routine annual medical examination from 2006 to 2007. A total of 66 cases with simultaneous aspartate aminotransferase and alanine aminotransferase abnormalities of either at least 10% above reference levels or doubled values compared to the baseline levels were included in this cross-sectional study. Other liver diseases were excluded by detailed investigations including viral hepatitis serology, metabolic and autoimmunity profiles. Three cases were excluded because of positive ANA, HBsAg or HCVAb. One case was excluded due to taking naltrexin. Forty patients accepted liver ultrasonography. The relationships of different findings and liver enzymes were evaluated through inferential statistics. P value less than 0.05 was considered significant.

Results: All patients were male and their mean ± standard deviation of age was 36.76 ± 4.82 years. 38 subjects had dyslipidemia (61.3%). There were significant correlations between triglyceride or cholesterol concentrations and AST or ALT levels. Of 40 cases, 35 cases (87.5%) demonstrated ultrasonographic fatty liver. Also, significant correlations were found between cholesterol and GGT or ALP levels. ANOVA showed that workers of production department had significantly higher levels of both AST and ALT compared to those working in other departments of refinery. There was no significant correlation between liver enzyme abnormalities and duration of working in coal tar refinery.

Conclusion: Direct occupational exposure to coal tar refinery products may play an important role in liver enzyme abnormalities. Send Date: 2009/09/23
infused cells to clarify their putative mechanism of action. We limited by the small number of patients enrolled and the lack of some of our patients were promising however; this study is subsequently designed the first randomized controlled study with the aim of confirming the efficacy of MSC Tx. Compared to placebo group. We also did not track the fate of the infused cells to clarify their putative mechanism of action. We subsequently designed the first randomized controlled study evaluating the efficacy of autologous BM derived MSC transplantation in patients with advanced chronic liver disease with the aims of confirming the efficacy of MSC Tx (Compared to placebo group) and tracking the stem cells in the patient body. 30 patients with decompensated cirrhosis were randomly assigned as case or control group. BM of patients in both groups was aspirated. In the case group, culture of mesenchymal stem cell was done. Mean duration of culture: 3 months. In the controls, BM aspirates were cryopreserved, waiting the result of study. Similar to cases after the presumed interval, infusion of 100cc D5W with Vitamine B-complex was done as placebo in control group. Our plan, was to culture and infuse the cryopreserved BM aspirates to control group if the results of study was encouraging. Each patient was followed for 1 year. We have included about 30 pts in our study until now. The design, inclusion and exclusion criterias are as phase 1, but because of increased facility for culture of MSC about 400 million cells are transplanted to each recipient. Follow up with lab, CT Volumetri and liver biopsy. In 2 patients: 10% of the cultured mesenchymal stem cells was labeled with 111In-Oxine and tracking7 the cells in the patients’ bodies by SPECT images was performed. Immediately after I.V. infusion, the radioactivity (labeled MSCs) first accumulated in the lungs, and gradually shifted to the liver and spleen during the following hours to days. On SPECT images after 24 hours, the tracer distribution was homogenous throughout the liver and spleen. Region of Interest (ROI) analysis in the first patient showed that the percentage of the homing of the cells into the liver (following decay and background corrections and geometric mean calculation) increased from 2.8% at the 2nd-hour to 13.5% by the 10th-day post-infusion. The percentages of cells in the liver of the second patient were 0% at 2h and 13% at 10 days. An independent group of hepatologists selected by DDRC research council. They will periodically review the results of interim analysis. The board is empowered to recommend termination of the study on the basis of safety concerns. An Interim analysis for 11 cases and controlled who has finished the ine year follow up revealed that there is a trend (numerical but not statistically significant) for the improvement of albumin, PT, INR, Total bilirubin, platelets in the MSC group compared to the placebo group. The improvement was mild, and more prominent at month 4. A 0.8 mg/dl improvement in total bilirubin; 0.4 g/dl improvement in albumin; 10,000/ microliter improvement in platelets, 0.2 improvement in INR in the MSC group at month 4. Since we observed mild improvement in parallel in all of the above mentioned parameters, it is possible that these improvements are real. Although, the number of the cases for this interim analysis is still too low (11 in each group), and the improvements are not statistically significant.

Conclusion: Studies up to now did not showed unequivocal benefit of stem cell therapy in ESLD but it confirmed the Safety and some favorable effective in short term basis. Varied effects of different subclasses of stem cells within the diseased liver. Future clinical trials should be designed, using different stem cell types to target specific complications of liver disease.

Send Date: 2009/09/27

7.5 Cirrhosis and complications: basic aspects

T-S-071

Association Between platelet count and grade of cirrhosis

Amirbagy MK*, akhondi meybodi M, Shojaee M
Shahid Sadoghi Hospital, Shahid Sadoghi Medical University.

Introduction: Thrombocytopenia is a common disorder among cirrhotics due to multiple mechanism that has been traditionally explained by splenic platelet pooling and destruction. The aim of
this study was to determine the relation between platelet count and grade of cirrhosis.

**Method:** This is a retrospective descriptive analytic study of 120 patients with cirrhosis admitted at sadoughi Hospital in Yazd from 1384-87. This study was conducted to determine the relationship between platelet count and child score, esophageal varices, size of spleen, diameter of portal vein.

**Results:** Our findings indicate that there was correlation between the increase of child score and decrease the platelet count (P<0.05). Also there was correlation between increase in grade of esophageal varice and size of spleen with decrease in platelets count. But there was no correlation between diameter of portal vein and platelet count.

**Conclusion:** Our results show that platelet count could be a good indicator for prediction of the child score, size of spleen and grade of esophageal varice in patient with cirrhosis.

**Send Date:** 2009/09/30

### 7.5 Cirrhosis and complications: basic aspects

**T-S-072**

**Effects Of Biliary Cirrhosis On The Neurogenic Relaxation Of Rat Gastric Fundus And Anococcygeus Muscle: Involvement Of Nitric Oxide Pathway**

Ghasemi M¹, Karimollah AR¹, Bakhtiar B², Ghasemi A¹, Bakhtiar A¹, Delpour AR²

1 Department of Pharmacology, School of Medicine, Tehran University of Medical Sciences
2 School of Medicine, Islamic Azad University of Medical Sciences

**Introduction:** The nonadrenergic noncholinergic (NANC) neurotransmission plays a crucial role in the gastrointestinal (GI) tract motility and has been linked with release of nitric oxide (NO) on electrical stimulation in GI tract such as gastric fundus and anococcygeus muscle. Several line of evidence have demonstrated that cirrhosis could affect the GI tract motility. However, the exact aetiology of this problem is as yet elusive. In this study we investigated the effect of biliary cirrhosis on the neurogenic relaxation of rat gastric fundus and anococcygeus muscle and also the possible role of nitric oxide system in this manner.

**Method:** Isolated gastric fundus and anococcygeus strips of sham-operated and biliary cirrhotic (4 weeks after bile duct ligation) rats were mounted under tension in a standard organ bath. Electrical stimulation was applied (5 Hz) to obtain NANC-mediated relaxations in precontracted gastric fundus (serotonin; 1µM) and anococcygeus muscle (phenylephrine; 7.5µM). The neurogenic relaxation of two groups were examined in the presence of different doses the NO synthase (NOS) inhibitor L-NAME (0.03-1000µM). The concentration-dependent relaxant responses to the NO donor sodium nitroprusside (10µM-1mM) were also evaluated. Each group consisted of six animals.

**Results:** The neurogenic relaxation of both gastric fundus and anococcygeus muscle was significantly (P<0.001) increased in cirrhotic animals. L-NAME (0.03-1000µM) inhibited relaxations in both groups in a dose-dependent manner (P<0.001), but cirrhotic groups were more resistant to the inhibitory effects of L-NAME (P<0.01). Sodium nitroprusside-mediated relaxations were similar in two groups.

**Conclusion:** This study for the first time demonstrated that cirrhotic condition increases the NO-mediated neurogenic relaxation of both rat gastric fundus and anococcygeus muscle, suggesting a crucial role for the nNOS-derived NO in the pathophysiology of disturbed GI motility in cirrhosis.

**Send Date:** 2009/09/30

### 7.5 Cirrhosis and complications: basic aspects

**T-S-073**

**Congenital hepatic Fibrosis (CHF)**

Antikchi MH¹, SalmanRoghani H, Amirbeigiafti MK, Akhondi M

shahid sadooghi hospital, shahid sadoogi university

**Introduction:** Congenital hepatic fibrosis (CHF) is an unusual condition in which portal hypertension occur without significant hepatic or renal functional impairment. CHF is a subtype group of congenital disorders described as fibropolycyctic disease with a wide clinical spectrum CHF is a rare autosomal recessive disease and only a few hundred patients with CHF have been reported in literature and appear in both sporadic (in as many as 56% of cases) and familial patterns. CHF primarily affects the hepatobiliary and renal system. It is characterized by hepatic fibrosis, portal hypertension and renal cystic disease.

**Method:** Case presentation A 22 Y/O man presented with abdominal pain, icter and fever from 2 weeks ago. Nausea and vomiting and malaise were in symptom. Patient had not any previous disease. In physical examination sclera icteric, hepatomegaly 3cm under edge and rib and splenomegaly 7cm under edge of rib.

**Results:** Laboratory results:

- WBC:3200/µl (PMN 80%,LYMPH20%)
- Hct:35.9% Hb:10.9g/dl RBC:3950000mil/µl
- MCV:80 MCH:27.3 MCHC:34.2 PLT:43000/µl
- HBsAg: negative HCV Ab: negative HIV Ab: negative
- Total protein:7.2 gr/dl Albumin:3.2 gr/dl
- U/A:protein+ RBC:10-15 Blood:++

Wilson’s disease investigation was negative.

**Conclusion:** Abdominal sonography: Hepatosplenomegaly with normal diameter bile ducts and portal vein and disappear corticomedulary border in kidney with increased parenchymal echogenesity. Abdominal CT-Scan: Hepatosplenomegaly and enlarment of kidneys with hypodense area in liver and kidneys. In hospitalization Hematemesis and melena occurred and in Endoscopy esophageal varicesgrade II with mild portal hyp ertensive gastropathy seen. Because of pancytopenia BMB and BMA was done that reported hypercellular. In Final process liver and renal biopsy done: Active Cirrhosis with regenerative noduls and portal space fibrosis Cystic dilatation of renal tubules Final diagnosis was congenital hepatic fibrosis and with conservative treatment symptoms of patient done. Discussion Congential hepatic fibrosis is a term first coined by Kerr in 1961, clinically reserved for a condition in which PH occurs without significant impairment of liver or kidney function. Cases have been reported from all over the world but the exact incidence of the disease is not known. The presentation ranges between 1.8-14 years, PH is a usual accompaniment and renal involvement is seen with < 10% tubules being affected. Classically affected patients are asymptomatic until the age of 5 or 7 years when manifestations of portal hypertension or cholangitis lead to the...
diagnosis. Cholangitis form of CHF is more severe and usually occurs in late childhood and adult life. Renal involvement is maximal in perinatal group and minimal in juvenile group. The usual presentation of CHF is within abdominal distension, hematemesis or melena, failure to thrive, jaundice, anemia, hepatomegaly and splenomegaly. The other features of CHF are abdominal pain (splenic infarction), fever (cholangitis), ascites, etc. The diagnosis is based on liver functions which are well preserved, features of hypersplenism, elevation in levels of alkaline phosphatase and gamma glutamyl transferase. Hallmark of diagnosis is liver biopsy which shows bands of fibrous tissues often containing circular or linear spaces lined by cuboidal epithelium. There is diffuse portal and perilobular fibrosis varying in thickness but it does not distort lobular architecture. The limiting plate is intact and parenchyma is separated by islands of fibrosis. There are no inflammatory changes and regenerative nodules are absent or few. This suggests a spectrum of congenital biliary tree disease with portal fibrosis and normal caliber ducts at one end and multiple intrahepatic, even extrahepatic, dilatations without fibrosis at the other end.

Send Date : 2009/10/06

7.6 Cirrhosis and complications: clinical aspects
T-S-074

Survey of relationship between lipid profile and severity of liver damage in cirrhotic patients admitted in referral (Kamkar) hospital of Qom at 2005-2008

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2 Qom Free University Of Medical Sciences
3 Kordestan University of Medical Sciences

Introduction: The cirrhosis is a chronic liver disease and characterized by fibrosis of liver tissue and decreased liver function and thereby, important complications such as portal hypertension, esophageal varices, ascites, etc. Decreased liver function is defined as low serum albumin, elevated prothrombin time, etc. A variety of etiologies of cirrhosis is known such as chronic hepatitis B or C, alcoholism, metabolic disorders, etc. Since metabolism of serum lipids is predominantly accomplished by liver, it is probable that lipid profile can be used as a laboratory marker of severity of liver damage in cirrhosis so, the practitioner can utilize a noninvasive easy test to foretell severity of hepatic injury.

Method: This study was a descriptive research. More than 200 cirrhotic patients were admitted in Qom referral (Kamkar) hospital from 2005 through 2008. Diagnosis of cirrhosis was based on standard pathologic criteria of (CHILD) and (MELD) methods. Exclusion criteria were diabetes mellitus, cancer, heart or renal failure, pancreatitis and positive history of dyslipidemia. Qualified patients were considered as «case» and matched noncirrhotic admitted patients were regarded as «control». A questionnaire was completed which contained personal characteristics, etiology of cirrhosis (HBV, HCV, drugs, Wilson disease, autoimmune disorders, hemochromatosis, etc), pathologic criteria of CHILD (A, B and C) and MELD (<10, 11-18, 19-24 and 25-< and lipid profile (total, LDL and HDL cholesterol and triglyceride). Data were analysed by SPSS software (chi 2, ANOVA and t-test were used with p value of less than 0.05 as significant).

Results: 50 Patients qualified as cases and other 50 matched as controls. 29 (58%) was male. Age range was 8 to 85 and mean age was 52 years. The most common age group was 41 to 50 (24%) and 90 percent was over 40 years. The commonest etiology was chronic hepatitis B (54% or 27 Out of 50), 11,14 and 25 patients had pathologic criteria of CHILD A, B and C, respectively. As well, 10,15,17 and 8 had MELD class 1.2,3 and 4 respectively. Serum lipid profile indicated that in case and control groups, mean triglyceride level was 82 and 187, respectively so its level was significantly lower in cases (chi 2, p<0.01). Total cholesterol was 80 and 139 in cases and controls respectively (chi 2, p<0.05). LDL cholesterol was also significantly lower in cases than in controls (chi 2, p<0.05) and HDL cholesterol was 40 and 44 (chi 2, p<0.05). On the other hand, comparison of lipid profile with pathologic progression of cirrhosis (increase in CHILD and MELD scores) revealed that with the exception of triglyceride, serum level of lipids diminishes linearly with progression of liver damage (ANOVA, p<0.05). Other extra results were yielded such as relationship of lipid profile with serum albumin, prothrombin time, etc which were offered in original article.

Conclusion: Serum lipid test is an easy nonexpensive test that is accessible anywhere and with regarding these results can be used as a reliable test in cirrhotic patients to estimate severity of hepatic damage with this manner that the more tissue damage, the more decline in serum lipids.

Send Date : 2009/09/07

7.6 Cirrhosis and complications: clinical aspects
T-S-075

A survey of correlation between insulin-like growth factor-I (IGF-I) levels and severity of liver cirrhosis

Khoshnood A*, Miroliaee A, faravash MJ, nasiri toosi M, froutan H, Ghofran H, esteghamati AR, abdollahi AR
Department of Gastroenterology, Imam Khomeini Hospital, Tehran

Introduction: Insulin-like growth factor is a polypeptide with endocrine, autocrine and paracrine effects and its structure is similar to insulin. Although various tissues secrete IGF-I, 90% of the circulating IGF-I is secreted by liver. Cirrhosis of liver is a condition accompanied with decreased level of IGF-I and with progression of the disease, the level of IGF-I may be further decreased. In this study an effort has been made to demonstrate the relation between the degree of IGF-I and severity of liver disease on the basis of Child- Pugh and Model for end stage liver disease(MELD) Score

Method: This is a descriptive-analytic cross sectional study in which the cirrhotic patients who were diagnosed on the basis of liver biopsy or clinical criteria, visiting the gastroenterology clinic of Imam Khomeini Hospital in Tehran, Iran during the years 2007-2008 were evaluated. Initially for all patients included in the study, laboratory investigations including IGF-1, CBC, liver Enzymes, Alkaline phosphates, serum Albumin, Creatinine, direct and total Bilirubin were carried out. Similarly ultrasound for evaluation of ascites and endoscopy for varices, was performed for all patients.

Results: 100 cirrhotic patients with male to Female ratio of 63:37 and median age 44±15 years were enrolled in the study. The findings of this study showed a median IGF-I (± standard
7.6 Cirrhosis and complications: clinical aspects
T-S-076

Absence Of Tumor Outcome After Autologous Bone Marrow (Bm) Stem Cell Transplantation For Liver Cirrhosis
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Introduction: Stem cell therapy may offer new hope in the management of cirrhosis. One of the potential complications of stem cell therapy is tumor development. Recently, a case of dono T-Serived brain tumor has been reported after transplantation of neural stem cells (Amariglio N, et al. PLoS Medicine 2009). There is no long term follow up study in regard to the tumor development in cirrhotic patients who underwent stem cell transplantation. We aim to report the data related to the tumor development in our three prospective trials of autologous stem cell transplantation in liver cirrhosis

Method: Data of serum alfa-fetoprotein (AFP) levels, abdominal ultrasound, and abdominal CT scan at baseline and at the end of follow up were assessed from the databank of the following prospective trials. A phase 1 trial(1) in which the mean number of 7 milion CD34+ hematopoietic BM stem cells were infused through hepatic artery in 3 patients with cirrhosis. Another phase 1 trial(2)in which the mean number of 31 milion mesenchymal stem cells (MSC) were infused through peripheral vein in 4 patients. A phase 2 trial(3) in which the mean number of 400 milion MSC were infused through peripheral vein in 8 patients. The last study is an ongoing randomized controlled trial, which the data of the treatment arm is presented. Serum AFP levels, and abdominal ultrasonography were done every 6 months for all the patients. Also, all of them had baseline CT scan, and follow up CT scan at 6 months of post-transplantation. All the patients were on the waiting list of liver transplantation.

Conclusion: The findings of this study show that IGF-1 is an index of severity of cirrhosis and can be used to determine the severity of the disease in patients when liver biopsy is not possible.

Send Date : 2009/09/19

7.6 Cirrhosis and complications: clinical aspects
T-S-077

The frequency of diabetes mellitus and its Effective factors in cirrhosis patients comparing with normal Society
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Introduction: Liver is the main organ in carbohydrates metabolism. Alterations in carbohydrates metabolism and diabetes mellitus are common in cirrhotic patients. Resistance to insulin is an important prognostic factor in liver cirrhosis. To determine the incidence of diabetes and effective factors in cirrhosis patients in compare with normal society.

Method: This case-control study was conducted by using simple random sampling on 100 patients with cirrhosis who were admitted in Arya, 22 Bahman and 17 Shahrivar hospitals and had the conditions to enroll in the study. Checklists were completed for patients. The presence of DM was diagnosed either by a history of DM and use of antidiabetic drugs or FBS > 126 mg/dl at two times. Data analysis was performed using Pearson Chi-square and Fisher exact test

Results: Out of all patients 37 were females and 63 were males (Mean age 63.57 years). Prevalence of DM and IFG in these patients were much more than normal population (p<0.05), there were significant statistically relationship between sex (F>M) and age>60 years in diabetes and cirrhosis patients in compare with normal group (p<0.05). Family history of DM and severity of cirrhosis were also associated with DM (p<0.05). Among complications of cirrhosis, prevalence of DM was more in patients with encephalopathy and ascites.

Conclusion: In this study, our findings indicate that cirrhotic patients are at the increased risk of DM occurrence. Female sex, age>60 years, family history of DM, severity of liver disease, presence of encephalopathy and ascites were associated with DM occurrence in these patients. The Regular screening for DM can be useful for early diagnosis and treatment of these patients.

Send Date : 2009/09/30

7.6 Cirrhosis and complications: clinical aspects
T-S-078

Comparison of the effect of midodrine and octreotide on hemodynamic parameters in cirrhotic patients
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Introduction: In cirrhotic patients peripheral vasodilatation may decrease renal blood flow and subsequent raise in plasma renin activity. Octreotide with several mechanism cause peripheral vasoconstriction. Midodrine is an alpha agonist and acts as a peripheral vasoconstricor, therefore it may reduce plasma renin activity. We compared these two agents among cirrhotic patients.
to determine if they could reduce plasma renin activity. 

**Method:** This is a clinical trial performed in Al-Zahra hospital in 2008-2009. 34 patients with CHILD C cirrhosis involved in this study. They randomized into two groups. First group treated by 3 days subcutaneous octreotide 100 µg TDS (n=17). For second group oral midodrine 7.5 mg TDS were administrated for two weeks. Plasma renin activity, mean arterial pressure, serum creatinin, and body weight were measured and compared before and after therapy in both groups.

**Results:** In both groups, plasma renin activity decreased significantly after treatment (from 0.15 to 0.03 and from .013 to 0.02 ng/L-s in octreotide and midodrine groups respectively) (p<0.5 in both groups). The difference in decreasing plasma renin activity was significant between these 2 groups. Mean arterial pressure increased significantly in midodrine group (from 73.32 to 85.45 mmHg), but in octreotide group it did not increase significantly (from 75.68 to 77.42 mmHg).

**Conclusion:** Octreotide has favorable hemodynamic effect in cirrhotic patients by decreasing plasma renin activity and increasing mean arterial pressure.

Send Date: 2009/10/05

7.7 Viral hepatitis: basic aspects
F-T-079

**Correlation of serum HBsAg level with necroinflammatory activity in liver biopsy in patients with chronic viral hepatitis B**

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**Introduction:** Among 400 million people HBsAg carriers living in the world now. The important complication of chronic viral hepatitis B is necrosis and inflammation. That improvement with medical treatment, liver biopsy is the gold standard diagnosis. Necrosis and inflammation of liver is a invasive method. This study was aimed correlation between serum HBsAg titer with hepatitis B. That is a noninvasive method.

**Method:** The present sample 78 of the patients selected among chronic viral hepatitis B referred to gastroenterology and liver research center of mashhad university of medical sciences. In all patients variables such as age’ sex’ necrosis and inflammation grading’ serum ALT level and serum HBsAg titer were investigated.

**Results:** Mean age of patients was 34.8 ± 13.4 years. Mean serum titer was 3604 ± 2514.3 IU/mL. Mean serum ALT was 72.1 ± 62.1 IU/mL. Mean grading of necrosis and inflammation with HAI system was 6.3 ± 4. That is equal in men and women.

**Conclusion:** Evaluated correlation between these variables include serum HBsAg titer and serum ALT and grading of necroinflammation of liver. According to these results no correlation between serum HBsAg titer and grading of necroinflammation of liver or serum ALT. Relative correlation is between serum ALT and necroinflammation grade of liver.

Send Date: 2009/09/16

7.7 Viral hepatitis: basic aspects
F-T-080

**Mutations In Pkr- Eif2 Alpha PhosphorylationHomology Domain (Pephd) Of E2 Protein And Pkr Binding Domain Of Ns5a Protein Of Hepatitis C**

Virus And Its Relation To Response To Treatment


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**Introduction:** Hepatitis C virus (HCV) is a major cause of chronic hepatitis. The standard treatment for hepatitis C is pegylated interferon and ribavirin. Nevertheless, many patients do not respond to this treatment. The interferon-inducible protein kinase (PKR) is involved in antiviral activity of interferon through phosphorylation of eukaryotic initiation factor 2 alpha (eIF2α) and thus shutting down protein synthesis. The protein kinase- eIF2α phosphorylation homology domain (PePHD) of the E2 envelope protein of HCV has considerable homology with eIF2α and thus might inhibit its phosphorylation through simple competition. The NS5A protein of HCV also contains a PKR-binding domain (PKR-bd) which binds PKR and thus inhibits phosphorylation of eIF2α. These mechanisms might be involved in resistance of HCV to interferon. A variable region (V3) at the carboxyl end of PKR-bd might also be involved.

**Method:** In order to evaluate the effect of mutations in PePHD, PKR-bd and V3 on response to interferon we studied 24 patients infected with HCV genotype 1a. Samples were taken before treatment and after 4 weeks of treatment with pegylated interferon and ribavirin. The patients were treated for 48 weeks and followed till 24 weeks after end of treatment. At this time, 18 patients had detectable HCV RNA in their serum and were considered as responders. The PePHD domain of E2 protein and the PKR-bd and V3 domain of NS5A were sequenced. Mutations were recorded and compared between responders and non-responders. The sequences were compared before and after 4 weeks of treatment to identify possible mutations occurring during treatment.

**Results:** In comparing the PePHD sequences to a consensus sequence and a standard sequence from Gene Bank (M62321), only three samples had substitutions (position 660 and 668). In the PKR-bd region, 8 samples had substitutions as compared to the consensus sequence. One was a non-responder and 7 were responders. The mean number of substitutions was 0.44 for responders and 0.33 for non-responders. For the V3 region, the mean number of mutations in responders was 2.94, vs. 1.67 in non-responders. None of the differences between responders and non-responders were statistically significant. Only 12 patients had detectable HCV RNA at week 4 of treatment. Among these patients, none had new mutations in PePHD or V3. Only one patient (non-responder) had a double substitution in positions 2212 and 2213 of PKR-bd.

**Conclusion:** We did not observe any significant effect of mutations in PePHD, PKR-bd, or V3 proteins of HCV on response to treatment by interferon. There was a slight trend for mutant viruses to respond better to treatment which might become significant with larger number of cases. Four weeks of treatment with interferon does not result in significant mutations in these areas.

Send Date: 2009/09/22

7.7 Viral hepatitis: basic aspects
F-T-081

**Analysis of Plasma Proteome in Patients**
7.8 Viral hepatitis B: clinical aspects
F-T-083

Hepatitis B Virus DNA level as predictor of response to therapy with Interferon-Alpha-2b in chronic Hepatitis B infection

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Introduction: To evaluate the strength of association and to determine the best prediction of response in terms of sensitivity and specificity among quantitative baseline HBV DNA levels in blood serum in patients with Chronic Hepatitis B (CHB) infection who treated with Interferon-alpha-2b.

Method: Patients and Methods: 78 CHB patients with serum HBV DNA >105 copies/mL were treated with Interferon-alpha-2b for 52 weeks as 5 MU Sc. for 24 weeks in HBeAg (+) and 48 weeks for HBeAg (-) at baseline of study in Tehran, Iran. Serum HBV DNA level using Cobas Amplicor HBV Monitor test and HBeAg status were assessed at baseline and end of 6-months follow-up. Sustained Response (SR) (n= 42, 56%) was defined by HBeAg seroconversion (n= 12), or with a decrease in HBV DNA <105 copies/mL to undetectable value (n= 33), or biochemical response (n= 20).

Results: Higher pretreatment HBV DNA levels have a significant relationship with better response to treatment in HBeAg (+) (R=0.7, P=0.04). Positivity of HBeAg in SR was a better predictor of biochemical response in our patients, when compared to HBeAg negative (SR: 85% vs. 15%, respectively). At end of follow up, HBeAg (-) patients have more decrease in HBV DNA levels than HBeAg (+) (412 vs. 290 • 105 copies/ml, p<0.05). Sensitivity of HBV DNA in HBeAg (+) was more than HBeAg (-) (75% vs. 62%), but specificity was less in HBeAg (+) (58% vs. 45%). Area under ROC was (0.63) in HBeAg (-).

Conclusion: Higher pretreatment HBV DNA levels have a significant relationship with better response to treatment in HBeAg positive patients of CHB. Although HBVDNA in HBeAg negative was decreased significantly from baseline to end of follow-up, monitoring with sensitive quantitative baseline HBV DNA measurements in these patients was not a better predictor of SR than HBeAg positive. 

Send Date : 2009/10/07

7.8 Viral hepatitis B: clinical aspects
F-T-082

Response to hepatitis B Virus Vaccine in Iranian infants

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Introduction: The aim of this study was to evaluate the infants’ immune response against hepatitis B virus vaccination.

Method: This study was a cross-sectional descriptive study carried out on 215 infants of 7-12 months of age in 2006. These children already had received the three-time vaccination against hepatitis B. Anti-HBs, Anti-HBe antibodies and HBsAg level of their serum were determined using ELISA method.

Results: Of all 215 subjects, 55.3% were males. All of them were 7-12 months old. 86 percent of studied cases had positive response to the vaccination. The response rate in males was lower than females (p=0.34).

Conclusion: We found that non-response to HBV vaccination is an important issue in our area. Further studies are needed to assess the procedure of vaccination, type and site of inoculation, vaccine preservation and transportation as major participating factors.

Send Date : 2009/08/19

7.8 Viral hepatitis B: clinical aspects
F-T-084

HDL and Adiponectin are Associated with Lower Serum HBV DNA Concentration in Chronic Hepatitis B Infection

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Introduction: The natural history of hepatitis B is complex, influenced by level of HBV replication and host factors. High density lipoproteins (HDL) and adiponectin are host factors which
their hepatoprotective role on HBV persistence is less well understood. **OBJECTIVE:** To investigate correlation between serum HDL and adiponectin level with clinical parameters in patients with chronic hepatitis B (CHB)

**Method:** 92 male subjects with HBV infection without Diabetes or any risk factors for diabetes were enrolled in the study. Age and BMI of the study population were matched and HBV DNA, ALT, Tumor Necrosis Factor alpha (TNF-α), adiponectin and lipid levels was measured.

**Results:** Serum HBV DNA correlated negatively with serum HDL level (r=−0.24; P=0.04). Independent t-test with median of 3.67 log for HBV DNA was considered as cut off point. Patients with HBV DNA level higher than the mentioned cut off point had lower adiponectin level (8.7±5.3 vs 10.7±4.9 p=0.05). Also, Adiponectin had a negative correlation with TNF-α (r=−0.21, P=0.04) and borderline positive correlations with HDL (r= 0.18, P=0.06).

**Conclusion:** Our findings suggest that HDL and adiponectin are host factors which may be associated with lower levels of HBV replication. We suggest that adiponectin possibly promotes HDL formation and consequently nonspecific innate immunity to protect against HBV infection. Therefore, manipulating the clinical circulating concentration of these factors could provide a promising therapeutic strategy for the control of hepatitis B viral replication.

Send Date : 2009/09/22

7.8 Viral hepatitis B: clinical aspects
F-T-085

The Role of Mutations in Core Protein of Hepatitis B Virus in Liver Fibrosis

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**Introduction:** The core protein of hepatitis B virus contains B- and T-cell immunodominant epitopes and subdivides into N-terminal assembly domain and the functional C-terminal domain with several phosphorylation sites. Mutations of the core gene may change the conformation of the core protein or cause alteration of important epitopes in the host immune response.

**Method:** In this study twenty nine men (mean age 40±9 years old) with chronic hepatitis B were recruited for direct sequencing of the core gene. Serum ALT and HBV DNA level were measured at the time of liver biopsy. We analyzed the effects of mutations of core protein on patients’ characteristics. Then the effect of mutations in B cell, T helper and cytotoxic T lymphocyte (CTL) epitopes and also C-terminal domain of core protein on the activity of liver disease was evaluated.

**Results:** Liver fibrosis was significantly increased in patients with core protein mutation (1.0±0.8 vs 1.9±1.4 for mean stage of fibrosis P=0.05). Mutations in CTL epitopes and in phosphorylation sites of C-terminal domain of core protein also were associated with higher liver fibrosis (P= 0.003 and P= 0.04; Fisher’s exact test for both). Patients with mutation in C-terminal domain had higher serum ALT (62±17 vs 36±12 IU/l, p= 0.02). Patients with mutations in B cell and T helper epitopes did not show significant difference in the clinical features.

**Conclusion:** Our data suggests that core protein mutations in CTL epitopes and C-terminal domain accompanied with higher stage of liver fibrosis may be due to alterations in the function of core protein.

Send Date : 2009/09/22

7.8 Viral hepatitis B: clinical aspects
F-T-086

Liver histology and HBV-DNA features in patients with chronically HBV infected patients with persistently normal ALT

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**Introduction:** Data on histologic activity and HBV-DNA level in patients with chronic HBV infection and persistently normal ALT are sparse. We aimed to investigate histologic activity, and HBV-DNA levels in these patients.

**Method:** One hundred and thirty two patients with HBeAg negative chronic HBV infection and persistently normal ALT were included prospectively. Data were dichotomized according to the median levels. Associations of histology with HBV-DNA and other variables were assessed.

**Results:** Eighty patients were male. Median age was 36 years old. Median baseline HBV-DNA was 103.60 copies/ml. Fifty cases (38%) had total score ≥5, fifty tree cases (40%) had grade ≥4 and 40 cases (30.3%) had stage ≥2. Twenty four cases (48%) of those with total score ≥5, twenty eight cases (53%) of those with grade ≥4 and 9 cases (22.5%) of those with stage ≥2 had baseline HBV-DNA < 104 copies/ml. In multivariate analysis baseline HBV-DNA above median level could predict total score, grade and stage significantly with an adjusted odd ratio of 5.43, 3.47 and 4.23 respectively comparing to below median values. Second liver biopsy was performed in 61 patients. Median time interval between two biopsies was 40 months. Total scores of 23 cases (38%) progressed by ≥ 2 scores and HBV-DNA of eighteen cases (22.5%) increased by ≥ 1 Log10 comparing to baseline values.

**Conclusion:** HBeAg negative chronic HBV infection with persistently normal ALT is not a silent disease. Active liver disease could be seen in such patients with viral loads less than 104 copies/ml.

Send Date : 2009/09/28

7.8 Viral hepatitis B: clinical aspects
F-T-087

Predictors of primary nonresponse to Adefovir in chronic hepatitis B patients

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**Introduction:** A major concern in choosing first line treatment for chronic hepatitis B is primary nonresponse to treatment, which is defined as “lack of at least 2 log 10 reduction in viral load after 1 year of treatment”. In this study we evaluated the frequency of primary nonresponse to adefovir and early predictors of primary nonresponse.

**Method:** 112 patients with chronic hepatitis B who had clear
indication for treatment, according to their viral loads, HBcAg status, and liver enzymes. Liver biopsy findings enrolled in the study. All the patients received Adefovir Dipivoxil, 10 mg/day for 1 year. Their viral load and liver aminotransferases were checked 3, 6, and 12 months after the beginning of treatment. Those who had less than 2 log10 reduction in viral load after 12 months were considered as primary nonresponders. Then age, sex, HBcAg status, and baseline and on treatment levels of ALT, AST and viral load were compared between these patients with those who responded to treatment.

**Results:** Seventeen patients out of 112 (15.17%), had less than 2 log 10 reduction in viral load after 12 months of treatment. There was no difference in the mean age, AST, ALT or the frequency of HBcAg status between the two groups. None of the patients who had less than 1 log10 reduction in viral load at 6 months showed at least 2 log 10 reduction in viral load after 12 months. In multivariate analysis, high baseline viral load (more than 108 copies/ml and lack of at least 1 log10 reduction in viral load after 6 months) were predictors of primary nonresponse to adefovir.

**Conclusion:** Primary non response to adefovir is relatively common in Iranian chronic hepatitis B patients. Adding another drug or switching to another drug should be considered in those patients who have less than 1 log 10 reduction in viral load after 6 months of treatment with adefovir.

Send Date: 2009/10/05

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7.9 Viral hepatitis C: clinical aspects F-T-089

**Hepatitis C infection in general population of Iran: A Systematic review**

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**Introduction:** There is not an overall estimation of hepatitis C infection (HCV) in Iran. We reviewed all published and unpublished evidences about HCV infection in Iran in order to accurately estimate the HCV infection prevalence in Iranian general population for the subsequent health system programs.

**Method:** In this systematic review, all papers, medical congresses, HCV related reports, projects of Iranian research centers and medical universities, reports of Deputy for Health affairs (published or unpublished) and online theses about HCV in Iran were included. We selected descriptive/analytic cross-sectional studies/surveys related to prevalence of HCV infection in Iranian general population between 2001 and 2008 that have sufficiently declared objectives, proper sampling method with identical and valid measurement instruments for all study subjects and proper analysis methods regarding sampling design and demographic adjustments. We used survey data analysis method to calculate nationwide prevalence estimation.

**Results:** From 6431 studies which were investigated, eight eligible studies reported prevalence of HCV infection in the general population. They were from 6 (out of 30) provinces in which about 43 percent of the country population live. The HCV infection prevalence in Iran is calculated to be 0.16% (95% CI: 0% – 0.59%).

**Conclusion:** In comparison with similar studies, prevalence of HCV infection in Iran is low. This might be related to preventive programs in high risk groups and strict blood screening programs.

Send Date: 2009/08/29

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7.9 Viral hepatitis C: clinical aspects F-T-090

**Treatment of Chronic Hepatitis C in Polytransfused**

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**Introduction:** Hepatitis C virus (HCV) infection is a major cause of liver related morbidity and mortality among thalassemic patients. In order to analyze the effect of the current anti-HCV treatment in this subset of HCV-infected patients, we conducted a systematic review with meta-analysis of the available literature.

**Method:** The outcome was sustained viral response. Both
comparative [odds ratio (OR)] and a non-comparative index (success rate) as the effect size were used to run meta-analytical procedure. **Results:** Data encompassing 429 thalassemic HCV-infected patients treated with conventional or pegylated interferon monotherapy or combination therapy with ribavirin was collected from 13 articles (10 prospective cohort studies, 1 randomized controlled trial and 2 controlled trials). Pooled SVR was 44.7% (34.6-54.9). Pooled ORs of SVR for genotype 1 vs non-genotype 1 infected thalassemic patients were 0.46 (95% CI 0.22–0.95) in IFN monotherapy and 1.7 (95% CI 0.46-6.04) in ribavirin combination therapy. **Conclusion:** Our meta-analysis shows that thalassemic patients with genotype 1 infection significantly benefit from addition of ribavirin to their therapeutic regimen. It seems that using ribavirin in thalassemic patients increase transfusion need by median of 30-40 percent but does not increase major adverse events and treatment withdrawal. Current literature is also lacking enough evidences about PEG-IFN as monotherapy or combination therapy with ribavirin in thalassemic patients.

**Send Date:** 2009/08/29

7.9 Viral hepatitis C: clinical aspects

**F-T-091**

**Hepatitis C virus detection by reverse transcription loop–mediated isothermal amplification**

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**Introduction:** Hepatitis C virus of the Flaviviridae family, is an enveloped virus a positive single –stranded 9.6 kb RNA genome. It is well established that hepatitis C virus develops in to cirrhosis of liver and hepatocellular carcinoma (HCC) both of which are fatal diseases. Loop–mediated isothermal amplification (LAMP) allows rapid amplification of nucleic acid under isothermal conditions using four sets of specially designed primers that recognize six distinct target sequences with high specificity and sensitivity. It can amplify target nucleic acids from a few copies to 10–9 copies at 60–65℃ within 1h. Reverse transcription loop–mediated isothermal amplification (RT-LAMP) method can synthesize CDNA from template RNA and apply LAMP technology to amplify and detect them.

**Method:** RT-LAMP includes two reactions, the reverse transcription and LAMP reaction, however these two reactions could be performed in one tube by mixing AMV reverse transcriptase in to LAMP reaction mixture. Moreover, RT-LAMP could amplify HCV RNA in the isothermal condition at 65℃ within 60 minutes. To compare the sensitivity of detection limit, RT-LAMP, Nested RT-PCR were carried out various concentrations of RNA extracted from HCV –infected as template.

**Results:** RT-LAMP includes two reactions, the reverse transcription and LAMP reaction, however these two reactions could be performed in one tube by mixing AMV reverse transcriptase in to LAMP reaction mixture. Moreover, RT-LAMP could amplify HCV RNA in the isothermal condition at 65℃ within 60 minutes. To compare the sensitivity of detection limit, RT-LAMP, Nested RT-PCR were carried out various concentrations of RNA extracted from HCV –infected as template.

**Conclusion:** RT-LAMP protocol is more convenient, rapid, and does not require sophisticated PCR machine. This method could be used for diagnosis of suspected HCV, even though the virus titer is relatively low.

**Send Date:** 2009/08/31

7.9 Viral hepatitis C: clinical aspects

**F-T-092**

**Distribution of HCV Genotypes**

**Hemodialysis Patients of Guilan, The Province of Iran**

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**Introduction:** Hepatitis C virus (HCV) infection has been identified as the major cause of chronic liver disease among patients on chronic haemodialysis (HD). Information about the genotypes of HCV infected patients in Iran is limited. The aim of this study was to identify the HCV genotypes in group of HCV infected patients on HD in Guilan, North province of Iran.

**Method:** Patients on HD in all of eleven Guilan HD centers were enrolled; all sera were screened for anti HCV antibodies by enzyme-linked-immunosorbent assay (ELISA) polymerase chain reaction (PCR) and genotyping was performed in positive anti HCV cases. SPSS 14 was used for analysis and P<0.05 were statistically considered significant.

**Results:** of 514 patients, 61 ones had positive anti HCV, (prevalence: 11.9%) and among them 32 ones had positive HCV RNA (52.5%). The most frequent genotypes were 1a and 3a with 59.38% and 40.62% prevalence, respectively. There were not any significant relations between the type of genotypes and gender or age. Of point was the high prevalence of genotype 3a in Rasht, the capital city of province.

**Conclusion:** HCV genotype pattern in our province, like other parts of Iran, is characteristic of the non-Arab countries of middle East, where genotype 1 predominates.

**Send Date:** 2009/09/19

7.9 Viral hepatitis C: clinical aspects

**F-T-093**

**Anti-HCV Positivity in Cases with History of Intravenous Drug Abuse via Community Announcement: A useful Experience**

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**Introduction:** Injection drug use plays an important role in transmission of hepatitis C. In Iran, surveys have been conducted on various high risk groups but this is the first announcement based study for anti-HCV prevalence among cases with history of intravenous drug using (IVDU) in the country.

**Method:** The announcement-based detection and follow up of patients with anti-HCV positive project in volunteers with history
Conclusion: The prevalence of hepatitis C virus infection in Iran is most common cause of chronic viral liver disease in Iran. Rising and in the future, hepatitis C will replace hepatitis B as the most common cause of end-stage liver diseases in these patients. We conducted this study to evaluate the efficacy and safety of pegylated interferon alpha 2a (PEG-IFN) plus Ribavirin and compare it with PEG-IFN monotherapy.

Method: In this multicenter, open-label randomized clinical trial, 84 consecutive interferon-naïve thalassemic patients with histologically proven chronic hepatitis C were entered the study. The study was performed from 2005 to 2008. Patients were randomized to two arms. Arm A including 42 patients were treated with weekly subcutaneous administration of PEG-IFN alpha 2a (180 mcg/week) and arm B including 42 patients were treated with weekly subcutaneous administration of PEG-IFN alpha 2a (180 mcg/week) combined with 800-1200 mg Ribavirin daily for 24-48 weeks based on HCV-RNA genotype. The Sustained Virological Response (SVR, undetectable HCV-RNA 24 weeks after treatment completion) were compared between the two arms.

Results: The mean age of patients at the start of treatment was 42.7. They were 52 women and 32 men. 47% of patients had genotype 1a that was the most frequent one. 32% had genotype 3 and 21% had type 2 and 4.11 patients (13%) didn't complete the study due to non-compliance or side effects (4/42 from arm A and 7/42 from arm B). Median blood transfusion increased by 32% due to Ribavirin-associated hemolysis. SVR was achieved in 27% of arm A and 61% of arm B. the SVR was significantly associated with combination therapy, HCV genotype (3)p<0.01 and no evidence of cirrhosis.

Conclusion: Our findings demonstrated that combination treatment with PEG-IFN plus Ribavirin achieved a high SVR in interferon-naïve thalassemic patients with chronic hepatitis C, despite the increment in blood transfusion in these patients.

Send Date: 2009/09/27

7.9 Viral hepatitis C: clinical aspects
F-T-095

Efficacy and safety pegylated interferon alpha 2a (PEG-IFN) plus Ribavirin with PEG-IFN monotherapy
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Introduction: Thalassemia major (TM) is the commonest transfusion-dependent anemia in Iran. Transfusion-transmitted chronic hepatitis C Virus (HCV) is still common and one of the major causes of end-stage liver diseases in these patients. We conducted this study to evaluate the efficacy and safety of pegylated interferon alpha 2a (PEG-IFN) plus Ribavirin and compare it with PEG-IFN monotherapy.

Method: In this multicentre, open label randomized clinical trial, 84 consecutive interferon-naive thalassemic patients with histologically proven chronic hepatitis C were entered the study. The study was performed from 2005 to 2008. Patients were randomized to two arms. Arm A including 42 patients were treated with weekly subcutaneous administration of PEG-IFN alpha 2a (180 mcg/week) and arm B including 42 patients were treated with weekly subcutaneous administration of PEG-IFN alpha 2a (180 mcg/week) combined with 800-1200 mg Ribavirin daily for 24-48 weeks based on HCV-RNA genotype. The Sustained Virological Response (SVR, undetectable HCV-RNA 24 weeks after treatment completion) were compared between the two arms.

Results: The mean age of patients at the start of treatment was 18.42±7.2. They were 52 women and 32 men. 47% of patients had genotype 1a that was the most frequent one. 32% had genotype 3 and 21% had type 2 and 4.11 patients (13%) didn't complete the study due to non-compliance or side effects (4/42 from arm A and 7/42 from arm B). median blood transfusion increased by 32% due to Ribavirin-associated hemolysis. SVR was achieved in 27% of arm A and 61% of arm B. the SVR was significantly associated with combination therapy, HCV genotype (3)p<0.01 and no evidence of cirrhosis.

Conclusion: Our findings demonstrated that combination treatment with PEG-IFN plus Ribavirin achieved a high SVR in interferon-naïve thalassemic patients with chronic hepatitis C, despite the increment in blood transfusion in these patients.

Send Date: 2009/10/05

7.9 Viral hepatitis C: clinical aspects
F-T-096

Distribution of Different Hepatitis C Virus Genotypes in Plasma, Peripheral Blood Mononuclear Cells, and Liver of Chronically Infected Patients with Hepatitis C virus
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Introduction: Relapse and failure to antiviral therapy have been frequently seen in patients with chronic hepatitis C especially in those who are on multiple blood transfusions. The aim of this study was to
investigate the presence of mixed HCV infection and discrepancy between HCV genotypes in PBMCs, plasma and hepatocytes.

**Method:** From September 2008 up to April 2009, 133 patients with chronic hepatitis C who have referred to Firouzgar hospital for initiation of an anti viral therapy were recruited in the study. 5 ml of peripheral blood was collected from each patient and liver biopsy was performed in those who gave consent or had indications. HCV genotyping was done using INNO-LiPA in serum, PBMCs and hepatocytes and then confirmed by sequencing of 5'UTR fragments.

**Results:** The Mean age of patients was 30.25 ±17.07. Multi transfusion was seen in 124(72.2%) of patients. Multiple HCV genotypes were found in, 3 (2.3%) of 133 plasma, 9 (6.76%) of 133 PBMC, and 8 (18.2%) of 44 hepatocyte specimens. It is notable that the different genotypes found in PBMCs was not as the same as those found in hepatocytes.

**Conclusion:** Our study showed that a significant proportion of patients with chronic hepatitis C are affected by multiple HCV genotypes. Also it was demonstrated that PBMCs and hepatocytes may represent some HCV genotypes which are not detectable in serum. So we recommend HCV genotyping in PBMCs or hepatocytes as other sites of replication for HCV.

**Send Date:** 2009/10/05

**Abstracts of Iranian Congress of Gastroenterology and Hepatology- 2009**

**10.2 Nutrients and gut function**

**F-T-098**

**Antibacterial activity of some probiotic bacteria (isolated from local yogurt) against enteropathogenic bacteria**

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**Introduction:** There is increasing evidence indicating health benefits by consumption of foods containing microorganisms, i.e. probiotics. Probiotics are live microbial, dietary supplements or food ingredients that have beneficial effect on the host by influencing the flora of the gastrointestinal (GI) tract. Lactic acid bacteria (LAB) such as Lactobacilli and Bifidobacteria are the most common types of probiotics. Such probiotic-containing dairy foods are associated with a range of health claims, including the alleviation of symptoms of lactose intolerance, treatment of infectious diarrhea, cancer suppression and the reduction of blood cholesterol.

**Method:** Ten local yogurt from different parts of Mazandaran province (in north of Iran) were collected. The isolation of bacteria was done using MRS medium, incubated in anaerobic jar at 37 C for 48 hours. After gram staining and catalase test, the isolates were identified by comparing their sugar fermentation patterns with the scheme described in Bergey’s Manual of Systematic Bacteriology. The viability of the isolated strains under acidic pH =2 and bile salt (0.3% oxgall) was evaluated. The inhibitory activity of the isolates was determined by agar well diffusion method. The indicator strains were pathogenic Escherichia coli, Salmonella enteritidis, etc. that were added to 5ml BHI soft agar and poured over solidified agar plates.

**Results:** During preliminary screening, a total of 25 LAB strains were isolated from 10 specimen. According to sugar fermentation patterns, these isolates were from 12 different species. Three of the isolates were highly resistant to acidic pH and high concentration of bile salts. Some of them had high antibacterial activity against enteropathogenic bacteria.

**Conclusion:** Yogurt has been believed to hold some therapeutic effects and used to decrease abdominal discomfort since ancient times in Iran. Our findings prove such a belief to some extent. Some of these isolates are good probiotics for producing probiotic-containing dairy foods. The isolates can be use for improving gastrointestinal flora, enhancing the immune system and preventing infectious gastrointestinal diseases.

**Send Date:** 2009/08/31

16.1 Malignant disease - epidemiology - screening and prevention

**F-T-99**

**Burden of Gastric cancer in Ardabil province, a**
high incidence area of Gastric cancer in Iran
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Introduction: Malignant tumors represent one of the major health problems today; their occurrence and severity are constantly increasing. Gastric cancer alone constitutes one third of all cancers in Ardabil, the ASR of which is the highest reported from Iran up to now and one of the highest in the world. In briefly, here in this research for the first time in Iran we want to have a discussion by estimating the burden of gastric cancer in Ardabil. Purpose of this study was to provide a baseline for assessing improvements in health and performance and provide objective criteria for improving the effectiveness and efficiency of the cancer control program.

Method: Data on all newly diagnosed cancer cases, permanent residents of Ardabil province, in the years between 2004 and 2006 were actively collected. The data of cancer death were obtained from the comprehensive death registry system of Ardabil province and had been compared with cancer registry data to reduce misclassification of cancer related death causes.

We used Dutch disability weight for end stage Gastric cancer (0.93) to estimate years lost due to disability (YLD) for our cases.

Results: The mean age of the patients was 66.7 years old for both sexes. The Age adjusted incidence rate of gastric cancer was estimated to be 51.8 (95% CI: 47.8-55.8) in male and 24.37 (95% CI: 21.5-27.2) in female. The mortality rate of gastric cancer was 18 per 100,000 (24.48 in male and 11.3 in female). The YLL was 7,108 for male (3.7 per1000) and for female 4,141 (2.3 per1000). The undiscounted DALY for gastric cancer was 86.2 per 1000 (male 125.6 and female 45.3).

Conclusion: Gastric cancer has a high burden in Ardabil. Because of incomplete death registration data in Ardabil it is supposed that the actual DALY should be higher. To obtain a good estimate on burden of diseases in Ardabil, standard demographic techniques may be useful to adjust for underreporting of deaths.

Send Date : 2009/10/01

1.2 Diagnosis of malignant disease

Multiple inflammatory pseudotumors of the liver associated with colon adenocarcinoma: a case report
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Introduction: Inflammatory pseudotumor (IPT) of the liver is a rare, benign tumor-like lesion. IPT is sometimes misdiagnosed as a malignant tumor. Due to their malignant appearance on imaging studies, unnecessary exploratory laparotomy or a hepatectomy was often performed. Some cases of IPT of the liver have been associated with malignant tumors.

Method: We report the 48-year-old woman who presented with sudden onset severe right upper quadrant pain. On physical examination, the patient was not febrile, pale or icteric. She appeared to be a healthy, well nourished middle age woman. Abdominal examination revealed right upper quadrant tenderness and hepatomegaly. Liver surface was coarse nodular and firm. Ultrasonography of liver revealed numerous target lesions (2-4cm in diameter). In lab data ESR was 80mm/h, carcinoembryonic antigen was 197ug/ml, but other laboratory results including Hb, WBC, ALT, AST, Alkaline Phosphates, PT, Albumin, LDH, and Alpha-Feto Protein were normal. Spiral CT scan revealed: multiple hypodense masses in RT and LT liver lobes on precontrast phase and rim enhancement on post contrast arterial phase. There was not evidence of malignancy in CT guided liver biopsy. Repeated CT guided biopsy confirmed the first pathologic findings and diagnosis of hepatic pseudotumor was established. In further workup upper GI endoscopy and colonoscopy was performed. Upper GI endoscopy was normal but in colonoscopy a tumoral lesion in cecum was seen. Multiple biopsies were obtained and pathologic examination confirmed adenocarcinoma of colon.

Results: In our case, the prominent presenting feature were RUQ pain and tender hepatomegaly without fever or weight loss. All laboratory data were normal except high ESR and elevated CEA that was
not reported in previous cases of IPL. Normal alkaline phosphates and LDH in the presence of multiple hepatic masses are compatible with diagnosis of IPL and against malignancy in this patient.

**Conclusion:** Despite their rarity, IPLs remain clinically important because of their differential diagnosis with both benign and malignant hepatic masses. Clinical, radiologic, and histologic data can help distinguish between IPLs and other liver diseases.

Send Date: 2009/09/23

17.5 Functional gastrointestinal disorders (clinical - management)  
F-T-102  
**Effect of olanzapine and citalopram combination in the treatment of Irritable Bowel Syndrome**  
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**Introduction:** Although several medications have shown promise in treatment of Irritable bowel syndrome, none have relieved all complaints adequately to be considered as gold standard. Based on previous data regarding the effectiveness of olanzapine in other functional or psychosomatic disorders and clinical experience of the authors on its efficacy and safety, we considered to test the drug for Irritable bowel syndrome.

**Method:** Irritable bowel syndrome Patients were assigned randomly to take citalopram either with placebo or olanzapine by which, 36 and 38 patients entered the study in each group respectively. The Patients were evaluated for severity and frequency of symptoms, quality of life, depression and anxiety before intervention and 4 and 12 weeks after initiation of the treatment.13 of the control Versus 17 of the case groups completed full course of the study. A group of 31 patients is included taking only placebo with similar inclusion criteria and evaluated only for quality of life.

**Results:** While there was a trend toward better results in intervention groups compared to placebo alone, No statistically significant difference was observed among the three intervention groups in quality of life (p = 0.799); but there was a significant improvement from pretest scores in both 4 and 12 weeks observations in all groups (p<0.001). Similar findings were detected between two first intervention groups for severity and frequency of symptoms as well as anxiety and depression scores.

**Conclusion:** Olanzapine may offers no benefit for treatment of Irritable bowel syndrome when added to citalopram.

Send Date: 2009/09/07

17.5 Functional gastrointestinal disorders (clinical - management)  
F-T-103  
**The Relationship between Perfectionism and irritable bowel syndrome**  
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**Introduction:** Perfectionism appears to play an important role in the etiology, maintenance, and course of many disorders for example irritable bowel syndrome (IBS). However, very few clinical data exist to clarify the nature and the relationship between dimensions of perfectionism with IBS. The aim of this study was to compare dimensions of perfectionism in IBS patients and control group.

**Method:** This was a Cross-sectional study. We had evaluated 166 medical students (135 were female and 31 were male) in basic science course in Islamic Azad University, Najafabad Branch. (79.5%) were female and were (20.5%) male. Sampling were diagnosed in accordance with guidelines established by the Rome III criteria. Two groups (IBS positive and IBS negative) were evaluated with Persian version of the positive and negative perfectionism scale (PANPS). Means scores of perfectionism was compare between two groups. Collected data was analyzed using analytic method such as T-student and chi-square with SPSS software.

**Results:** The mean age of medical students was 21.2 years. Prevalence of IBS was 14.4% (15.5% in female and 0.1% in male). IBS in female was significantly higher than male. IBS-D was seen in 4 students (16.6%), 3 students (12.5%) were IBS-C patients, 11 students (45.8%) had IBS-M and 25 % (6 students) had IBS-U. There was no significant difference between two groups in positive and negative perfectionism scores.

**Conclusion:** The results of the present study suggest that perfectionism and irritable bowel syndrome have not relation and the reason could be the high prevalence of perfectionism in medical students.

Send Date: 2009/09/24

17.5 Functional gastrointestinal disorders (clinical-management)  
F-T-104  
**Is Farsi version of IBS questionnaire of ROME III criteria valid?**  
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**Introduction:** The aim of this study was to validate the Farsi version of the ROME III modular questionnaire of irritable bowel syndrome (IBS).

**Method:** One hundred and eleven patients who were diagnosed to have different types of IBS (IBS-D, IBS-C, IBS-M, and IBS-U) by a gastroenterologist during 10 months were included to this study. All patients were full field the Farsi version of IBS questionnaire which was translated to Farsi in an academic clinic. Farsi version was checked by a gastroenterologist and a psychiatrist then the new Farsi version of IBS questionnaire was backward to English.

**Results:** Our results show that IBS questionnaire diagnosed 101 patients between 111 patients who were diagnosed to have any type of IBS. The sensitivity of this questionnaire was 91%. Internal reliability by Cronbach’s Alpha was 0.70 it means that
good consistency of questions in the form. If we omit 2 questions which was about regarding loose pass following pain the Cronbach's Alpha will be 0.74. **Conclusion:** The Farsi version of IBS questionnaire is valid and reliable and could be used in Persian Functional gastrointestinal disorder studies on IBS. Our results show that the sensitivity in our study is higher than other Asian studies.

Send Date: 2009/09/24

17.5 Functional gastrointestinal disorders (clinical - management) F-T-105  
**Type D Personality and Severity of Irritable Bowel Syndrome (IBS) symptoms**  
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Introduction: Irritable Bowel Syndrome (IBS) is the most common functional gastrointestinal disorders and considered as a psychosomatic disorder. Type D personality characterized by both global traits including negative affectivity and social inhibition has been proposed to be related to etiology of psychosomatic disorders. However, the role of this personality type in severity of IBS symptoms remains unclear. The purpose of this study was to examine the relationship between type D personality and IBS severity of symptoms.

Method: In a cross-sectional study 158 consecutive patients with IBS referred to the gastrointestinal and psychosomatic clinics at Noor hospital, Isfahan, were selected in respect of inclusive and exclusive criteria. The patients completed Type D Personality Scale (DS-14) and The IBS Severity Scoring System (IBS-SSS). The patients were divided into two groups with and without type D personality by using DS-14. Then the data was analyzed by using ANCOVA, Multiple Regression and Pearson correlation coefficient.

Results: The findings indicated that 46% were the type D personality. Although the results of ANCOVA showed no significant difference between two groups in severity of IBS symptoms (F= 0.097, P= 0.756), multiple stepwise regression analysis indicated negative affectivity, one of the type D dimensions, was the only significant predictor (β= 4.6, P= 0.018) for severity of IBS symptoms.

Conclusion: Generally, the findings confirmed that negative affectivity as one of the type D dimensions is associated with severity of IBS symptoms.

Send Date: 2009/09/24

17.5 Functional gastrointestinal disorders (clinical - management) F-T-106  
**Comparison Of Very Low Dose Polyethylene Glycol With Lactulose And Magnesium Hydroxide In Constipated Children; A Randomised Clinical Trial**  
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Introduction: Constipation is a common pediatric issue; the incidence appears to be increasing because of changes in diet and lack of exercise. Many children do not respond to medication and continue to have chronic problems. This study was designed to compare the efficacy and safety of very low dose of polyethylene glycol 3350 (PEG) with magnesium hydroxide (MOM) and lactulose in functional constipation of children.

Method: A total number of 468 patients 1-15 year old with chronic constipation entered a randomized comparative multicenteric trial. Subjects were healthy outpatients who had hard, painful or < 3 stools per week. Their parents were given a teaching pamphlet about constipation, diet, toilet training and therapy. Disimpaction was done if needed then the patients were allocated to 3 treatment groups; lactulose (70%) 1ml/kg/day/BID, MOM (400mg/5ml) 1ml/kg/day/BID, and PEG (40%) 1ml/kg/day/BID. The dose was adjusted up to three times depending on responding. Treatment scheduled for two months and data were collected on 2ed, 4th and 8th weeks.

Results: 354 patients completed the trial. After eight weeks, patients in the PEG groups had higher number of bowel movement (P<0.000) and low straining at stool (P<0.000) than patients in two others groups. Patient’s adherences with PEG were better than lactulose and magnesium hydroxide (P<0.000). Soiling and blood on stool declined significantly in three groups (P<0.000) without differences among. Overall improvement was greater in PEG group (>90%) than magnesium hydroxide (>88%) than lactulose (<70%) groups, and so clinical tolerance. There were no serious adverse effects.

Conclusion: Low dose of polyethylene glycol 3350 was more effective than lactulose and M.O.M for the treatment of functional constipation and better tolerated without any significant adverse events in children.

Send Date: 2009/09/27

17.5 Functional gastrointestinal disorders (clinical - management) F-T-107  
**Coping Strategies Training In the Management of Irritable Bowel Syndrome**  
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Introduction: Irritable bowel syndrome (IBS) is one of the most common functional gastrointestinal disorders accompanied by psychological disorders, mostly anxiety and depression. We aimed to evaluate the efficacy of cognitive-behavioral therapy (CBT) with coping strategies training in the treatment of IBS.

Method: This single-blind, placebo-controlled, randomized trial was conducted in Behavioral Sciences Research Center (Isfahan) from 2008 to 2009. Sixty three IBS patients were randomly assigned into intervention and placebo groups. All patients received the standard medical care for IBS. Patients in the intervention group participated in 8 weekly group sessions (2 hours) of coping strategies training including problem and...
emotional and symptom monitoring methods were applied to patients in the placebo group in which patients participated in 4 bi-weekly group sessions (90 minutes). Severity of symptoms, quality of life, and anxiety and depression were evaluated before and two weeks after the intervention using IBS-SSS, IBS-QOL, and HADS questionnaires, respectively.

**Results:** From all, 24 patients in the intervention and 22 in the placebo group completed the study. The two groups were similar in demographic and baseline characteristics. After the intervention, there was a significant decrease in symptom severity in the intervention but not in the placebo group (P<0.001). Also, there was a significant improvement of quality of life in both groups (P<0.05) with superiority for the intervention group. The decrease in anxiety and depression in the intervention group was not significant after the intervention (P>0.05). There was, however, a significant decrease in anxiety but not in the placebo group (P=0.021).

**Conclusion:** Coping strategies training, in parallel with standard medical care, can significantly decrease symptom severity and improve quality of life in patients with IBS. Further studies with long-term follow-up and evaluation of self-administered CBT are warranted.

Send Date: 2009/09/30

**17.5 Functional gastrointestinal disorders (clinical - management) F-T-108**

**Outcome Measures in Irritable Bowel Syndrome Treatment Trials**

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**Introduction:** In clinical trials of Irritable Bowel Syndrome (IBS), evaluation of treatment efficacy is mainly subjective because no specific biochemical marker is available for diagnosis or monitoring clinical course of IBS. Several outcome measures and end points have been applied separately in this regard. We aimed to compare the ability of three outcome measures in reflecting changes in a treatment trial of IBS.

**Method:** Sixty-three adult IBS patients participated in a placebo-controlled trial of 10-wk cognitive-behavioral therapy. Patients completed the IBS-Quality of Life questionnaire (IBS-QOL), IBS-Symptom Severity Scale (IBS-SSS), Extra-intestinal Symptom Severity Scale (EISSS), and Hospital Anxiety and Depression Scale (HADS) before and after the intervention. After the intervention, patients responded to the IBS-Adequate Relied (IBS-AR) and IBS-Global Assessment of Improvement (IBS-GAI) instruments. Patients were categorized to responders and non-responders based on each of the IBS-AR, IBS-GAI, and >50 points reduction in IBS-SSS score. IBS-QOL, IBS-SSS, EISSS, and HADS scores were compared between the responders and non-responders.

**Results:** Forty-six patients (mean age 31.5±6.9 years, 82.6% female) completed the study. After the intervention, significant correlations were found between responder definitions results. Compared with IBS-AR and IBS-GAI, defining responders based on >50 points reduction in IBS-SSS was related to more reduction in IBS-SSS, EISSS, and HADS and to more increase in IBS-QOL scores. However, responder definition based on the IBS-SSS, but not other instruments, was influenced by baseline symptom severity.

**Conclusion:** In this treatment trial of IBS, defining responders based on >50 points reduction in IBS-SSS was more comprehensive in reflecting changes in symptoms severity, quality of life, and psychological status and we recommend it for treatment trials of IBS. However, further investigations with larger sample sizes are needed to find the best outcome measure and end point in this regard.

Send Date: 2009/09/30

**17.5 Functional gastrointestinal disorders (clinical - management) F-T-109**

**Translation and Cultural Adaptation of Irritable Bowel Syndrome-Quality of Life Questionnaire for Iranian Population**

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**Introduction:** Assessing quality of life of patients with Irritable Bowel Syndrome (IBS) is of great importance in clinical researches and practice. Previous attempts on validation of the IBS quality of life instruments for Iranian population had some methodological inadequacies. We aimed to cross-culturally adapt and validate the Persian version of the Irritable Bowel Syndrome-Quality of Life questionnaire (IBS-QOL-P) for Iranian IBS patients through a standard linguistic validation method.

**Method:** The IBS-QOL was translated into Persian and culturally adapted following the principles provided by the Translation and Cultural Adaptation working group. A sample of 109 IBS patients completed the IBS-QOL-P, IBS-Symptom Severity Scale (IBS-SSS), and Hospital Anxiety and Depression Scale (HADS). One-week retest was performed on a random sub-sample of 30 patients. Internal consistency and test-retest reliability were assessed using Cronbach’s alpha and interclass correlation coefficient (ICC), respectively. To analyze discriminant validity, the IBS-QOL-P and its subscales were correlated to IBS-SSS and HADS. Responsiveness to treatment was assessed in 42 IBS patients who underwent a 10-wk cognitive-behavioral therapy (CBT) trial. Change scores in the IBS-QOL-P were then correlated to changes in IBS-SSS and HADS scores.

**Results:** The internal consistency and test-retest reliability were acceptable for all of the IBS-QOL-P domains with Cronbach’s alpha coefficients and ICCs ranging from 0.68 to 0.90 and from 0.77 to 0.91, respectively. Discriminant validity was supported by the presence of correlations of the IBS-QOL-P total and subscales scores (except sexual domain) with IBS-SSS and HADS scores. The IBS-QOL-P was responsive to treatment as demonstrated by significant correlations between change scores in the IBS-QOL-P with changes in IBS-SSS and HADS scores after CBT trial.

**Conclusion:** The IBS-QOL-P appears to be a reliable instrument with sufficient psychometric requirements to assess the disease-specific HRQL and the effect of treatments on HRQL in Iranian IBS patients with Persian language.

Send Date: 2009/09/30

**17.5 Functional gastrointestinal disorders (clinical - management) F-T-110**

**The Role of Treatment Expectancy and Credibility in**
Outcome of Psychotherapy for Irritable Bowel Syndrome

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Introduction: Patients’ initial beliefs about the success of a given treatment are shown to affect final treatment outcome especially in the case of cognitive behavioral therapy (CBT). We aimed to evaluate the effect of treatment credibility and outcome expectancy on final outcomes in a trial of CBT for irritable bowel syndrome (IBS).

Method: A single-blind, placebo-controlled, randomized trial was conducted on 62 patients with IBS. Patients were randomly assigned into intervention and placebo groups and all of them received the standard medical care for IBS. Intervention group participated in 8 weekly group sessions (2 hours) of coping strategies training. Attention and symptom monitoring method was applied for the placebo group in which patients participated in 4 bi-weekly group sessions (90 minutes). Severity of symptoms, quality of life, and anxiety and depression were evaluated before and two weeks after the intervention using IBSSS, IBS-QOL, and HADS questionnaires, respectively. The Credibility/Expectancy Questionnaire was used for measurement of treatment credibility and expectancy before the intervention.

Results: From all, 24 patients in the intervention and 22 in the placebo group completed the study. The two groups were similar in demographic and baseline characteristics. Sixteen patients (54.1%) in the CBT and 2 (9%) in the placebo group were responders according to >50 points reduction in severity scores. Regression analysis showed that treatment expectancy but not credibility predicted response to treatment (P=0.011). Also, expectancy was moderately correlated to changes in severity and credibility was correlated to changes in quality of life scores (P=0.054, 0.020).

Conclusion: Treatment expectancy and credibility affect the final outcomes in psychological therapies of IBS. Further investigations with larger sample size are needed to clarify this issue.

Send Date: 2009/10/02

17.5 Functional gastrointestinal disorders (clinical - management) F-T-112

The Relationship the Dimensions of Alexithymia with Depression and Anxiety in Functional Gastrointestinal Disorders

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Introduction: The aim of this study was to examine the association between the dimensions of alexithymia including difficulty identifying feelings, difficulty describing feelings, and externally-oriented thinking with depression and anxiety in functional gastrointestinal disorders (FGID).

Method: This investigation is a descriptive-correlation study. In the present study, 129 (82 female and 47 male) patients with FGID who were referred to digestive clinic of the Noor hospital in city Isfahan in 1387 during 5 months were selected on the basis of inclusion criteria to study (18-60 years, education at least guidance school certificate, and diagnosis of FGID on the basis of ROME III criteria by gastroenterologist), and were studied with Toronto Alexithymia Scale, Hospital Anxiety and Depression Scale and Gastrointestinal Symptom Rating Scale. Data was analyzed using descriptive statistics, Multivariant variance analysis, Pearson’s correlation coefficient and Regression analysis.

Results: The dimensions of difficulty identifying feelings and difficulty describing feelings showed a significant positive correlation with depression, anxiety and severity of gastrointestinal symptoms in FGID, while there was not significant correlation between dimension of externally-oriented thinking with depression, anxiety and severity of gastrointestinal symptoms. Regression analysis showed dimension of difficulty identifying
feeling is predictor variance of depression, anxiety and severity of gastrointestinal symptoms.

**Conclusion:** The study indicates alexithymia and its dimensions of difficulty identifying feelings and difficulty describing feelings are associated with psychological symptoms and dimension of difficulty identifying feelings influences pathology of patients with FGID. On this basis, the role of alexithymia is important to understand the psychopathology of FGID and it must be considered as a effective factor in treatment process of patients with FGID.

Send Date : 2009/10/03

21.2 Endoscopy - Colon

**Propofol deep sedation or conscious sedation in colonoscopy?**

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**Introduction:** For performing a colonoscopy as a therapeutic & diagnostic process, short time, suitable & enough sedation is needed. In this study benefits & side effects of propofol will be evaluated in subanesthetic dosage for providing deep sedation during colonoscopy.

**Method:** In this cross sectional study 125 randomized patients were evaluated. Heart rate & blood pressure changes, apnea, oxygen desaturation, incidence of side effects during colonoscopy & their appropriate therapeutic intervention were evaluated. Data were analyzed with SPSS software & chi square test.

**Results:** We studied 62 men & 63 women in average age of 46.14±17.47 year.51% of patients experienced hypotension during process (P=0.02) and in 24.8% of all patients therapeutic intervention was needed (P=0.01). Bradycardia occurred in 14% of all patients on induction time, in 21% during maintaining of sedation, in 3.8% of this patients therapeutic intervention was needed (P=0.02). Prolonged apnea occurred in 32.8% of patients & in 89.3% of this patient was accompanied with oxygen desaturation. 12% of all patients experienced oxygen desaturation but no one needed for mechanical ventilation (p=0.001). Agitation occurred in 2% & 0.8% of all patients had cough (P=0.001) & 10.4% of all patients had only a mild pain on injection. No one remembered events during colonoscopy. All patient & colonoscopists declared their full satisfaction about sedation.

**Conclusion:** In this study propofol provided significant hemodynamic changes with no other life threatening side effects & so much benefits. This result shown that usage of propofol is suitable for induction & maintaining of deep sedation during colonoscopy accompanying with blood pressure monitoring. Use of lidocaine is not recommended for prevention of pain on injection.

Send Date : 2009/09/03

21.3 Endoscopy - ERCP

**Resolution of Benign Extrahepatic Biliary Long Stricture After Medical Therapy**

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**Introduction:** A wide spectrum of disorders can cause benign biliary strictures, including ischemic, inflammatory diseases, choledocholithiasis, pancreatitis, iatrogenic and noniatrogenic injury. Different techniques such as endoscopic stent placement or surgery may be done for these cases. We report an unusual case of inflammatory stricture of the distal portion of the common bile duct, who recovered with medical therapy.

**Method:** A 67-year-old man presented with infra-diaphragmatic and inter-hepatic loop abscesses associated with cholangitis and common bile duct stones.

**Results:** Surgery for those conditions was initially performed, along with common bile duct exploration, T-tube placement, cholecystectomy, and abscess drainage. After two weeks he was candidate for ERCP because of obstructive jaundice. CBD cannulation and dye injection showed T-tube in place and CBD dilation with numerous stones. Distal portion of CBD had a 25mm long stricture. Wide sphincterotomy, balloon dilation and balloon extraction of the stones were done, but T-tube was a barrier to stone extraction. CBD irrigation with 1000cc of normal saline was done through T-tube. Numerous

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**Magnesium Sulfate May Be Superior to Polyethylene Glycol in Bowel Preparations Prior to Total Colonoscopy: A Randomized Trail**

Moradi moghadam F, Saadatnia H, Hassanzadeh AA

Ghaem Hospital, Medical University of Mashhad

**Introduction:** There are many preparation regimens for bowel cleansing which none of them have been considered perfect by the endoscopists regarding their adverse effects. The aim of this study was to compare the effects of two bowel cleansing regimens on the subjects’ well being and electrolyte balance.

**Method:** A total number of 280 patients were randomly assigned to receive either Mg Sulfate (group A, N= 140) or Polyethylene Glycol (group B, N= 140) as a bowel preparation regimen for colonoscopy. Patients in group A received 120 ml of MgSO4 33%. Patients in group B received 2 L of PEG one day before and 2 L of PEG on the day of procedure. The quality of preparation was graded by an endoscopist who was blinded to the type of preparation. The simplicity of preparation method, taste of the preparation and their adverse effects were also recorded by an independent-blinded investigator, using a questionnaire before the colonoscopy. Blood samples were taken from subjects before and after colonoscopy.

**Results:** The quality of bowel cleansing was significantly higher in group A (P=0.039). There was no significant difference between 2 regimens regarding side effects and the simplicity of preparation method. However preparation taste was reported significantly worse in group A (p<0.001). Blood samples showed that Createnine and Urea decreased more in group A and Potassium decreased more in group B, but all were in normal range.

**Conclusion:** Considering our results, price and availability of Magnesium Sulfate, it is recommended for bowel preparation.

Send Date : 2009/09/05
small stones were extracted. After ERCP CA19-9 was more than 500 U/mL. Ten days later, second ERCP was performed to insert the metal stent, but the stricture in distal CBD was resolved and stent wasn’t placed. Aminotransferases, CA19-9 and ALP were normalized. Recovery of CBD stricture in this case might be due to control of inflammation. There was no recurrence of jaundice, laboratory abnormality or significant stricture 8 months later.

**Conclusion:** This report emphasizes biliary strictures might be inflammatory and reversible. There have been no reports of similar this case so far.

Send Date: 2009/09/16

21.4 Endosonography
F-T-116

**Assessment of Acute Pancreatitis Severity by Endoscopic Ultrasonography**
Sotoudehmanesh R1, Hooshyar A1, Kolahdoozan Sh1, Zeinali F1, Shahraeeni Sh1, Keshtkar A1
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2 Golestan Research Center of Gastroenterology and Hepatology, Golestan University of Medical Sciences

**Introduction:** Endoscopic ultrasonography (EUS) is a useful modality to diagnose causes of pancreatitis. Role of EUS for prediction of pancreatitis severity has not been studied.

**Method:** The aim of this study was to identify the utility of EUS in determining severity of acute pancreatitis. All patients diagnosed as pancreatitis consecutively underwent EUS in the second day of their admission. Atlanta criteria were used as the severity index of pancreatitis.

**Results:** During 11 months 85 patients (53 female and 32 male with mean age of 54.9±18.0) are enrolled in the study. According to Atlanta criteria, pancreatitis was mild in 54 (63.5%) and severe in 31 (36.50%) patients. The presence of peripancreatic edema in EUS study correlated with the severity of acute pancreatitis in Atlanta criteria.

**Conclusion:** EUS may be a new useful imaging modality for prediction of severity of acute pancreatitis and have prognostic significance in early phase of acute pancreatitis.

Send Date: 2009/09/27

21.4 Endosonography
F-T-117

**Assessment of Acute Pancreatitis Severity by Endoscopic Ultrasonography**
Sotoudehmanesh R1, Hooshyar A1, Kolahdoozan Sh1, Zeinali F1, Shahraeeni Sh1, Keshtkar A1
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2 Golestan Research Center of Gastroenterology and Hepatology, Golestan University of Medical Sciences

**Introduction:** The issue of incidental findings in medicine gains attention due to rapid progress in powerful diagnostic technologies and an aging population. We performed a prospective analysis of the frequency and clinical importance of incidental findings on endoscopic ultrasonography (EUS) of referred patients to EUS unit of our tertiary center hospital.

**Method:** From May 2008 to May 2009, 552 patients who referred for upper EUS evaluation (mean age 53.2± 16.6 years; 52.5% males, 47.5% females) were consecutively enrolled in the study using a radial EUS instrument.

**Results:** Forty four (8%) of patients (mean age 61±16; 23 males, 21 females) had a total of 48 incidental findings (IF’s). Of these, 24 abnormalities in 22 patients (4%) were of high clinical significance. The frequency of incidental findings were higher in older patients (P=0.001). The most frequent IF’s were gallstones (n=22). Significant IF’s include pancreatic mass (n=6), subepithelial lesions (n=6), pancreatic cyst (n=3), gallbladder polyp (n=3), visceral artery aneurysm (n=2), mediastinal lymphadenopathy (n=2), ascites (n=2) and liver mass (n=1). In 33 (75%) of patients with IF’s, CT scan and/or transabdominal ultrasonography had been performed before EUS evaluation which had not been able to detect a total of 37 IF’s. Follow-up results were available in 40% of significant IF’s. Both cases of visceral artery aneurysms (in celiac artery and splenic artery) were confirmed on CT angiography and surgery and one case of mediastinal lymphadenopathy was diagnosed as tuberculosis after EUS-FNA.

**Conclusion:** To our knowledge, the present study is the first systematic investigation of incidental findings of upper GI tract in EUS. IF’s on EUS are not uncommon in clinical practice and might be a clue to significant pathology. Further research would be helpful to clarify the practical, ethical and financial implications of incidental findings on EUS.
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گوارش
نشریه علمی انجمن متخصصین گوارش و کبد ایران
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ارگمن متخصصین گوارش و کبد ایران
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