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*In The name of God*

Abstract Submitted for  
**Iranian Congress of Gastroenterology and Hepatology - ICGH 2011**  
*November 28-30, 2012*

## **Contents**

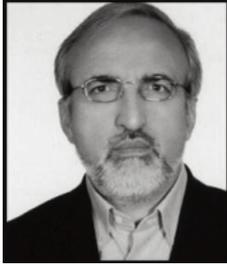
### *ICGH 2012 Committees*

• <b>Executive Committee</b> .....	<b>3</b>
• <b>Scientific Committee</b> .....	<b>4</b>
• <b>Sponsor Societies</b> .....	<b>5</b>
• <b>Abstracts Categories</b> .....	<b>6</b>

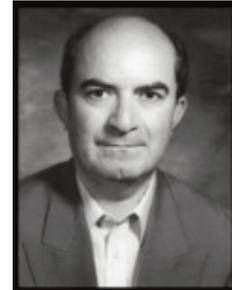
<i>Abstracts of the ICGH 2012</i> .....	<b>7-87</b>
---	-------------

• <b>Author Index</b> .....	<b>88</b>
-----------------------------	-----------

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**Schedule of Abstracts Presentation - ICGH 2012**

**Day 1: Wednesday, November 28/Azar 8**

W-F-001 to W-F-050..... 7-32

**Day 2: Thursday, November 29/Azar 9**

T-S-051 to T-S-99..... 32-59

**Day 3: Firday, November 30/Azar 10**

F-T-100 to F-T-148..... 60-87

**Abstract Categories**

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology..... 7-18  
 1.2 Management strategies..... 18-19  
 1.3 Evidence-based clinical practice..... 19-20  
 1.4 Outcome studies..... 21-22

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.1 Cell/molecular biology/pathology..... 23  
 2.2 Dyspepsia ..... 24-25  
 2.3 Barretts..... 26  
 2.4 Reflux disease – pathogenesis..... 26  
 2.5 Reflux disease – diagnosis..... 27  
 2.6 Reflux disease – treatment..... 27  
 2.7 Reflux disease – complications..... 28  
 2.8 Esophageal malignant disease..... 29  
 2.9 Other esophageal disorders ..... 29-31  
 2.12 Acid peptic disease (includes NSAIDS - but NOT H.pylori)-diagnosis and treatment..... 31  
 2.13 Gastroduodenal malignancies..... 32-35

Category: 3. H.PYLORI

3.1 Epidemiology/natural history..... 35-36  
 3.2 Molecular biology/genetics/pathology..... 36  
 3.3 Pathogenesis: host factors/histo-pathology..... 37  
 3.4 Diagnosis..... 38-39  
 3.5 Management strategies..... 39-42

Category: 4. INTESTINAL

4.2 Coeliac disease/malabsorption syndromes and food enteropathies..... 43-48

Category: 5. IBD

5.2 Etiology/epidemiology..... 48-50  
 5.3 Genetics..... 50-51

Category: 6. COLONIC AND ANORECTAL DISORDERS

6.1 Malignant disease – pathogenesis..... 51-53  
 6.2 Malignant disease - diagnosis/histopathology..... 53  
 6.3 Malignant disease – management..... 54  
 6.4 Other colonic and anorectal disorders..... 54-56

Category: 7. LIVER

7.2 Nutrition - metabolism – pharmacology..... 57-59  
 7.3 Metabolic/genetic disorders..... 59-61  
 7.6 Cirrhosis and complications: clinical aspects..... 61-63  
 7.7 Viral hepatitis: basic aspects..... 63-65  
 7.8 Viral hepatitis B: clinical aspects..... 65-66  
 7.9 Viral hepatitis C: clinical aspects..... 67-70  
 7.10 Immunology - autoimmune liver disease..... 71  
 7.13 Miscellaneous..... 71

Category: 8. BILIARY

8-2 Gallstones..... 72-73  
 8.3 Malignant hepato-biliary diseases..... 74

Category: 9. PANCREAS

9.5 Malignant disease and endocrine tumors of the pancreas..... 74

Category: 10. NUTRITION

10.2 Nutrients and gut function..... 75

Category: 12. SURGERY

12.1 Esophagus / stomach / duodenum..... 75

Category: 13. ONCOLOGY-BASIC

13.2 Molecular biology/genetics/pathology..... 76-78

Category: 14. ONCOLOGY-CLINICAL

14.1 Malignant disease - epidemiology - screening and prevention..... 78-81

Category: 15. NERVE GUT AND MOTILITY

15.5 Functional gastrointestinal disorders (clinical - management)..... 81-83

Category: 16. IMMUNOLOGY/MICROBIOLOGY

16.3 Gastrointestinal infections..... 84

Category: 18. GASTROINTESTINAL BLEEDING..... 84

Category: 19. ENDOSCOPY AND IMAGING

19.1 Endoscopy - Upper GI..... 85-86  
 19.3 Endoscopy – ERCP..... 86-87

Code: 2293

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-001

**ارزیابی سطح ویتامین D در کودکان مبتلا به IBD**

فاطمه فرهمند\*

بیمارستان مرکز طبی کودکان، دانشگاه تهران

زمینه و هدف: ویتامین D نقش تنظیم کننده سیستم ایمنی داشته و در جریان بیماری التهابی روده IBD نقش تنظیم و کنترل التهاب را نیز دارد. میزان کمبود ویتامین D در کودکان در مناطق مختلف متفاوت است و به مسایل مختلف بستگی دارد. خصوصاً در کودکانی که IBD هم داشته باشند مقادیر سرمی ویتامین D کمتر از معمول می باشد. هدف از این مطالعه تعیین Prevalence و ریسک فاکتورهای لازم جهت کمبود ویتامین D در کودکان مبتلا به IBD است.

روش بررسی: در این مطالعه در ۳۵ کودک مبتلا به IBD، (مراجعه کننده به مرکز طبی کودکان) سطح سرمی ۲۵(OH) vit D<sub>3</sub> طی سالهای (۱۳۹۰، ۱۳۸۹) اندازه گیری شد. اطلاعات دموگرافیک، نوع IBD و مدت زمان بیماری، فعالیت بیماری و مصرف داروهای مورد نظر، مارکهای التهابی انجام شده قبلی ثبت شد. کمبود ویتامین D وقتی گفته می شد که سطح سرمی Vit D طبق زیر باشد سطح سرمی ویتامین D بر حسب ng/ml است.

Deficient &lt;10, Insufficient: 10-29, Sufficient: 30-100

Severely deficient &lt;5 Moderately deficient (10-15)

یافته ها: از کل ۳۵ نفر ۱۵ نفر مذکر (۴۲/۸۶٪) و ۲۰ نفر مونث (۵۷/۱۴٪) بود. فقط ۲ کودک (۵/۷۱٪) سطح سرمی بالاتر از نرمال داشت. در ۱۲ کودک (۳۴/۲۸٪) سطح سرمی ویتامین D بسیار پایین بود. Severely deficient در ۱۸ نفر (۵۱/۴۲٪) به طور متوسط پایین بود. Deficient moderately و ۳ نفر (۸/۵۷٪) ناکافی بود. In sufficient. هیچ ارتباطی بین سطح vit D و نوع بیماری و شدت آن در کودکان و نوع مصرف دارو وجود نداشت.

نتیجه گیری: تعداد زیادی از کودکان مبتلا به IBD دچار کمبود ویتامین D هستند سطح vit D باید در کودکان مبتلا به IBD مرتب مونیتور شود. استفاده از ویتامین D در این کودکان توصیه می شود.

Send Date: 2012/07/04

Code: 2314

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-002

**Distribution and risk factors of****Hepatitis-B in the General****Population of Qom: A Population-based Study**

Mohammad-Reza Ghadir<sup>1\*</sup>, Akram Heidari<sup>1</sup>,  
Hoseinali Habibinejad<sup>1</sup>, Abolfazl Iranikhah<sup>1</sup>,

Seyed Saeed Sarkeshikian<sup>1</sup>, Seyed- Moayed Alavian<sup>2</sup><sup>1</sup> Shahid Beheshti Hospital, Qom University of Medical Sciences, Qom, Iran<sup>2</sup> Gastroenterology and hepatology Section, Baghiatallah University of Medical Sciences, Tehran, Iran

**Introduction:** Hepatitis B is the most common chronic viral infection of the human being and the most common cause of death in viral hepatitis. It is estimated that out of the 350 million carriers of HBV, 40 million would die of liver cirrhosis and 60 million of hepatocellular carcinoma. As 70-80% of chronic hepatitis cases are caused by HBV in Iran, this virus alone is considered as the most important cause of liver diseases and the major cause of mortality arising from viral hepatitis cases in Iran.

Since the Qom Province, Iran, has special features and a heterogeneous population, we planned this study to determine the prevalence of hepatitis B in the general population of the province. It seems that the results of this study would provide new data on the disease in Qom, thus enabling the health officials to adopt better decisions on both preventing the complications of and treating the disease.

**Method:** The present study is a cross-sectional study. A total of 3,690 samples were collected out of 7 rural clusters and 116 urban clusters. Ten teams, each consisting of 2 trained members, were assigned to conduct sampling and filling the questionnaires. The data were analyzed using the SPSS software.

**Results:** The prevalence rate of hepatitis B infection in Qom Province was 1.3%. The mean age of the patients with hepatitis B was 44.17 years. The prevalence of hepatitis B was 1.6% in men and 1.1% in women. Moreover, the prevalence of hepatitis B was positively correlated with the factors of age, tattooing and literacy level.

**Conclusion:** The prevalence rate of hepatitis B in Qom is medium. It is possible to prevent the disease by increasing public awareness. Further investigations on clinical presentations and determining the genotype of the virus are suggested.

Send Date: 2012/07/27

Code: 2325

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-003

### Prevalence of chronic constipation and associated factors in Kermanian adult population

Mohammad Javad Zahedi<sup>1</sup>, Sodaif Darvish Moghadam<sup>1</sup>, Sayyed mahdi Sayyed Mirzaei<sup>1</sup>, Mahdi Hayat Bakhsh Abasi<sup>1</sup>, Sara Shafiei pour<sup>1\*</sup>

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**Introduction:** Chronic constipation is a common problem in the world that have negative effect on quality of life. Because of the impact of the psychological and cultural factors on the function of bowel tract and the vast variety of ethnic and habit in Iranian people, the present study describes the occurrence of the constipation, and associated factors in Kermanian population.

**Method:** A cross-sectional study was conducted in Kerman from March 2009 to October 2010, including 2191 adult persons who were selected randomly and interviewed face to face by a validated questionnaires base on Rome III criteria. demographic, habit and personality factors were assessed.

**Results:** Of the 2191 participants, 9.4% had chronic constipation according to Rome III criteria. constipation was more prevalent in female, older, low physical activity, anxious, depressed and opium addicted individuals (P value <0.001). but cigarette smoking and amount of fiber in diet not significantly different between constipated and non constipated groups (P value =0.2, P value >0.05 respectively).

In the first degree of constipated group prevalence of colon cancer and inflammatory bowel disease decreased comparing to the first degree of non constipated group (2.4% versus 9.3% and 0% versus 8.9%, respectively) but was not statistically significant difference between these results (P value =0.5, P value =0.02, respectively).

**Conclusion:** In our survey, prevalence of chronic constipation in Kerman was more than the other studies that were performed in general population of Iran but was lower than western countries. we suggest cohort study for finding association among constipation with colorectal cancer and inflammatory bowel disease.

Send Date : 2012/08/06

Code: 2338

Category: 1- CLINICAL PRACTICE

### 1.1 Epidemiology

W-F-004

#### Causes and risk factors for upper gastrointestinal bleeding in Khorram Abad in 1390

Koorush Ghanadi<sup>1\*</sup>, Khatereh Anbari<sup>2</sup>, Majid Abdollahian<sup>1</sup>, Abolfazl Zendedel<sup>1</sup>

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<sup>2</sup>community medicine department, Lorestan university

**Introduction:** Acute upper gastrointestinal bleeding is a common medical emergency and is known as one of the main causes of mortality and morbidity.

**Method:** in this cross sectional study, all patients with Acute upper gastrointestinal bleeding living in the Khorramabad city and its suburbs, whose referred to Shohada Ashayer hospital, were evaluate.

control group were selected through consecutive sampling from patients and their relative who were referred to outpatient clinics of Shohada hospital, provided no history of heart disease, gastrointestinal and rheumatologic disease and discopathies and matched with patient group as age and sex. endoscopy was used for diagnosing the causes of acute bleeding of the upper digestive system. data gathering tools in this study was questionnaire included demographic variable, clinical features and endoscopy findings in this patient. fisher's exact test and chi-square was used for data analysis.

**Results:** Of 62 patients, 32.3% were female and 67.7% were male, with a mean age of 54.5 ± 12.1 years old. The most frequent gastrointestinal bleeding was seen in 69-79 years age group. Among all the patients, 29% of patient had a history of regular NSAIDs consumption, out of whom 76.5% consumed ASA.

history of regular NSAID used in the control group was 6%. odds ratio for gastrointestinal bleeding in regular NSAIDs consumption was 3.8 (CI=1.3-4.8). significant association was not seen between regular consumption of cigarettes and upper gastrointestinal bleeding. Hematemesis (62.9%) was the most common primary presentation. the most common prevalent underlying disease predisposing bleeding in this patient was liver cirrhosis (61.5%). The main causes of bleeding were digestive ulcers (42.7%), of

which duodenum ulcers had the highest prevalence (27.8%). more frequent cause of upper gastrointestinal bleeding ,in male (26.8%) and female(30%) was duodenal ulcers . the most common cause of upper gastrointestinal bleeding ,in patient under 40 years (35%) and over 60 years (36%) was duodenal ulcer and in 40-60 age group (43.8%)was esophageal varices.

**Conclusion:** provide preventive and treatment strategies for patient can prevent or reduce the incidence of this disease and its complications.

Send Date : 2012/08/12

Code: 2372

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-005

**Prevalence of gastroesophageal reflux disease in a population based study and the related risk factors**

Sodaif Darvish Moghaddam<sup>1\*</sup>, Mohammad Javad

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**Introduction:** Gasrtoesophageal reflux disease (GERD) is common around the world. We studied whole parameters that are supposed to be the risk factors of this chronic disorder. The aim of this study was to detect the prevalence of GERD and related risk factors in an urban area; Kerman, Iran.

**Method:** This population- based cross sectional study was conducted in a one stage randomized clustered sample of adult inhabitants in Kerman city in 2010-2011. A total of 2275 subjects with age range of 15-75 years old were enrolled. Data collection and physical examination was performed by a trained physician and nurse by a face to face interview. GERD was defined as at least weekly heart burn and / or acid regurgitation during the past year.

Association of GERD with demographic features, medical conditions, diet and habits were analyzed.

**Results:** A total of 2189 subject were analyzed. Mean age was  $33.45 \pm 0.07$  years. The prevalence of GERD was 29.3% that was related to age and gender. Among the demographic features elderly, female gender, lower educational level, Housekeeping and Retirement were associated with GERD. Higher BMI, waist circumference, hip circumference were anthropometric measures that showed a significant correlation with GERD ( $p=0.2$ ). Hyperlipidemia, cardiovascular diseases, metabolic syndrome, drug Consumption, cigarette smoking, opium addiction, light and severe physical activity, depression and anxiety were also significantly correlated with GERD ( $p<0.0001- 0.02$ ).

**Conclusion:** GERD was common among inhabitants in this urban area. It seems that multiple variables including the demographic features and life style affects the prevalence of GERD.

Send Date : 2012/08/30

Code : 2406

Category : 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-006

**Incidence of Colorectal polyps and premalignant Lesions in Asymptomatic people Referring to the Check- up Clinic of Razavi Hospital from 2006- 2011**

sarah Tayebi<sup>1\*</sup>, Ali Abdolhosseini<sup>1</sup>, Maryam Razavi<sup>1</sup>

<sup>1</sup>Razavi Hospital

**Introduction:** Colorectal cancer (CRC) is the third most common cause of cancer death worldwide. prevalence of CRC and colonic polyps varies in different ethnics and populations. The preferred method for screening of CRC and colonic polyps among asymptomatic people is colonoscopy. The aim of this study is to evaluate the results of colonoscopy among asymptomatic people referring to Razavi Hospital check up clinic, during 2006-2011 by a cross-sectional study.

**Method:** In this study the demographic and colonoscopy results of 212 asymptomatic people who have been referred to the Check-Up Clinic of Razavi Hospital from 2006 till 2011, were evaluated and then analyzed by SPSS.

**Results:** The mean age of the people was 54.72,

included 78.3% males and 21.7% females. Pathological lesions were more common in males (89.5%) than females (10.5%). Considering risk assessment for CRC, 86.8% of them were estimated in the average risk group and 13.2% in the increased risk group. Among these people, the incidence of polyp was 29.7%. It was revealed that sigmoid colon (34.9%) and rectum (15.9%) were the most common affected sites. Due to the pathological analysis, 74.6% of the subjects were reported with low grade adenocarcinoma; 11.11% with hyperplastic polyp; 4.76% with high grade adenocarcinoma and 7.95% with other pathological colorectal lesions.

No significant relation was found between the type of diet and risk of colon cancer as well as incidence of polyp. Also, No significant relation was observed between the intake of calcium, folic acid, ASA, alcohol consumption, smoking, BMI, and pathological colorectal lesion.

**Conclusion:** Our findings support that, the incidence of polyp was 29.7% among our target group and prevalence of colorectal lesions was higher in men than women. It was found that the intake of calcium, folic acid and ASA has not protective role in asymptomatic people. Further studies should be done in this area.

Send Date : 2012/09/04

Code: 2422

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-007

#### **Anatomical distribution and demographic data of colorectal cancer from 2006-2012 in North East of Iran**

m Farzaneh far<sup>1</sup>, Kamran Ghaffarzadehgan<sup>2</sup>,  
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**Introduction:** Colorectal cancer (CC) is the fourth most common cancer in the world. The incidence of colorectal cancer is being increased in Iran and it seems that changing of life style is the main reason of this event. Statistics show that in Iran CC is the fourth cause of cancer and third cause of death among other types of cancers. This study was designed to determine a new data of anatomical distribution and demographic data of CC in North East of Iran.

**Method:** records of patients diagnosed with primary colorectal cancer from 2006-2012 in Mashhad Qaem hospital were reviewed for demographic data and anatomical location of tumor. results were analyzed by SPSS version 18.

**Results:** Participants (n=397) were 230 men (57.9%) and 167 women (42.1%) with a mean age of 59.42±17.463 and 56.97±15.751 years, respectively. 18 patients (4.5%) had caecum involvement, 40 patients (10.1%) with sigmoid and 2 patients (0.5%) descending colon involvement, 1 of them (0.3%) suffered from transverse colon and 1 case (0.3%) ascending colon and 8 patients (2%) appendix cancer. 326 cases (82.1%) were unspecified and 1 patient (0.3%) had overlapping lesions of colon.

**Conclusion:** colorectal cancer involves descending colon and sigmoid colon the most which is the same as other studies. data shows that Men in their 50s are the main victims of this disease.

Therefore, screening of colorectal cancer in middle age is an efficient strategy to early diagnosis of this lethal disease.

Send Date : 2012/09/05

Code: 2423

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-008

**Prevalence and the demographic risk factors of bloating and functional bloating in Isfahan, Iran**

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**Introduction:** Bloating is an unpleasant but extremely common gastrointestinal symptom, which is experienced by a large number of people at some stage in their lives and imposes great costs on the community. Due to the lack of data on the prevalence of bloating, the current survey among healthy volunteers was conducted to determine the bloating and functional bloating prevalence.

**Method:** This study is a part of the Study on the Epidemiology of Psychological, Alimentary Health and Nutrition (SEPAHAN), conducted in April-May 2010 on an adult population in Isfahan, Iran.

Self-administrated questionnaires including questions on demographic factors, symptom of bloating and functional bloating criteria according to Rome III questionnaire were distributed.

**Results:** A total of 4763 participants (44.2% male and 55.8% female) with a mean age of 36.58±8.093 completed the questionnaires. Nearly half of subjects (2390) experienced bloating, while 940 (19.7%) suffered from functional bloating. The prevalence of bloating was 44.2% (931) among men and 54.9% (1459) among women, which was significantly different (P-value<0.0001, OR=1.537 [95% confidence interval: 1.370 to 1.724]), but the difference between prevalence of functional bloating in men and women was not statistically significant. The relationship between marital status and prevalence of bloating is only considered as partially significant (51.0% in married, versus 47.2% in single subjects, P-value=0.07). Education level and age did not have a significant role in the prevalence of bloating or functional bloating.

**Conclusion:** The present study adds to a growing

body of literature that suggests bloating as a very common symptom in general population. This may lead to serious impacts on health behavior of the community in general. Despite the prevalence of this disorder, little knowledge is known about its pathophysiology and treatment. Thus, further research on underlying mechanisms and effective treatments is suggested.

Send Date : 2012/09/05

Code: 2424

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-009

**The study on the epidemiology of psychological, alimentary health and nutrition (SEPAHAN):**

**Overview of methodology**

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**Introduction:** Functional gastrointestinal disorders (FGIDs) are common worldwide and cause considerable social and economic burden. The aims of SEPAHAN project were to 1) assess the prevalence of different FGIDs within an Iranian population.

**Method:** It was a cross-sectional study among staff of Isfahan University of Medical Sciences and Health Sciences, Isfahan

**Results:** In the first and second phases of the study, 8691 and 6239 adults were recruited, respectively. The complete information of 4763 subjects has been

provided after linking the questionnaires from both phases.

**Conclusion:** SEPAHAN project is a novel study that provides the opportunity of investigating epidemiological aspects of FGIDs and their relationship with different lifestyle and psychological factors.

Send Date : 2012/09/05

Code: 2426

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-010

### Most common diseases in patients referring to GI clinics in Yazd

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**Introduction:** Gastrointestinal and liver diseases are the most common causes of morbidity and one of common causes of death in Iran.

**Method:** This is a cross-sectional descriptive study conducted on 400 patients who referred to GI clinics in Yazd in 1389.

**Results:** According to this study the most common diseases in GI clinics were respectively as follows: Gastroesophageal Reflux (22.5%), irritated bowel syndrome (17.8%), non ulcer dyspepsia (14.3%) and other diseases (13.8%) and ulcerative colitis (14.5%).

ردیف	نام بیماری	تعداد	درصد	ردیف	نام بیماری	تعداد	درصد
۱	بیماری ریفلکس معده به مری	۹۰	۲۲/۵	۱۵	سپروز کبدی	۴	۱
۲	سندرم روده تحریک پذیر	۷۱	۱۷/۸	۱۶	GI bleeding	۳	۰/۸
۳	Non ulcer dyspepsia	۵۷	۱۴/۴	۱۷	سنگ مجاری صفراوی	۳	۰/۸
۴	سلیر بیماری های غیرگوارشی	۵۵	۱۳/۸	۱۸	کانسر پانکراس	۲	۰/۵
۵	کولیت اولسراتیو	۱۸	۴/۵	۱۹	سپروز صفراوی اولیه	۲	۰/۵
۶	Peptic ulcer disease	۱۶	۴	۲۰	بیماری های سایکوسوماتیک	۱	۰/۳
۷	گاستریت	۱۳	۳/۳	۲۱	پانکراتیت	۱	۰/۳
۸	فیشر آنال	۱۳	۳/۳	۲۲	آپاندیسیت	۱	۰/۳
۹	گاستروانتریت	۱۲	۳	۲۳	انسداد حاد روده	۱	۰/۳
۱۰	هیپاتیت B	۱۱	۸/۲	۲۴	بیماری کرون	۱	۰/۳
۱۱	هموروئید	۸	۲	۲۵	کانسر مری	۱	۰/۳
۱۲	کوله سیستیت	۵	۱/۳	۲۶	کانسر معده	۱	۰/۳
۱۳	کانسر کولون	۵	۱/۳	۲۷	هیپاتیت C	۱	۰/۳
۱۴	انسپروزی سیلیاک	۴	۱	۲۸	جمع	۴۰۰	۱۰۰

**Conclusion:** The study results revealed that acid pepsin diseases and irritated bowel syndrome

increase in were the most common GI disease that can be on result of prevalence of H.pylori

Send Date: 2012/09/06

Code: 2492

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-011

### Prevalence of hepatitis C virus infection in Amol, Apopulation based study

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**Introduction:** The prevalence of hepatitis C infection in Iran is considered to be between 0.13% - 0.16% but this rate is not homogenous in all parts of this country. The aim of this survey was to determine the prevalence of HCV infection in general population of north of Iran .

**Method:** We randomly recruited 6145 individuals from urban and rural areas of the city of Amol in both gender and different ages. Anti hepatitis C antibody was tested by a third generation ELIZA .The positive results were confirmed by a recombinant immunoblot assay (RIBA) and quantitative HCV-RNA- Polymerase chain reaction (PCR).

Risk factors were recorded and bivariant and multivariate analysis was done.

**Results:** From all participants, 51.7% (3507) were male, with mean age of 42.70±17.10 .ELISA anti-HCV antibody positive was found in 12 individuals in which 5 subjects were RIBA positive and 3 subjects ,all of them were male were PCR positive. The prevalent of HCV was predominant among male than female. In multivariate analysis the unsterile punctuation and history of infection in family member were associated with HCV infection.

**Conclusion:** We revealed that the rate of HCV true infection in this region is lower than previous reports of Iran . It probably due to lower prevalence of high -risk behaviors in this part of Iran . However we

have to consider the different routs of transmission of infection.

Send Date: 2012/09/30

Code: 2493

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-012

### Epidemiology of viral hepatitis B in North of Iran ; A population based study in Amol city

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Hossein Kayvani<sup>1</sup>, Hossein Ajdarkosh<sup>1</sup>, Mansooreh  
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**Introduction:** Viral hepatitis is a major health problem in different countries. The change of transmission pattern of hepatitis B make a necessary to reevaluating the prevalence and risk factors of this infection.

**Method:** We conducted a Cluster-random sampling population based cohort study in Amol and its surrounded areas .In this projects we recruited 6145 subjects from urban and rural areas. The health centers were assigned for case selection and randomization was done base on Health Center population. A questionnaire including demographic and anthropometrics data were completed. A blood sample ten milliliter (10 ml) was taken from each study subject that checked for hepatitis B markers.

**Results:** Of 6145 participants, 51.7% (3507) were male and 42.9% were female with mean age of 42.70±17.10 .About half of them from urban and rural areas (3138 vs. 3507).The prevalence of HBsAg, HBsAb, HBcAb was 63 (1%), 1711(27.9%), and 644 (10.5%) respectively. Among different risk factors the male sex (P=0.002) and aging (P=0.04) have correlation with HBsAg by bivariant analysis and in multivariate analysis the history of prison has a predictive effect on positivity of HBsAg(OR=2.49). However the history of IV drug abuse, traditional phlebotomy, and history of hepatitis have correlation with HBcAB by OR of 2.58,1.32 and 132 respectively.

**Conclusion:** Our result revealed a lower HBsAg rate in Amol compared with other geographic areas in Iran. This observation directly correlated with

nationwide vaccination against hepatitis B during the last two decades and also patient education. But the rate of HBcAb positive was 10.5% which revealed the exposure of hepatitis B infection. The rate of hepatitis B was higher among male and in urban than female and rural area.

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Code: 2500

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-013

بررسی فراوانی شیوع HCVAb مثبت در اهدا کنندگان خون مراجعه کننده به

سازمان انتقال خون شهرستان خرم آباد در سالهای ۱۳۷۸-۱۳۸۸

دکتر مجید عبدالهیان<sup>۱\*</sup>، دکتر مزگان کاویانی<sup>۱</sup>،

دکتر کوروش قنادی<sup>۱</sup>، دکتر فائزه گل نوری<sup>۲</sup>

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زمینه و هدف: هیپاتیت C از علل اصلی بروز هیپاتیت پس از انتقال خون است، همچنین یکی از مهمترین عوامل بیماریهای مزمن کبدی است که میتوانند به سیروز کبدی پیشرفته و سرطان کبد منجر شود. این مطالعه به منظور تعیین شیوع HCVAb در میان اهدا کنندگان خون مراجعه کننده به سازمان انتقال خون خرم آباد در سالهای ۱۳۸۷-۱۳۸۸ انجام شده است.

روش بررسی: جامعه مورد مطالعه ۲۶۱۶۷ نفر اهدا کننده خون مراجعه کننده به سازمان انتقال خون خرم آباد در سالهای ۱۳۸۷ و ۱۳۸۸ بود. آزمون ELISA برای تشخیص اولیه و برای تایید موارد مثبت از WESTERN BLOT استفاده شد. یافته ها: شیوع کلی HCVAB در ۰/۱ درصد افراد بدست آمد و این شیوع در گروههای سنی ۳۹-۳۰ سال و ۴۹-۴۰ سال در میان افراد با سطح تحصیلات سیکل و کمتر و در میان مشاغل آزاد بیشتر بود ولی ارتباط واضحی میان وضعیت تاهل، جنسیت، و محل سکونت با شیوع HCVAb بدست نیامد.

نتیجه گیری: براساس این مطالعه شیوع HCVAb مثبت نسبت به دهه گذشته در خرم آباد کاهش داشته است و نسبت به شیوع آن در استانهای مختلف کشور و برخی کشورهای منطقه نیز کمتر است که در اثر پیشگیری در گروههای پرخطر و نیز غربالگری خونهای اهدایی از این نظر است.

Send Date : 2012/09/30

Code: 2501

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-014

### Association between meat and fish consumption and cooking method and esophageal squamous cell carcinoma

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**Introduction:** High temperature cooking such as frying has been shown to be associated with increased risk of cancer in different organs, most likely due to the formation of carcinogenic particles such as heterocyclic amines.

**Method:** Using data from the Golestan case-control study, conducted between 2003 and 2007 in a high-risk region for esophageal squamous cell carcinoma (ESCC), we sought to investigate the association between meat consumption and preparation and ESCC. Information on food preparation methods and dietary habits were gathered from 300 cases and 571 controls individually matched for age and sex using a structured questionnaire and a semi-quantitative food frequency questionnaire, respectively. Multivariate conditional logistic regression was used to estimate odds ratios (OR) adjusted for other known risk factors.

**Results:** More than 95% of the participants reported using meat, most of which was red meat. Being in higher quartiles of red meat intake was associated with higher OR for ESCC (P value for trend < 0.001). While consuming fish decreased the odds of ESCC by 3.4 (95% confidence interval (CI) 1.9-5.7), chicken conuse had a no significant association with ESCC. Among meat users, OR's for frying meat (red or white) and fish were 2.5 (1.1-4.8) and 2.4 (1.3-4.5), respectively.

**Conclusion:** Our results suggest a role for frying meat or fish in ESCC carcinogeneity. Moreover it shows that while red meat intake is probably associated with an increased risk of ESCC, fish intake may reduce this risk.

Send Date : 2012/09/30

Code: 2504

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-015

**Reproductive factors and risk of esophageal squamous cell carcinoma in northern Iran- A case-control study in a high risk area and literature review**

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**Introduction:** Several epidemiologic studies have suggested an inverse association between female reproductive factors and risk of esophageal squamous cell carcinoma (ESCC), but the evidence is not conclusive. We investigated the association of the number of pregnancies, live-births, and miscarriages/stillbirths in women and of the number of children in both sexes with ESCC risk in Golestan Province, a high-risk area in Iran.

**Method:** Data from 297 histopathologically confirmed ESCC cases (149 women) and 568 controls (290 women) individually matched to cases for age, sex, and neighborhood of residence were included in this analysis. Conditional logistic regression was used to calculate odds ratios (ORs) and corresponding 95% confidence intervals (CIs).

**Results:** The average number of live-births and miscarriages/stillbirths among controls was 8.2 and 0.8, respectively. Women with 6 or more live-births were at approximately one-third the risk of ESCC as those with 0-3 live-births; the OR (95% CI) for having 6-7 live-births was 0.33 (0.12-0.92). In

contrast, the number of miscarriages/stillbirths was associated with an increase in ESCC risk. The OR (95% CI) for  $\geq 3$ , versus no, miscarriages/stillbirths was 4.43 (2.11-9.33).

**Conclusion:** In contrast to men, the number of children in women was suggestive an inverse association with ESCC, although this association was not statistically significant. Findings of this study support the influence of female hormonal factors on ESCC risk. However, further epidemiological and mechanistic studies in order to provide conclusive evidence of a causal association are warranted.

Send Date: 2012/09/30

Code: 2506

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-016

#### **Hematocrit and mortality, a U-shaped relationship – the Golestan Cohort Study**

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**Introduction:** Only a limited number of studies have investigated the correlation between hematocrit (HCT) and mortality in the general population, and few of those studies have had data on the full range of low and high HCT levels.

**Method:** 49,983 adult participants in the Golestan Cohort Study, Iran, with a large spectrum of HCT values, among whom 2262 deaths were reported during a mean follow-up of 5 years.

**Results:** There was a U-shaped relationship between categories of HCT and mortality in both sexes: both low and high levels of HCT were associated with increased overall mortality and mortality from cardiovascular disease and cancer. The U-shaped relationship persisted in sensitivity analyses, such as: restricting the analyses to non-smokers; excluding deaths due to accidents and other external causes as well as deaths in those with self-reported ischemic heart disease at the baseline interview; and excluding the first two years of follow-up.

**Conclusion:** Low and high HCT levels are associated with increased mortality in the general population. Results of this study can be of particular importance for other low- and middle-income countries, where a substantial proportion of the population lives with suboptimal HCT levels.

Send Date: 2012/09/30

Code: 2507

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-017

#### **Cooking Methods and Esophageal Cancer in Iran**

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**Introduction:** Cooking method in some studies has been implicated in the etiology of upper gastrointestinal cancers.

**Method:** We used a validated Food Frequency Questionnaire and a pre-tested cooking method questionnaire in three groups: forty ESCC (Esophageal Squamous Cell Carcinoma) cases, forty healthy subjects from this same area, and forty healthy subjects from a low-risk area in Southern Iran. We compared the frequency of using boiling, grilling, frying and frying degree of fried foods in three degree of surface browning in the high-risk area of ESCC and then compared with those in a low-risk area in Iran. We also calculated “frying index” by multiplying the frequency of each fried food item by its frying degree.

**Results:** There was no difference in the frequency of fried meat consumption between the high-risk and the low-risk ESCC or cases and their clinical controls, however based on surface browning, frying chicken at higher frying degree was more common in the high risk than in the low risk controls ( $P < 0.05$ ) and in ESCC patients than in their clinical controls ( $P < 0.001$ ). “Frying index” showed a significant difference among groups, it was higher in the high-risk than in the low-risk controls ( $P < 0.01$ ) and in cases than in their clinical controls ( $P < 0.05$ ).

**Conclusion:** Cooking methods may have a role in ESCC in Iran.

Send Date : 2012/09/30

Code: 2509

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-018

### Opium; an emerging risk factor for

### gastric adenocarcinoma .Case control study

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**Introduction:** Opium use has been associated with higher risk of malignancies in esophagus, bladder, and larynx. No previous study examined the association between opium use and gastric cancer. There is very little information on the association between use of hookah (water pipe) or nass (a chewing tobacco product) and gastric adenocarcinoma risk. We studied the association between use of opium and several tobacco products (cigarette, hookah, and nass) with risk of gastric adenocarcinoma.

**Method:** In a case-control study in Golestan Province of Iran, we enrolled 309 cases of gastric adenocarcinoma (118 noncardia, 161 cardia, and 30 mixed adenocarcinoma) and 613 matched controls. Detailed information on long-term use of opium, tobacco, and other covariates were collected using structured and validated lifestyle and food frequency questionnaires. Odds ratios (OR) and 95% confidence intervals (95% CI) were obtained using conditional logistic regression models.

**Results:** Opium use was associated with an increased risk of all gastric adenocarcinoma, with adjusted OR (95% CI) of 3.1 (1.9 – 5.1), and an increased risk of

both major anatomic subsites (i.e., cardia and noncardia adenocarcinoma). All adjustments and sensitivity analyses substantiated these findings. We did not find a statistically significant association between use of any of the tobacco products and risk of all gastric adenocarcinoma or anatomic subtypes.

**Conclusion:** The results of this study add to the current literature that opium use can cause of a variety of cancers. Given that an estimated 13 to 22 million people use opium or its derivatives worldwide, these results are of public health significance.

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Code: 2566

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-019

**Prevalence and the demographic risk factors of dyspepsia and functional dyspepsia in Isfahan, Iran**

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**Introduction:** Functional dyspepsia is a heterogeneous disorder including two subgroups of epigastric pain syndrome and postprandial distress syndrome. Herein, we will study the prevalence of dyspepsia in a large sample of Iranians in Isfahan province.

**Method:** This study has been carried out as a part of the Study on the Epidemiology of Psychological, Alimentary Health and Nutrition (SEPAHAN). We conducted a cross-sectional study using self-administered questionnaires based on Rome III criteria in 2010.

**Results:** Overall, 4763 participants (mean age: 36.58±8.093; 44.2% male, 55.8% female) took part in this study. Seven hundred and twenty three subjects (15.2%) fulfilled the criteria for dyspepsia and 549 (11.53%) met the Rome III criteria for postprandial distress syndrome. The prevalence of dyspepsia seemed to be higher among women; 17.2% versus 12.6% in male and the difference was statistically significant (P value < 0.001, OR = 1.43, 95% CI: 1.274-1.846). The prevalence of dyspepsia varied among the participants with different education

levels and there were less patients in higher educated groups (P value <0.001). There was not any relationship between frequency of dyspepsia and age or marital status.

**Conclusion:** This study reveals that dyspepsia is prevalent in Isfahan province and is associated with some demographic factors such as gender and education level. However, as it has a heterogeneous pathophysiology and not all the aspects of disorder are apparent, performing more studies seems to be necessary.

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Code: 2567

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-020

**Epidemiology of Irritable Bowel Syndrome in Isfahan, Iran**

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**Introduction:** Irritable bowel syndrome (IBS) is a common health problem that may affect a substantial proportion of general population. IBS etiology is the subject of much debate. In the present study, we evaluated IBS prevalence by different demographic factors in Isfahan province.

**Method:** This cross sectional study is a part of the Study on the Epidemiology of Psychological, Alimentary Health and Nutrition (SEPAHAN), conducted in 2010 in Isfahan province. Using self-administrated questionnaires, the diagnosis of IBS and its subtypes were made using Rom III criteria.

**Results:** Of 4763 participants (mean age of 36.58±8.093) 44.2% were male and 55.8% were female. The overall prevalence of IBS based on Rome III criteria was 21.5% with a male-to-female ratio of 1:1.65 (P<0.05). Three hundred and forty eight (34%) IBS individuals had IBS-C, whereas 27%, 20% and 19% had IBS-U, IBS-D and IBS-M, respectively. The prevalence of IBS was highest (51.3%) in the ages between 35 to 50, followed by 44.4% in 19-34. The prevalence of IBS was significantly higher in females compared with males.

**Conclusion:** According to the results, IBS is prevalent among adults in Isfahan province and affects females more than males. Considering that it has significant impacts on work, lifestyle and social well-being, IBS imposes a substantial economic burden in medical and social costs in the studied population.

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Code: 2569

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-021

### Constipation in Iran:

#### A SEPAHAN Systematic Review

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**Introduction:** Constipation is a common gastrointestinal symptom with a high prevalence all over the world and it has unpleasant effects on individuals' quality of life. This study is a systematic review of previous epidemiologic studies on constipation in Iran.

**Method:** Bibliographic databases including PubMed, Google Scholar, Scientific Information Databases, Iran Medex and Magiran were searched to select studies reporting the prevalence of constipation in Iran.

**Results:** Overall, 10 articles met the inclusion criteria of the current study. The prevalence of constipation and functional constipation in Iran varied from 1.4 to 37% and 2.4 to 11.2%, respectively. Gender, age, socioeconomic status and educational level seem to have major effects on these conditions.

**Conclusion:** The prevalence of constipation is higher than expected Iran is. The available data on the natural history, quality of life and risk factors of constipation in Iran is scarce. More population-based studies are needed to explore different epidemiological aspects of constipation in Iran.

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Code: 2571

Category: 1- CLINICAL PRACTICE

1.1 Epidemiology

W-F-022

### Dyspepsia in Iran:

#### A SEPAHAN systematic review

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**Introduction:** Dyspepsia is an upper gastrointestinal tract syndrome presenting with epigastric pain, fullness sensation, burning, early satiety, nausea and vomiting. Studies have shown its prevalence to be high all over the world.

**Method:** In this study four electronic databases including Pubmed, Google scholar, IranMedex and Scientific Information Database were searched using the keywords "dyspepsia" and "Iran". At last two independent reviewers reviewed the selected articles and purified them based on our criteria.

**Results:** Among four databases searched, nine articles approved our criteria. The prevalence of dyspepsia in these studies ranged from 2.2% to 29.9%. Dyspepsia has been seen to be more prevalent in women in most of these studies.

**Conclusion:** This study demonstrated that dyspepsia is prevalent in Iran. But as the prevalence has been reported in a wide range it seems necessary to conducting more studies on its epidemiology and risk factors influencing its prevalence.

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Code: 2453

Category: 1- CLINICAL PRACTICE

1.2 Management strategies

W-F-023

### Predictive factors of in-hospital mortality in patients with UGI bleeding treated in intensive care unit

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**Introduction:** Backgrounds: This prospective, cohort study assessed the independent predictors of in-hospital mortality in patients with acute upper

gastrointestinal haemorrhage admitted to the medical intensive care unit (MICU) at the University Medical Centre.

**Method:** Using univariate, multivariate and logistic regression methods the predictors of mortality in 54 upper gastrointestinal haemorrhage patients (47 men, mean  $\pm$  SD age  $61.6 \pm 14.2$  years) were investigated. The mean  $\pm$  SD duration of treatment in the MICU was  $2.8 \pm 2.9$  days and the mortality rate was 31.5%.

**Results:** Significant differences between nonsurvivors and survivors were observed in haemorrhagic shock, heart failure, infection, diastolic blood pressure at admission, haemoglobin and red blood cell count at admission, and lowest haemoglobin and red blood cell count during treatment.

**Conclusion:** Heart failure (odds ratio 59.13) was the most significant independent predictor of in-hospital mortality. Haemorrhagic shock and the lowest red blood cell count during treatment were also important independent predictive factors of in-hospital mortality.

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Code: 2478

Category: 1- CLINICAL PRACTICE

1.2 Management strategies

W-F-024

#### **Eosinophilic Gastroenteritis presented With massive Ascitis, A Case Report**

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**Introduction:** Eosinophilic gastroenteritis is a heterogeneous disorder affecting both children and adults and is characterized by the presence of an intense eosinophilic infiltrate on histopathology of one or multiple segments from the esophagus to the rectum. Eosinophilic gastroenteritis may involve more than one layer of the gastrointestinal tract. Clinical features depend on the layer and location to be involved. Involvement of the serosal layer occurs in 10% of cases of eosinophilic gastroenteritis and typically presents as ascites. This patient is as likely as those patients who refer with full thickness involvement and presenting ascite and it has completely improved after steroid treatment.

**Method:** We presented a 14-year-old male that referred with massive ascites and progressive abdominal pain. After recognition of eosinophilia in blood and ascite fluid, suspicion was go on Eosinophilic gastroenteritis, and after serial examinations was performed. Ultimately Eosinophilic gastroenteritis was closely diagnosed after laparoscopic full thickness biopsy. The patient was treated with prednisolone. The massive ascites and abdominal pain subsided soon after initiation of steroid treatment.

**Results:** Eosinophilic gastroenteritis may involve more than one layer of the gastrointestinal tract. Clinical features depend on the layer and location to be involved. Involvement of the serosal layer occurs in 10% of cases of eosinophilic gastroenteritis and typically presents as ascites. The patient was treated with prednisolone.

**Conclusion:** Eosinophilic gastroenteritis may involve more than one layer of the gastrointestinal tract. The massive ascites and abdominal pain subsided soon after initiation of steroid treatment.

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Code: 2508

Category: 1- CLINICAL PRACTICE

1.3 Evidence-based clinical practice

W-F-025

#### **Randomized Placebo-Controlled Trial of Mesenchymal Stem Cell Transplantation in Decompensated Cirrhosis**

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**Introduction:** There has been great interest in recent years to take advantage of bone marrow stem cells to treat cirrhosis. Our uncontrolled trial showed promising results for bone marrow mesenchymal stem cell (MSC) transplantation in cirrhosis. Therefore, we conducted a randomized, placebo-controlled trial to evaluate the efficacy of autologous

MSC transplantation in cirrhosis.

**Method:** The enrolled patients with decompensated cirrhosis were randomly assigned to receive MSC or placebo infusions. A median of 245 million (range: 190 to 295 million) cultured MSCs were infused through a peripheral vein. The primary outcomes were absolute changes in MELD score, Child score, liver function tests, and liver volumes between the MSC and placebo group 12 months after infusion.

**Results:** A total of 27 patients were enrolled. Of these, 15 patients received MSC and 12 patients received placebo. One patient in the MSC group and one patient in the placebo group were lost to follow up. Three patients in the MSC group died of liver failure 3 months (1 patient), or 5 months (2 patients) after cellular infusion. The baseline MELD scores of the deceased patients were significantly higher than those who remained alive in either group (20.0 vs. 15.1; P: 0.02). Final analyses were performed in the remaining 22 patients (11 in the MSC and 11 in the placebo group) who completed 12 months of follow up. The absolute changes in Child scores, MELD scores, serum albumin, INR, serum transaminases, and liver volumes did not differ significantly between the MSC and placebo groups at 12 months of follow up.

**Conclusion:** This randomized, placebo-controlled trial showed no benefit of autologous bone marrow MSC transplantation through peripheral vein in cirrhotic patients.

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Code : 2514

Category : 1- CLINICAL PRACTICE

1.3 Evidence-based clinical practice

W-F-026

#### **The effect of cumin on the symptoms of Irritable Bowel Syndrome patients**

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**Introduction:** IBS is one of the most common gastrointestinal disorders. Unfortunately, no specific treatment for relieving all IBS symptoms has been suggested yet. The purpose was to assay the impact of cumin on all IBS symptoms, a herb known to be

used as a remedy for some gastrointestinal disorders such as bloat.

**Method:** 57 patients who fulfilled ROME II criteria with no other accompanied illnesses enrolled. Patients were asked to complete an IBS-associated symptoms questionnaire to specify their symptoms at the 1st, 2nd and 4th week after oral administration of cuminum extract.

**Results:** according to the study, the intensity of abdominal pain, bloating and mucus discharge were significantly reduced and Symptoms relief continued on follow-up visits. Improvement of stool frequency and consistency were observed in both patients with constipation-predominant and diarrhea IBS.

**Conclusion:** Considering the low cost and widespread accessibility, cumin administration seems to be economical. However, conducting more placebo-controlled studies with a larger sample size is recommended.

Send Date: 2012/09/30

Code: 2515

Category: 1- CLINICAL PRACTICE

1.3 Evidence-based clinical practice

W-F-027

#### **Chamomile Efficacy in Patients with Irritable Bowel Syndrome**

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**Introduction:** Irritable bowel syndrome (IBS) is a common GI functional disorder, which presents with a wide range of symptoms such as chronic abdominal discomfort, bloating and altered bowel habits. The variety of symptoms has led to a difficult therapeutic challenge and no specific treatment for relieving all IBS symptoms has been suggested yet. The purpose of this study was to evaluate the impact of Chamomile extract on IBS symptoms.

**Method:** In a randomized clinical trial, 45 patients who fulfilled the ROME II criteria and had no organic disease enrolled in this study and were asked to take Chamomile 20 drops daily for four weeks. They were asked to fill in IBS-associated symptoms questionnaire to specify abdominal pain intensity,

bloating, nausea, stool consistency and altered bowel habits. The questionnaire was filled out during 5 visits: at the first day, at the second and fourth weeks after starting the treatment and also the second and fourth weeks after the end of intervention.

**Results:** IBS symptoms were significantly reduced at the second and fourth weeks after beginning of the herbal therapy ( $p < 0.000$ ). Symptom relief continued up to 2 weeks after the end of intervention and started to decrease in 4 weeks time.

However, comparing to the first visit, the symptoms were still improved significantly ( $p < 0.000$ ).

**Conclusion:** Chamomile has proven to have inhibitory effect on gastrointestinal spasm and to prohibit ulcer development. This herb is well known as a tranquilizer and bloat reliever, too. Considering the improving effects of Chamomile on all IBS symptoms, it may have a positive effect on the syndrome pathogenesis as well. Furthermore, in view of its low cost, availability and safety, Chamomile extract can be recommended as a choice treatment for IBS symptoms.

Send Date: 2012/09/30

Code: 2463

Category: 1- CLINICAL PRACTICE

1.4 Outcome studies

W-F-028

**A review of Ramadan fasting and gastrointestinal disorders:  
A SEPAHAN team systematic review**

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**Introduction:** Ramadan is the 9th month in Hijri calendar, during which healthy adult Muslims observe the Islamic fast. They avoid eating and drinking from sunrise to sunset. Our study aimed to investigate effects of Ramadan fasting on gastrointestinal (GI) symptoms and disorders by means of reviewing the available findings.

**Method:** In March 2012, we searched PubMed, Google Scholar, Iran Medex and Scientific Information Database to find related articles. Our keywords included

“Ramadan” and “Islamic fasting”, and the equivalent terms in Farsi. Articles on the relation between GI symptoms and disorders and Ramadan, published in English or Farsi were selected. This study provided background knowledge for “The Study on the Epidemiology of Psychological, Alimentary Health and Nutrition” (SEPAHAN).

**Results:** We found 2312 related articles, of which 23 fulfilled our inclusion criteria. Ramadan fasting appears to increase complications of peptic ulcer and have a deteriorating effect on patients on drug therapy for chronic peptic ulcer disease, but not on duodenal ulcer patients under treatment. Although healthy individuals may experience minor GI symptoms, no serious complications have been reported. Studies reported conflicting results regarding the incidence of acute appendicitis in Ramadan, but acute mesenteric ischemia, hyperemesis gravidarum and small bowel volvulus seem to increase during Ramadan. Ramadan fasting does not appear to increase idiopathic intussusception or impose serious risks on patients with inflammatory bowel diseases.

**Conclusion:** Fasting in Ramadan is generally safe for healthy individuals, but might be hazardous to patients with various GI diseases and may increase the risk of complications in this group.

Send Date: 2012/09/26

Code: 2522

Category: 1- CLINICAL PRACTICE

1.4 Outcome studies

W-F-029

**Self-perceived changes in upper gastrointestinal symptoms in Ramadan:  
A SEPAHAN cross-sectional study**

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**Introduction:** During Ramadan, the 9th month in Islamic Hijri calendar, adult Muslims fast from sunrise to sunset and abstain from food and drinks. In our study self-perceived changes in upper

gastrointestinal (GI) symptoms in Ramadan was investigated in a sample of adult population in Isfahan, Iran.

**Method:** This study was a part of SEPAHAN project; a cross-sectional self-administered questionnaire based study, carried out in September 2010. A community-based sample of adults participated in our study and filled out the questionnaires about a week after Ramadan.

**Results:** The studied sample consisted of 839 individuals (58.8 % female). A total of 57.4% of the population had not experienced symptoms of GER, while 22.0% and 20.6% reported that they suffered less from GER symptoms and more during Ramadan, respectively. As for dyspepsia, 56.5% of individuals were found to be symptom free, and respectively 19.5% and 24.0% had suffered from the symptom more during Ramadan and less. Nausea was less prevalent in which 78.3% of the population was symptom free, 13% had experienced an improvement in their symptom, and 8.7% had got worse.

**Conclusion:** The majority of the studied sample hadn't experienced upper GI symptoms. Among upper gastrointestinal symptoms, nausea was the least common and had improved the most during Ramadan, which could be due to fasting.

Send Date: 2012/09/30

Code: 2523

Category: 1- CLINICAL PRACTICE

1.4 Outcome studies

W-F-030

**Self perceived changes in lower gastrointestinal symptoms during Ramadan:**

**A SEPAHAN cross-sectional study**

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**Introduction:** During Ramadan, the 9th month in the Hijri calendar, adult Muslims are obliged to fast and they don't eat or drink from sunrise to sunset. This study investigates self-perceived changes in lower gastrointestinal (GI) symptoms (abdominal pain,

constipation, diarrhea and bloating) in Ramadan.

**Method:** As a part of "The Study on the Epidemiology of Psychological, Alimentary Health and Nutrition" (SEPAHAN), in a cross sectional self-administered questionnaire setting, 840 adults (58.7 % female) in Isfahan, Iran, filled out the questionnaires about a week after Ramadan, in September 2010.

**Results:** Sixty-eight percent of the studied sample had not experienced constipation, while 15.7% reported that they had suffered more, and 16.3% had suffered less from the symptom during Ramadan. As for Bloating, 64.2% of individuals were symptom-free, in 15.4% the symptoms had worsened while 20.4% had suffered less from the symptom. A total of 63.3% had not experienced abdominal pain, 14.4% had experienced an exacerbation in the symptom while 22.3% reported that they had less abdominal pain during Ramadan. Diarrhea was the least prevalent symptom in which 91.7% of the sampled population was symptom-free; however 2.3% reported that their diarrhea had worsened while 6% had got better during Ramadan.

**Conclusion:** The majority of the studied sample was symptom-free. Lower GI symptoms seem to improve during Ramadan, which could be due to fasting. Prospective studies are needed to determine how fasting in Ramadan could affect patients with GI symptoms.

Send Date: 2012/09/30

Code: 2524

Category: 1- CLINICAL PRACTICE

1.4 Outcome studies

W-F-031

**The Sahur meal and upper gastrointestinal symptoms in Ramadan: A SEPAHAN study**

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**Introduction:** During Ramadan, Muslims refrain from eating and drinking during the day and consume only two large meals: one before the sunrise (Sahur),

and the other right after the sunset. This study, aimed at investigating the association between upper gastrointestinal (GI) symptoms and consumption of Sahur.

**Method:** The present study was a population-based, cross sectional study, carried out in September 2010, on an adult population in Isfahan, Iran, filling out questionnaires about a week after Ramadan. It was a part of SEPAHAN: "Study on the Epidemiology of Psychological, Alimentary Health and Nutrition".

**Results:** The majority of the 863 individuals (58% female) participating in the study, i.e. 74.5% had had Sahur almost every day. The association between having Sahur and upper GI symptoms (gastroesophageal reflux, dyspepsia, and nausea) was not significant. The association between nausea and the time interval between Sahur and going back to bed was significant ( $p < 0.05$ ), while it was only marginally significant for dyspepsia ( $p < 0.1$ ). Dyspepsia and nausea seem to improve as the time interval of between Sahur and sleeping increases.

**Conclusion:** Consumption of Sahur doesn't seem to affect upper GI symptoms. The increase in time interval between Sahur and sleeping seems to decrease symptoms of dyspepsia and nausea.

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Code: 2436

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.1 Cell/molecular biology/pathology

W-F-032

بررسی نقش مهارکننده های سیکلواکسیژناز-۲

در جلوگیری از مری بارت / یک مطالعه مروری سیستماتیک

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**زمینه و هدف:** مری بارت عبارت است از جایگزینی مخاط طبیعی سنگفرشی مطبق انتهایی تحتانی مری با اپیتلیوم استوانه ای روده. مری بارت از عوارض ریفاکس معدی مروی طولانی مدت است که در نتیجه آن التهاب نیز به وجود می آید. نتایج تحقیقات نشان داده است که در مری بارت میزان بروز

سیکلواکسیژناز-۲ افزایش چشم گیری پیدا میکند و هم چنین مری بارت به عنوان یک ریسک فاکتور مهم ایجاد آدنوکارسینوم مری به حساب می آید. لذا کنترل التهاب و تکثیر سلولی توسط مهارکننده های اختصاصی سیکلواکسیژناز-۲ اخیراً مورد توجه جدی واقع شده است. مطالعه حاضر به صورت یک مطالعه مروری سیستماتیک و فراتحلیلی جهت بررسی اثرات کلینیکی مهار کننده های اختصاصی سیکلواکسیژناز-۲ طراحی گردیده است.

**روش بررسی:** در این مطالعه با جستجو در منابع مختلف پزشکی حدود ۲۳ مقاله مرتبط با موضوع بدست آمد. تنها مطالعاتی وارد متاآنالیز شدند که به صورت کارآزمایی بالینی در بیماران مبتلا به مری بارت با شرایط کلینیکی مورد نظر بودند. بیماران قبل و بعد از درمان دارویی از نظر تکثیر سلولی و بروز و تولید سیکلواکسیژناز-۲ تحت مطالعه قرار گرفتند. نتایج با استفاده از نرم افزار CMA-2 مورد بررسی و تجزیه و تحلیل آماری قرار گرفت.

**یافته ها:** براساس نتایج حاصل از مطالعات مشخص گردید که شاخص تکثیر سلولی تغییر چندانی نداشته ولی بروز سیکلواکسیژناز-۲ به طور چشم گیری پس از درمان دارویی کاهش یافته بود که از لحاظ آماری هم معنی دار بود ( $p < 0/005$ ) نتیجه گیری: در بیمارانی که مبتلا به مری بارت میباشند اضافه کردن داروهای مهارکننده سیکلواکسیژناز-۲ به رژیم دارویی آنها همراه با داروهای ضد اسید مانند PPI به عنوان عامل جلوگیری کننده در برابر دیسپلازی و تبدیل شدن به آدنوکارسینوم مری موثر میباشند.

Send Date: 2012/09/18

Code: 2529

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.1 Cell/molecular biology/pathology

W-F-033

### Comparison of CD4+ and CD8+ T Cell count and CD4+/CD8+ ratio in gastric mucosa of patients with functional dyspepsia and healthy volunteers

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**Introduction:** Functional dyspepsia is one of the most common functional gastrointestinal disorders in adults. The intestinal intraepithelial lymphocytes are likely to be important in the preservation of mucosal integrity and the vast majority of these cells are of T-cell type and more than 70% are CD4+/CD8+ T-cel This study was carried out to compare the CD4+ and CD8+ T-cell count and CD4+/CD8+ ratio in gastric mucosa of patients with functional dyspepsia and healthy volunteers.

**Method:** In this case-control setting, 61 FD patients were studied and compared to 30 healthy adults in Tabriz Imam Reza Hospital during a 22-month period. The two groups were helicobacter pylori (HP) negative and matched for age and sex. The CD4+/CD8+ T-cells were isolated from gastric mucosa biopsy samples, and then quantified by microscopy while the membrane phenotypes were determined by immunohistochemistry. Frequency and percentage of these cells, as well as the CD4+/CD8+ ratio were compared between the two groups.

**Results:** Sixty one FD patients, 26 males and 35 females with a mean age of  $46.35 \pm 12.36$  (26-63) years and 30 controls, 13 males and 17 females, with a mean age of  $45.63 \pm 11.76$  (26-63) years were recruited ( $p=0.949$  and  $0.794$ , respectively). No patient in the case group had CD4+ T-cell in gastric mucosa specimens. This rate was significantly higher in the controls (16.7%,  $p=0.003$ ). CD8+ T-cell was recognized in 3.3% of the cases vs. 20% in the controls ( $p=0.014$ ).

The mean percentage of CD4+ T-cells was significantly higher in the controls ( $4.73 \pm 16.95\%$  vs.  $0\%$ ;  $p=0.031$ ). The similar rate for the CD8+ percentage was not significantly different between the two groups ( $2.30 \pm 13.09\%$  in the case group vs.  $8.40 \pm 24.48\%$  in the case group;  $p=0.124$ ). The mean CD4+/CD8+ ratio was zero in both groups.

**Conclusion:** Based on current findings, the CD4+/CD8+ T-cells in gastric mucosa may have a protective role against FD in HP- individuals.

Send Date: 2012/10/01

Code: 2445

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.2 Dyspepsia

W-F-034

ارتباط بین رفتارهای تغذیه ای شناسایی شده با روش

آنالیز کلاس پنهنان با سوهاضمه عملکردی در افراد میانسال اصفهانی

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زمینه و هدف: هرچند ارتباط بین غذاها و مواد مغذی با اختلالات گوارشی نظیر سوهاضمه تا حدودی بررسی شده است، اما اینکه آیا رفتارهای تغذیه ای حاصل از آنالیز کلاس پنهنان نیز با این بیماری مرتبط می باشد یا نه هنوز شناخته شده نیست. بنابراین مطالعه حاضر با هدف شناسایی رفتارهای تغذیه ای با روش آنالیز کلاس پنهنان و تعیین ارتباط آنها با سوهاضمه عملکردی (FD = Functional Dyspepsia) در بزرگسالان اصفهانی انجام شد.

روش بررسی: مطالعه مقطعی حاضر بر روی ۴۷۶۳ نفر از افراد میانسال اصفهانی که با روش نمونه گیری آسان انتخاب شده بودند انجام شد. رفتارهای تغذیه ای افراد بر اساس الگوی وعده های غذایی، سرعت غذا خوردن، مصرف مایعات همراه غذا و فاصله زمانی بین غذا خوردن و خوابیدن با استفاده از پرسشنامه ارزیابی شد. با استفاده از روش آنالیز کلاس پنهنان رفتارهای تغذیه ای افراد شناسایی گردید. از پرسشنامه ROME III جهت ارزیابی اختلالات عملکردی گوارش استفاده شد و سوهاضمه عملکردی طبق این معیارها تعریف گردید. جهت بررسی ارتباط ها از آمار تحلیلی استفاده گردید.

یافته ها: با استفاده از آنالیز کلاس پنهنان، الگوی وعده های غذایی به دو گروه "منظم" و "نامنظم" تفکیک شدند. افراد بر اساس سرعت غذا خوردن در سه گروه "با سرعت متوسط"، "متوسط به کند" و "متوسط به تند" و بر اساس مصرف مایعات به دو گروه "پر نوشان" و "متوسط نوشان" تقسیم شدند. در زمینه فاصله زمانی بین غذا خوردن و خوابیدن نیز دو گروه "فاصله زیاد بین خواب و غذا" و "فاصله کم بین خواب و غذا" شناسایی شد. پس از تعدیل عوامل مخدوشگر، شانس ابتلا به سوهاضمه عملکردی در افرادی که الگوی وعده های غذایی "نامنظم" داشتند، به طور معنی داری نسبت به افرادی که الگوی وعده های غذایی "منظم" داشتند بیشتر بود (OR: 1.42; 95% CI: 1.15-1.75). همچنین افرادی که غذای خود را با سرعت "متوسط به تند" می خوردند نسبت به افرادی که غذای خود را با سرعت "متوسط" می خوردند از شانس بیشتری جهت ابتلا به FD برخوردار بودند.

ارتباط معنی داری بین مصرف مایعات به همراه غذا و فاصله زمانی بین غذا خوردن و خوابیدن با سوهاضمه عملکردی مشاهده نشد. نتیجه گیری: یافته های مطالعه حاضر حاکی از ارتباط مستقیم بین رفتارهای تغذیه ای نادرست با سوهاضمه عملکردی می باشد. لذا با پیشگیری و تصحیح این عادات غذایی نادرست می توان گام موثری در کاهش علائم سوهاضمه برداشت.

Send Date: 2012/09/21

Code: 2457

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.2 Dyspepsia

W-F-035

**The accuracy of alarm features to predicting of upper GI malignancy in patients with dyspepsia**  
shahriar nikpour<sup>۱\*</sup>

<sup>۱</sup> loghman hakim hospital, shahid beheshti university

**Introduction:** There is insufficient evidence to define the optimal approach to dyspepsia in Iran.

This study was aimed to determine the diagnostic accuracy of alarm features in predicting upper GI malignancy in dyspeptic patients, in Loghman Hakim hospital, Tehran.

**Method:** All patients with dyspepsia referring to the gastroenterology clinic of Loghman Hakim Hospital, from September 2007 to February 2009 were prospectively enrolled. The alarm features included family history of upper gastrointestinal malignancy, unexplained weight loss, upper gastrointestinal bleeding, dysphagia, unexplained iron deficiency anemia, persistent vomiting, jaundice, intractable pain in upper abdomen and lymphadenopathy or mass.

**Results:** A total of 1700 patients (43.6% male, mean age 43.7±17 years) were studied. Esophageal cancer was found in two patients (0.1%) and gastric cancer in 17 patients (1.0%), all of whom were older than 50 years. The highest positive predictive value was found in dysphagia (3.4%) for esophageal cancer and Iron deficiency anemia (5.9%) for gastric cancer.

**Conclusion:** None of the alarm features showed a high positive predictive value and their use for selection of patients for endoscopy seems to be of limited value. Selection of the age over 50 years appears to be appropriate for endoscopic evaluation of dyspeptic patients.

Send Date: 2012/09/25

Code: 2459

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.2 Dyspepsia

W-F-036

**Low yield of upper endoscopy  
in patients with persistent dyspepsia  
Taking Proton Pump Inhibitor**

shahriar nikpour<sup>1\*</sup>

<sup>1</sup> internal medicine loghman hospital, shahid beheshti university

**Introduction:** Most clinical guidelines suggest empiric treatment for young patients with dyspepsia without alarm features and reserve upper gastrointestinal endoscopy for refractory cases.

However, upper GI malignancies are common in some parts of Iran and the safety of this approach has

not been thoroughly validated in our country. The objective of this study was to determine the yield of endoscopy in patients in whom empiric therapy is unsuccessful and compare them with the initial endoscopy strategy.

**Method:** Patients undergoing upper gastrointestinal endoscopy at Loghman Hakim hospital (non-referral center) were enrolled in this study. They were divided into three groups: failed empiric therapy with PPI (A), failed empiric therapy with H<sub>2</sub>B (B), and patients without any empiric therapy (C). Endoscopic findings were compared in these groups.

**Results:** A total of 450 cases (150 in each group) were studied (41.1% male, mean age 35years). The only case of upper gastrointestinal malignancy was gastric cancer in a patient in the initial endoscopy group (0.67%). Peptic ulcers (group A: 6.7%, B: 10.7% and C: 8.0%) and other upper gastrointestinal lesions were similar in the three groups.

**Conclusion:** This study showed that the empiric treatment approach to dyspepsia based on age and alarm symptoms appears to be safe. However, there still is a need for endoscopy in refractory cases, before considering the diagnosis of functional dyspepsia.

Send Date: 2012/09/25

Code: 2527

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.2 Dyspepsia

W-F-037

**Peptic ulcer disease is the most common  
cause of gastric outlet obstruction  
(GOO) in the Iranian population**

shahriar nikpour<sup>1\*</sup>

<sup>1</sup> internal medicine loghman hospital, shahid beheshti medical university

**Introduction:** according to medical literature Benign stenosis due to recurrent peptic ulcer was a common cause of gastric outlet (GOO) in the past but is rather rare now. It is therefore important to rule out a neoplastic process, which is a more common cause of GOO than peptic ulcer disease

**Method:** The charts of 185 patients with GOO admitted to loghman hakim hospital between khordad 1382 and shahrivar 1391 were reviewed to

determine etiology and management, (mean age 46.8 years, 56.0%female) The diagnosis of GOO was based on clinical presentation, upper endoscopy and/or barium meal.

**Results:** eighty-two percent (152 patients) had PUD as the cause of their gastric outlet obstruction. Eighteen percent (33 patients) had malignant disease. The patients with cancer were older, and fewer had a history of peptic ulcer disease, although these factors were not statistically significant. 10 patients had malignancy that had not been suspected before operation despite numerous endoscopic and radiological studies.

**Conclusion:** In our study the incidence of PUD in patients with GOO is greater than 80%. The etiology of GOO cannot be predicted by age and history of PUD. The endoscopic treatment of GOO should be approached with caution because malignancy cannot be reliably excluded by endoscopic studies  
Send Date: 2012/09/30

Code: 2460

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.3 Barretts

W-F-038

**Prevalence of Barrett's esophagus and its related factors in patients with Gastro Esophageal Reflux**  
shahriar nikpour<sup>1\*</sup>

<sup>1</sup> internal medicine loghman hospital, shahid beheshti university

**Introduction:** There are few studies from Iran that have reported the prevalence of Barrett's esophagus by endoscopy and histology. The aim of our study was to assess the frequency of Barrett's esophagus by endoscopy and histology studies in patients with gastro-esophageal reflux disease (GERD).

**Method:** We conducted a cross-sectional study and obtained data from 300 Patients with symptom of gastro esophageal reflux disease who underwent upper GI endoscopy at Loghman Hakim hospital in Tehran in 2009. Age, sex, smoking history, duration of GERD and upper gastrointestinal endoscopic findings were recorded. Four to six biopsies were taken from four quadrants above the

gastroesophageal junction in distal esophagus and sent for histology.

**Results:** In this study 145 male and 155 female with mean age of 46.5±17.2 were evaluated. Barrett's esophagus was diagnosed by histology in 37 patients (12.3%). History of smoking was more frequent in patients with Barrett's esophagus (21.6% vs. 4.9%, p=0.002). There was no significant relationship between age, sex and duration of gastroesophageal reflux and presence of Barrett's esophagus.

**Conclusion:** The frequency of Barrett's esophagus was higher in our GERD patients than previously reported. The importance of this lesion needs to be investigated.

Send Date: 2012/09/25

Code: 2446

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.4 Reflux disease - pathogenesis

W-F-039

تعیین ارتباط بین رفتارهای تغذیه ای شناسایی شده

با روش آنالیز کلاس پنهان با رفلکس معده به مری

در افراد میانسال اصفهانی: یافته های حاصل از مطالعه SEPAHAN

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<sup>۳</sup> مرکز تحقیقات جامع گوارش، دانشگاه علوم پزشکی اصفهان

زمینه و هدف: اطلاعات بسیار اندکی در زمینه اینکه آیا رفتارهای تغذیه ای حاصل از آنالیز کلاس پنهان با رفلکس معده به مری مرتبط (GERD) می باشد یا نه هنوز شناخته شده نیست. بنابراین مطالعه حاضر با هدف شناسایی رفتارهای تغذیه ای با روش آنالیز کلاس پنهان و تعیین ارتباط آنها با GERD در بزرگسالان اصفهانی انجام شد.

روش بررسی: مطالعه مقطعی حاضر در قالب مطالعه SEPAHAN و بر روی ۴۷۶۳ نفر از افراد میانسال اصفهانی که با روش نمونه گیری آسان انتخاب شده بودند انجام شد. رفتارهای تغذیه ای افراد بر اساس الگوی وعده های غذایی، سرعت غذا خوردن، مصرف مایعات همراه با غذا و فاصله زمانی بین غذا خوردن و خوابیدن با استفاده از پرسشنامه ارزیابی شد. با استفاده از روش آنالیز کلاس پنهان رفتارهای تغذیه ای افراد شناسایی گردید. از پرسشنامه ROME III جهت ارزیابی اختلالات عملکردی گوارش استفاده شد و GERD طبق این معیارها تعریف گردید. جهت بررسی ارتباط ها از آمار تحلیلی استفاده گردید.

یافته ها: با استفاده از آنالیز کلاس پنهان، الگوی وعده های غذایی به دو گروه "منظم" و "نامنظم" تفکیک شدند. افراد بر اساس سرعت غذا خوردن در سه گروه

"با سرعت متوسط"، "متوسط به کند" و "متوسط به تند" و براساس مصرف مایعات به دو گروه "پرنوشان" و "متوسط نوشان" تقسیم شدند. در زمینه فاصله زمانی بین غذا خوردن و خوابیدن نیز دو گروه "فاصله زیاد بین خواب و غذا" و "فاصله کم بین خواب و غذا" شناسایی شد. پس از تعدیل عوامل مخدوشگر، شانس ابتلا به GERD در افرادی که الگوی وعده های غذایی "نامنظم" داشتند، به طور معنی داری نسبت به افرادی که الگوی وعده های غذایی "منظم" داشتند بیشتر بود (OR: 1.23; 95% CI: 1.03-1.46). همچنین افرادی که غذای خود را با سرعت "متوسط به تند" می خوردند نسبت به افرادی که غذای خود را با سرعت "متوسط" می خوردند از شانس بیشتری جهت ابتلا به GERD برخوردار بودند.

فاصله زمانی زیاد بین غذا خوردن و خوابیدن با خطر ابتلا GERD ارتباط معکوس معنی دار داشت. (OR: 0.57-0.95; 95% CI: 0.57-0.95). ارتباط معنی داری بین مصرف مایعات همراه غذا با خطر رفلکس معده به مری مشاهده نشد.

نتیجه گیری: یافته های مطالعه حاضر حاکی از ارتباط مستقیم بین رفتارهای تغذیه ای نادرست با رفلکس معده به مری می باشد. لذا با پیشگیری و تصحیح این رفتارهای تغذیه ای نادرست می توان گام موثری در کاهش علائم رفلکس معده به مری برداشت.

Send Date: 2012/09/21

Code: 2565

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.5 Reflux disease - diagnosis

W-F-040

### Clinical Characteristics of Pediatric Esophagitis in Southern Iran: A Single Center Experience

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**Introduction:** To determine the clinical characteristics of pediatric esophagitis in southern Iran.

**Method:** Study was conducted from 2005 to 2009 in Nemazee hospital of Shiraz. We consecutively included all the pediatric patients who had pathology-confirmed diagnosis of esophagitis. Data regarding the patients' demographic characteristic, comorbidities and clinical findings were recorded using a questionnaire.

**Results:** We studied 125 children among whom there were 61 (48.8%) girls and 64 (51.2%) boys with mean age of 6.6±5.5 years. Repeated vomiting was

the prominent symptom in our series being reported by 75 (60%) patients followed by fever in 35 (28%). Erythema (33.6%), esophageal ulcer (11.2%), and whitish patch (8.0%) were the most common endoscopic findings while reflux esophagitis (32.8%), chronic (6.4%) and acute esophagitis (5.6%), and candida esophagitis (5.6%) were the most common histological diagnoses. Just 1 (0.8%) patient was diagnosed as having eosinophilic esophagitis, aspergillosis, and graft versus host disease.

**Conclusion:** Reflux is the most common cause of esophagitis in the pediatric population of southern Iran. Despite previous reports the prevalence of eosinophilic esophagitis is far less than estimated while the prevalence of opportunistic infections is higher secondary to post liver transplantation.

Send Date: 2012/10/01

Code: 2383

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.6 Reflux disease - treatment

W-F-041

### Effect Of Antireflux-B® Syrup Versus Omeprazole And Ranitidine In The Treatment Of Gastroesophageal Reflux Disease

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**Introduction:** Gastroesophageal reflux disease (GERD) is one of the most common diseases in GI tract as 15% of people in community have the same symptoms at least once a week. The aim of this survey was to investigate the effect of a herbal syrup (Antireflux-B®) containing extracts of Aloe vera in treatment of GERD in comparison with omeprazole and ranitidine.

**Method:** In a randomized clinical trial, 132 patients with GERD symptoms referred to gastroenterologist, enrolled to three groups: antireflux-B (10 ml before breakfast & dinner), omeprazole (one capsule 20 mg before breakfast) or ranitidine (150 mg, twice daily). In first visit, 2 weeks and 4 weeks after treatment the patients were visited upon clinical features. The data has been analyzed with Wilcoxon test, McNemar and

paired T test.

**Results:** There was no significant difference between 3 treatment groups upon cross matching factors (age, gender, educational status, ...) ( $P > 0.05$ ). The effect of antireflux-B, omeprazole and ranitidine on severity of reflux symptoms was 74%, 82% and 79% respectively. There was no significant differences upon relieving main reflux symptoms (heart burn, souring sensation, ...) in three groups ( $P > 0.1$ ). The frequency of adverse effects were nearly similar in all groups.

**Conclusion:** According to similar effects of three drugs in relieving the symptoms of GERD, the researchers were concluded that Antireflux-B syrup can prescribed in patient with gastroesophageal reflux disease.

Send Date: 2012/09/02

Code: 2432

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.7 Reflux disease - complications

W-F-042

#### Periodontal disease in patients with gastro-oesophageal reflux disease

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**Introduction:** Dental erosion has been considered an extraesophageal manifestation of gastro-esophageal reflux disease.

**Method:** Studies that assessed the prevalence of PD in individuals with GERD or vice versa were identified in Medline and the Cochrane Controlled Trials Register via a systematic research strategy.

**Results:** Seven studies met the selection criteria. Studies, however, differed greatly as far as design, population methods of diagnosing GERD, duration of follow-up and, consequently, findings.

The median prevalence of PD in GERD patients was 32%, with a large range (8-51.5%), and the median prevalence of GERD in PD adults patients was 34.3% (range: 18-73%).

**Conclusion:** This review shows that there is an

association between GERD and PD. This suggests the presence of pathogenic link between chronic inflammatory periodontal diseases and the presence of pathological gastroesophageal reflux.

Send Date : 2012/09/14

Code: 2540

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.7 Reflux disease - complications

W-F-043

#### The association of gastroesophageal reflux disease and tooth loss: SEPAHAN community-based study

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**Introduction:** To investigate the relation between gastroesophageal reflux disease (GERD), and tooth loss and masticatory ability.

**Method:** SEPAHAN project is a community-based study among adults population. A validated questionnaire containing questions regarding the presence and severity of GERD, tooth loss and masticatory ability was distributed through the subjects. Data were analyzed by SPSS 16 statistical software.

**Results:** 1120 out of 4585 individual (23.5%), had GERD which 29.9% of them had all of their teeth. Prevalence of tooth loss in subjects with GERD was 61.8% with less than 6 lost teeth, 4.8% with 6-20 lost teeth, 2.5% with more than 20 lost teeth, and 1.1% edentulous subjects ( $P=0.252$ ).

68% of subjects reported that they have good masticatory ability without problem. 30% and 2% of subjects had moderate and sever problems through the mastication respectively. There was significant difference between masticatory ability and the presence of GERD ( $P < 0.001$ ).

**Conclusion:** GERD can cause tooth erosion, halitosis and xerostomia which all have negative effect on oral health status. GERD plays an

important role in the maintenance of sufficient chewing ability.

Send Date: 2012/10/01

Code: 2437

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.8 Esophageal malignant disease

W-F-044

### **Survival Rate and prognostic factors of Esophageal cancer in East Azerbaijan Province, North-West of Iran**

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**Introduction:** Esophageal cancer in Iran as the sixth most common cancer and five most common cancers is one in east Azerbaijan. The aim of this study was to calculate survival rates and define prognostic factors in esophageal cancer patients.

**Method:** In this study, all patients with esophageal cancer registered in the Radiation Therapy Center, during March 2006 to March 2011 were analyzed. All patients were followed up and vital status. Data were analyzed using the Kaplan–Meier method and the Cox proportional hazard models.

**Results:** Out of 532 patients, survival information was available for 460 patients, including 205(44/5 %) Female and 255(55/4 %) male.

The mean age was 65.8±12.2, ranging from 29 to 90 years at the time of diagnosis. 1-, 3- and 5-year survival rates after diagnosis were 55%, 18% and 12%, respectively. The Median survival time in patients 13.2 ± .7 (CI 95% =11.8 -14.6) months. In the univariate analysis, Age group(P=0/001), education(P=0/001), smoker (P= 0/001), surgery (P= 0/001), tumor differentiation (P= 0/003) and tumor stage (P= 0/001) were significant prognostic of survival. Tumor morphology, sex, place of residence, tumor histology and tumor location did not show any

significant effects on the survival rate of patients. In multivariate analysis, Age group (P = 0/003), smoker (P= 0/01) and tumor stage (P= 0/001) were significant predictors of survival.

**Conclusion:** In summary, prognosis of esophageal cancer in North West of Iran is poor, Therefore, reduce the exposure to risk factors and early detection can improve survival in such patients.

Send Date: 2012/09/20

Code: 2502

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.9 Other esophageal disorders

W-F-045

### **Ethanolamine oleate as a novel therapy is effective in resistant idiopathic achalasia**

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**Introduction:** Idiopathic achalasia (IA) is a primary motor disorder of the esophagus.

Recently, Ethanolamine Oleate (EO) has been introduced as a novel therapy in IA. AIM: to investigate long-term efficacy of EO injection in selected patients with IA.

**Method:** 220 patients with IA were evaluated prospectively. 31 patients that were resistant to or poor candidate of pneumatic balloon dilation and/or cardiomyotomy, enrolled in this study.

EO was injected into lower esophageal sphincter 3 times with 2 weeks intervals. The patients were evaluated with achalasia symptom score (ASS) and timed barium esophagogram (TBE) before and after injections. We defined good response as decrease in ASS, height and/or volume of barium in TBE ≥50% of baseline at 1.5 months after last injection. Relapse was defined as increase in severity of dysphagia ≥2 score after initial good response.

**Results:** The mean age of patients was 49.32± 19.3 years. Twenty nine cases had good response and two

had no response. The mean ASS decreased from 12.48 ( $\pm 2.06$ ) to 4.50 ( $\pm 2.96$ ) ( $P = 0.000$ ) and the mean volume of barium decreased from 115.35 ( $\pm 93.40$ ) to 45.50 ( $\pm 60.86$ ) mL at 1.5 months after the last injection ( $P = 0.012$ ). The mean duration of follow-up was  $21.16 \pm 11.3$  (9 to 59) months. Eleven patients who relapsed were treated effectively with re-injection. Minor complications (chest pain, esophagitis) occurred in some patients.

**Conclusion:** This study indicates that EO is effective in long-term follow up and its use can be considered in selected IA patients.

Send Date: 2012/09/30

Code: 2503

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.9 Other esophageal disorders

W-F-046

**Timed barium oesophagram and clinical symptoms concordance in achalasia patients treated by pneumatic balloon dilation: long-term follow up**

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**Introduction:** Many centers consider only clinical symptoms for evaluation of post-pneumatic balloon dilation (PBD) response in achalasia. Some have suggested timed barium oesophagram (TBE) as an objective assessment with 70% concordance to clinical symptom score. To evaluate long-term subjective and objective response concordance in achalasia patients.

**Method:** Achalasia patients who referred for the first PBD were enrolled. Clinical symptom score and barium height at five minutes recorded before and 1, 6, 12, 18 and 24 months after treatment. Patients were divided into three groups; complete, partial and non-responder according to clinical response, then concordance was evaluated between clinical improvement and barium height reduction during follow-up.

**Results:** One hundred sixty eight patients were

enrolled. Thirteen patients with normal TBE before treatment were defined as a new group. A total concordance for complete, partial and non-responders was 39% at first month and 42, 44, 35 and 47% at 6, 12, 18, 24 months after treatment, while percentages of non-concordant patients at 1, 6, 12, 18 and 24 months after PBD were 61, 58, 56, 65 and 53. Patients with complete clinical response revealed 38.6%, 27.3%, 34.1% complete, partial and non-response by TBE at the end of follow-up (24 months), while these percentages in patients with partial clinical response were 22.2, 41.7 and 36.1. About one-third of clinically non-responder patients had complete barium height response.

**Conclusion:** Patients with achalasia frequently show different response to PBD according to subjective and objective assessments, therefore considering both items is necessary for evaluating response rate to treatment.

Send Date: 2012/09/30

Code: 2541

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.9 Other esophageal disorders

W-F-047

**The relationship between functional gastrointestinal disorder and halitosis: SEPAHAN community-based study**

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**Introduction:** Halitosis is apparent unpleasant odor of the breath, which affects the individuals' quality of life. The aim of this study was to investigate the relation between functional gastrointestinal disorder (FGIDs) and halitosis among Isfahan adults population.

**Method:** SEPAHAN project is a community-based study among adults population. A self-assessed questionnaire was completed by 4763 individuals. Severity of bad breath was determined through questionnaire. The epidemiology of FGIDs was

determined using Rome III criteria. Data were analyzed by SPSS version 16.

**Results:** 51.9% of 4652 studied population has experienced halitosis during last 3 month which 59.9% of them reported low severity of halitosis. There were significant difference between the presence of halitosis and gastroesophageal reflux disease (GERD), functional dyspepsia, IBS, constipation ( $P<0.0001$ ), and functional bloating ( $P=0.046$ ). Subjects who reported halitosis as a constant burden have been found most frequently in constipation patients (3.9%).

**Conclusion:** Constipation, functional bloating and irritable bowel syndrome (IBS) were not previously assessed as associating factors to halitosis. FGIDs, especially constipation is introduced as systemic factors with pathological origin for halitosis.

Send Date: 2012/10/01

Code: 2551

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.9 Other esophageal disorders

W-F-048

#### **Functional gastrointestinal disorder and xerestomia: SEPAHAN community-based study**

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**Introduction:** Xerestomia is defined as a subjective feeling of dry mouth and it can be related to the functional gastrointestinal disorders (FGIDs). The aim of this study was to determine association between the different types of FGIDs and xerestomia among Isfahan adults population.

**Method:** SEPAHAN project is a community-based study through adults population. A self-assessed questionnaire was filled by subjects including questions to evaluate presence of xerestomia, and the presence of any kind of FGIDs. The epidemiology of

FGIDs was determined using Rome III criteria.

**Results:** The complete information of 4763 individuals was provided which 15.2%, 21.5%, 33.5% and 19.7% had functional dyspepsia, irritable bowel syndrome, constipation and functional bloating respectively. There were significant difference between subjects who experienced xerestomia and all FGIDs ( $P<0.0001$ ) except functional bloating ( $P=0.214$ ). Individuals with functional dyspepsia showed the most severity of xerestomia (9.9%).

**Conclusion:** All types of FGID except bloating were in association with xerestomia. Because of xerestomia's impact on quality of life it should be taken into account in clinical practice through these patients.

Send Date: 2012/10/01

Code: 2528

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.12 Acid peptic disease (includes NSAIDS - but NOT H.pylori)- diagnosis and treatment

W-F-049

#### **Non-Helicobacter pylori and non-NSAID peptic ulcer disease in the Iranian population**

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**Introduction:** Although Helicobacter pylori(HP) and non-steroidal anti-inflammatory drugs (NSAIDs) are recognized as the major causes of peptic ulcer disease(PUD) ,the prevalence of (HP)and (NSAID) negative PUD seems to be increasing in the world but the the prevalence isnot known in our population.

**Method:** To examine the prevalence of H. pylori-negative PUD without intake of NSAIDs A total of 452 patients, including 340 patients with Duodenal ulcer (DU) and 112 patients with gastric ulcer (GU), were enrolled.H. pylori status was assessed by rapid urease tests and histological examinations ,Two biopsy specimens were taken from the antrum and two from the body of the stomach, Patients were asked a series of questions regarding risk factors, including the use of NSAIDs.

**Results:** Of the 340 patients with DU, 32 patients (9.4%) were considered to be H. pylori-negative. Of the 112 patients with GU, 15 patients (13.4%) were

considered to be *H. pylori*-negative. Hence, a total of 47(14.7%)patients were found to be *H. pylori*-negative. None of them were taking NSAIDs

**Conclusion:** The prevalence of *H. pylori* and NSAID-negative peptic ulcer disease is relatively high in our population and workup for other causes should be considered.

Send Date: 2012/09/30

Code: 2365

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.13 Gastroduodenal malignancies

W-F-050

**The Functional Role of Amino Acid Substitutions in Cyclooxygenase-2 Protein Function in Gastrointestinal Cancers**

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**Introduction:** Non- synonymous single nucleotide polymorphism (nsSNPs) results in the disruption of protein function are used as markers in linkage and association of human proteins that might be involved in diseases and cancers.

**Method:** To study the functional effect of nsSNP in cyclooxygenase-2 (COX-2 )'s amino acid, the nucleotide sequences of encoding COX-2 gene in gastrointestinal cancers were extracted from the NCBI (gi|223941909) data bank and analyzed by SIFT server. SIFT is a program that predict the effects of amino acid substitution on protein function. Disordered and 3D structure of COX-2 protein was analyzed by Cn3D version 4.3 software. This software produced by the national center for biotechnology information

**Results:** COX-2 is an essential enzyme for the production of pro-inflammatory prostaglandins which are relevant to cancer development and progression. The substitutions G587R and V511A of COX-2 in esophageal squamous cell carcinoma (ESCC) and colon cancer linked to reformed protein function through disruption of enzyme active site .

**Conclusion:** Amino acid substitutions as a consequence of COX-2 nsSNPs have important role

in human disease. Substitutions G587R and V511A which are located in catalytic domain are important for the enzymatic function of COX-2 and associated with higher expression of COX-2.

Send Date: 2012/08/21

Code: 2420

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.13 Gastroduodenal malignancies

T-S-051

**A comparative study of serum levels of Matrix metalloproteinase 2,9,10 and Tissue inhibitor of matrix metalloproteinase1,2 in gastric adenocarcinoma and non-tumoral control groups**

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**Introduction:** Epidemiologic studies show that 50000 people get cancer in Iran every year. The most involving system is gastrointestinal specially stomach. One of basic process in tumor growth is proteolysis of surrounding tissue which mediated by Matrix metalloproteinase(MMPs). MMPs inhibited by tissue inhibitors of metalloproteinase(TIMPs). Imbalances in expression of MMPs and TIMPs can

involve in the progression of cancer. So the serum levels of MMPs and TIMPs could be used in diagnosis of cancer. We evaluated the serum level of MMP-2 and MMP-9 in patients with gastric adenocarcinoma (cases) and in non-patients (controls).

**Method:** In this case-control study about 44 healthy volunteer controls and 43 patients with gastric adenocarcinoma without any prior history of radiotherapy or chemotherapy who underwent gastrectomy in Omid, Imam Reza and Ghaem hospitals of Mashhad were enrolled. After taking 10cc peripheral venous blood samples from both groups (in cases before gastrectomy) sera expression of MMP2, MMP9, MMP10, TIMP1, TIMP2 determined by Enzyme-linked immunosorbent assay using ELISA kit (RayBiotech, USA).

**Results:** The ratio of men/women in our study was 56/31. Average age in patients was 56.67 and in controls was 46.18. According to standard cut off (>800) for MMP2 there was lower significant serum level of this marker (7% in comparative to controls 13.6%) ( $P=0.00$ ). The serum level of TIMP1 and TIMP2 was higher in cancer patients than controls ( $p=0.00$ ). There is no significant difference in serum level of MMP9 ( $P=1.00$ ) and MMP10 ( $P=0.10$ ) between case and control groups.

**Conclusion:** Our study demonstrated that increased serum levels of TIMP1 & TIMP2 and decreased serum level of MMP2 were associated with gastric cancer. Further studies needed for evaluation of these tumour markers' role in diagnosis and prognosis of gastric cancer.

Send Date: 2012/09/05

Code: 2421

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.13 Gastroduodenal malignancies

T-S-052

**Anatomical distribution and demographic data of gastric cancer from 2005-2012 in Mashhad, Iran**

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**Introduction:** Gastric cancer is the second most common cancer and the second cause of death due to cancer worldwide. Although the global incidence of gastric cancer has been decreased dramatically in recent decades, it is the most common cancer in north and northeast of Iran. In this study we present some epidemiological and characteristics of patients with gastric carcinoma in Mashhad.

**Method:** 923 cases of gastric patients (mean age of  $63.31 \pm 13.59$ ) registered in Ghaem Hospital in Mashhad from March 2005 to February 2012 were enrolled in this descriptive and cross-sectional study. Existing data were evaluated. Location of lesion and demographic characteristics include age and genders were considered. Statistical analysis was performed using the SPSS statistical software.

**Results:** Participants ( $n=923$ ) were 668 men (72.4%) and 255 women (27.6%) with a mean age of  $64.05 \pm 12.95$  and  $61.37 \pm 14.99$  years, respectively. Location of lesion in 145 (107 male and 38 female) (15.7%) of patients was in cardia part of stomach, the most prevalent part. 5 patients (3 male and 2 female) (0.5%) of them were suffered from lesions in fundus of stomach. Body of stomach in 9 (1%) of cases (7 male and 2 female), pyloric antrum in 36 (24 male and 12 female) (3.9%) of cases, pylorus in 7 (6 male and 1 female) (0.8%) of cases, an unspecified part of lesser curvature of stomach in 1 (0.1%) patient and also an unspecified part of greater curvature of stomach in 1 patient were involved.

**Conclusion:** cardia gastric Cancer is now the most common type of stomach cancer and the incidence of it have risen in Mashhad during these years. Although

there is no significant statistical difference between men and women, it seems Men in their 60s are the main victims of gastric cancer.

Send Date: 2012/09/05

Code: 2531

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.13 Gastroduodenal malignancies

T-S-053

بقاء بیماران مبتلا به سرطان معده متاستاتیک

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زمینه و هدف: تغییرات متعددی در اپیدمیولوژی سرطان معده در دهه های گذشته گزارش گردیده که احتمالاً بدلیل تغییرات در عوامل خارجی می باشد. همچنین این تغییرات می تواند کاهش جهانی روند سرطان معده را توضیح دهد. کاهش ضایعات دیستال و افزایش تومورهای پروگزیمال و کاردیا از اوایل دهه هشتاد بیان شده است. ایران با توجه به شباهتش به دیگری که در آن تمام عوامل اتیولوژیکی را بدلیل موقعیت جغرافیایی و مشکلات و عادات اجتماعی-فرهنگی در آن می توان یافت، مخلوطی از تمامی گرایشات را نشان داده است. ما به مطالعه عمیق تری درباره اپیدمیولوژی این بیماری با توجه به عادات جمعیت ایرانی نیازمندیم. با وجود اینکه بروز و مرگ و میر ناشی از سرطان معده در نیم قرن اخیر کاهش یافته، ولی همچنان بعنوان چهارمین سرطان اصلی و دومین عامل مرگ ناشی از سرطان در جهان است. نرخ بقاء سرطان معده در رده بدترین های هر نوع تومور سفت می باشد. بر خلاف موفقیت شیمی درمانی های مدرن در درمان سرطان های روده بزرگ، بقاء ۵ ساله بیماران با سرطان معده پیشرفته ۳۱٪ است. دو نوع مجزای بافتی سرطان معده، "نوع روده ای" و "نوع منتشر"، توصیف شده اند. مطالعه حاضر در نظر دارد به ارزیابی ارتباط بالینی بقا در سرطان معده متاستاتیک بپردازد که در آن تاثیر سن، جنسیت، و قومیت بررسی شده اند. همچنین تعاملات میان ویژگی های بیمار و بافت شناسی تومور، درجه، اندازه و محل (کاردیا و غیر کاردیا) مورد بررسی قرار گرفتند.

روش بررسی: بیماران بالغ با سرطان معده متاستاتیک در خلال سالهای ۱۳۸۵-۱۳۹۰ در مراکز آموزشی درمانی تبریز واردبیل ثبت شدند که اطلاعات تمام موارد جدید سرطان از ۱۷ نوع بایگانی جمعیتی جمع آوری و ثبت شدند. بقاء کلی بیماران با سرطان معده متاستاتیک را براساس جنسیت، سن، و گروه قومی (آذری کرد، فارس) با استفاده از مدل های تناسبی خطر کاکس مقایسه شد.

یافته ها: از سال ۱۳۸۵ تا ۱۳۹۰ تعداد ۸۶۹ بیمار به صورت تصادفی انتخاب شدند. بیماران آذری و مردان بیشتر با تومورهای معده در کاردیا ( $P < 0.001$ ) تشخیص داده شدند. نتایج آنالیز بقاء نشان داد که زنان خطر مرگ کمتری نسبت به مردان داشتند ( $P < 0.001$ ). بقاء کلی با سن کمتری شد ( $P < 0.001$ ). میانه بقاء کلی در بیماران کمتر از ۵۰ سال ۱۰ ماه

بود در حالی که برای بیماران ۶۹ ساله و بیشتر ۵ ماه بود.

نتیجه گیری: این مطالعه نشان می دهد که سن، جنسیت، و موقعیت تومور از عوامل مستقل پیش آگهی برای بقاء کل در بیماران با سرطان معده متاستاتیک می باشند.

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Code: 2537

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.13 Gastroduodenal malignancies

T-S-054

بار اقتصادی بیماری های دستگاه گوارش در ایران

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زمینه و هدف: بیماری های دستگاه گوارشی (GI) بار اقتصادی سنگینی اعمال می نمایند. هدف این مطالعه ارائه گزارش اولیه درباره بکارگیری مراقبت های بهداشتی و هزینه های بیماری های دستگاه گوارشی در ایران می باشد.

روش بررسی: در این مطالعه داده ها از تمامی منابع مطالبات تمامی شرکت های بیمه در ایران و منابع مربوط به دلایل مرگ و میر اداره ثبت و احوال ایران در سال ۱۳۸۹ جمع آوری شد. ما اطلاعات درباره تمامی بیماری های گوارشی بعنوان یک تشخیص اولیه در مراجعات کلینیکی، بستری شدن، و علل مرگ در این منابع را جمع آوری نمودیم. یافته ها: بر اساس آمار سازمانهای بیمه، دو میلیون و ۸۰۰ هزار نفر در طول سال ۱۳۸۹ در ایران مورد تشخیص بیماری های GI قرار گرفتند. در بین آنان، نسبت بیماران با بیماری های GI مجاری گوارشی فوقانی در ۶۳/۵ درصد شایع بود. بیماران بستری شده ۸/۵ درصد کل بیماری های GI را تشکیل می دادند، با این حال، ۶۴/۴ درصد از هزینه های مستقیم مرتبط با GI را شامل می شوند. بدخیمی های GI دلیل اصلی هزینه های پزشکی در بستری شدن بود. سرطان معده همچنان دلیل اصلی مرگ ناشی از GI در ایران بود. بیماری های GI فشار اجتماعی اقتصادی سنگینی را در موارد سرپایی و مرگ و میر بالای بدخیمی های GI در موارد بستری شدن، اعمال می نمایند.

نتیجه گیری: نتایج مطالعه حاضر فشار ناشی از بیماری های GI بر بکارگیری مراقبت های بهداشتی بیماری های GI را برای پژوهشگران و سیاست گذاران نظام سلامت عمومی روشن می نماید تا دستوراتی جدید درباره تحقیقات و طرح مراقبت بهداشتی یکپارچه ایجاد نمایند.

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Code: 2539

Category: 2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS

2.13 Gastroduodenal malignancies

T-S-055

## ارتباط هلیکوباکتر پیلوری و سرطان معده

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**زمینه و هدف:** هلیکوباکتر پیلوری باکتری گرم منفی مارپیچی شکلی است که اپیتلیوم از نوع معده ای انسان را آلوده می کند و احتمالاً آئین عفونت شایع ترین عفونت مزمن باکتریایی در انسانها هست اکثر بیماران که هلیکوباکتر پیلوری در معده آنها کلونیزاسیون می یابد هرگز دچار زخم نمی شوند و بدون علامت می مانند.

**روش بررسی:** طی یک مطالعه اپیدمیولوژی یک آینده نگر چند مرکزی در ایران ارتباط هلیکوباکتر پیلوری و سرطان معده مورد بررسی قرار گرفت.

**یافته ها:** شیوع سرمی هلیکوباکتر پیلوری در بیماران سرطان معده (۸۴ درصد) تفاوت چشمگیری با گروه شاهد (۶۵ درصد) نداشت؛ همچنین در میان گروههای شاهد (۶۵ درصد)، سرطان منتشر معده (۷۶ درصد)، و سرطان معده نوع روده ای (۹۲ درصد) نیز تفاوت چشمگیری نداشتند. در عوض مقایسه میان سرطان معده نوع روده ای (۹۲ درصد هلیکوباکتر پیلوری متوسط) با گروه شاهد مرتبط آن (۵۹ درصد هلیکوباکتر پیلوری مثبت) تفاوت معنی داری از لحاظ آماری مشاهده شد ( $P < 0.001$ ).

**نتیجه گیری:** برغم شیوع بالای هلیکوباکتر پیلوری در ایران، ارتباط عفونت هلیکوباکتر پیلوری با سرطان معده از لحاظ آماری فقط برای نوع روده ای قابل توجه می باشد. بنابراین باور بر این است که قبل از مسبب دانستن هلیکوباکتر پیلوری برای تمام این وقایع نامطلوب، مطالعات بیشتری در مورد این رابطه انجام بگیرد.

Send Date : 2012/10/01

Code: 2573

Category: 2- ESOPHAGEAL-GASTRIC AND  
DUODENAL DISORDERS

2.13 Gastroduodenal malignancies

T-S-056

## بروز اختلالات روانی در بیماران مبتلا به سرطان معده

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**زمینه و هدف:** در سال ۲۰۰۸ حدود یک میلیون مورد جدید سرطان معده رخ داده است (۹۸۸۰۰۰ مورد، ۰.۸٪ کل)، که آنرا به چهارمین بدخیمی رایج در جهان پس از سرطان های ریه، سینه، و کولورکتال تبدیل کرده است. بیش از ۷۰٪ موارد (۷۱۳۰۰۰) در کشورهای در حال توسعه رخ داده (۴۷۶۰۰۰ در مردان، ۲۴۶۰۰۰ در زنان)، و نصف موارد جهانی در آسیای شرقی اتفاق افتاده است. شیوع اختلالات روانی در بیماران سرطانی در مطالعات بطور قابل توجهی از ۹٪-۶۰٪ متغیر است. **روش بررسی:** مطالعه حاضر یک مطالعه آینده نگر می باشد. این مطالعه با استفاده از یک مصاحبه بالینی ساختارمند در ۵ ماه پس از تشخیص افسردگی انجام گرفت و بر بقاء بیماران با سرطان معده، متمرکز گردید. موارد یاد شده ۱۲۱ نفر بیمار با سن

۳۱-۸۰ بودند که از سال ۱۳۸۶ تا ۱۳۹۰ سرطان معده از طریق پاتولوژی در آنها تایید شده بود. یافته ها: میزان افسردگی در افراد بر اساس معیار افسردگی بک، ۵۲ درصد بود. سن، جنسیت، درجه تومور و شیوه های درمانی بطور قابل ملاحظه ای با افسردگی بیماران مرتبط بودند. سن (۵۵ سال یا بیشتر) در آمد سالیانه، درجه تومور، متاستاز گره های لنفاوی و درمان بطور چشم گیری با نسبت خطر (HR) بالا برای بقاء سرطان معده مرتبط بودند.

**نتیجه گیری:** اطلاعات بدست آمده از این فرضیه که افسردگی با بقاء پایین در بیماران سرطان معده ارتباط دارد تأیید می کند. مطالعات گسترده تر با تعداد نمونه های بیشتر و دوره های پیگیری طولانی تر مورد نیاز می باشند.

Send Date: 2012/10/02

Code: 2359

Category: 3. H.PYLORI

3.1 Epidemiology/natural history

T-S-057

**Prevalence of Peptic Ulcer Disease and its relationship with Helicobacter Pylori in Asymptomatic Subjects Referring to the Check- Up Clinic of Razavi Hospital from 2006- 2011**

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**Introduction:** Life style change is considered as a factor affecting on the increasing number of subjects with Peptic Ulcer Disease (PUD). Helicobacter Pylori (H. Pylori) infection is regarded as a risk factor for the mentioned disease. This study aims to find the prevalence of PUD in asymptomatic subjects referring to the Razavi Hospital Check-Up Clinic and the relation between PUD and H. Pylori.

**Method:** 499 asymptomatic subjects referring to the Check-Up Clinic of Razavi Hospital from 2006 till 2011 included in this study. Their data including: age, sex, endoscopy report and Rapid Urease Test (RUT) were evaluated and the results of 260 Biopsy were analyzed by SPSS.

**Results:** The mean age of the subjects was 52 which included 73.1% males and 26.9% females. Positive H. Pylori were reported in 75.2% of males and 24.8% of females. Endoscopy results revealed 57.2% subjects with PUD from which 23% were seen with erosin, 11.6% with gastritis, 11.4% with ulcer, 8% with erythema, 1.6% with sub epithelial hemorrhage, 0.8% with deodenitis and 0.8% with gastroduodenitis. In

90% of subjects that their endoscopy showed PUD and in 36.6% of subjects with normal endoscopy positive RUT was reported.

There was a significant relation between PUD observed in endoscopy and RUT ( $p = 0.001$ ). In 89.6% of subjects who had PUD in biopsy, 57.7% subjects had gastritis with positive *H. Pylori* and 13.8% subjects had gastritis without *H. Pylori*. There was a significant relation between gastritis incidence based on biopsy and RUT ( $p = 0.001$ ).

**Conclusion:** The prevalence of PUD is more common in asymptomatic males than females. Regarding the high prevalence of PUD and *H. Pylori* in the population under study, life style change and healthy nutrition are considered as effective factors in PUD prevention. According to the results of this study, the patients with upper GI symptoms should be suspect to PUD and positive *H. Pylori* infection.

Send Date: 2012/08/19

Code: 2572

Category: 3. H.PYLORI

3.1 Epidemiology/natural history

T-S-058

#### High Distribution of New Determinants of Helicobacter pylori-Related Cancer, vacA i1/-d1 Alleles, in High-Incidence Areas of Gastric Cancer in Iran

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**Introduction:** The distribution of gastric cancer-related *Helicobacter pylori* genotypes between different geographic locations of Iran particularly areas with high- and low-incidence of gastric cancer was assessed.

**Method:** A total of 138 *H. pylori* isolates from 10

districts of Iran were recruited and genotyped.

**Results:** The frequency of *vacA* s1 was 94.9%, s2 5.1%, m1 24.6%, m2 75.4%, i1 40.6%, i2 59.4%, d1 39.9%, d2 60.1%, *iceA1* 76.8%, *iceA2* 52.9%, *iceA1/2* 29.7%, *babA2* 40.6%, and *cagA* 65.9%. An individual hierarchical analysis of molecular variance of *vacA* i1, i2, d1, and d2 alleles and *iceA1* and *iceA1/2* genes found significant levels of genetic differentiation among populations ( $P < 0.05$ ). The prevalence of *vacA* i1 and d1 genotypes and *iceA1/2* gene (but not *iceA1* gene) were significantly higher among *H. pylori* isolates from high-incidence areas of gastric cancer (Age-standardized rates, ASRs > 20/105, max. 51.8/105) compared with those from low-incidence areas (ASRs < 10/105) in Iran [*vacA* i1 25/41 (61%) vs. 9/36 (25%),  $P = 0.003$ ; *vacA* d1 24/41 (58.5%) vs. 9/36 (25%),  $P = 0.003$ ; and *iceA1/2* 18/41 (43.9%) vs. 5/36 (13.8%),  $P = 0.004$ ]. The results of Mantel's test showed a low correlation between the genetic and geographic distances for *iceA1* and *iceA1/2* genes among 10 districts of Iran ( $r = 0.098$  and  $0.074$ , respectively,  $P < 0.05$ ). No significant difference was found between the genetic and geographic distances for the *vacA* alleles and the *iceA2*, *babA2*, and *cagA* genes in Iran ( $P > 0.05$ ).

**Conclusion:** It is proposed that the *H. pylori vacA* i1/-d1 alleles could be considered as important cancer-related biomarkers in the high-incidence areas of gastric cancer in Iran.

Send Date: 2012/10/02

Code: 2470

Category: 3. H.PYLORI

3.2 Molecular biology/genetics/pathology

T-S-059

#### Studying the effect of Tcf4 silencing on sensitivity of SW480 colon cancer cell line to Oxaliplatin, a common chemotherapeutic drug

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**Introduction:** Colon Cancer as one of the most common malignancies is responsible for the third cause of death from cancer in the world. Patients in Stage 3- 4 should be treated by 5-FU and Oxaliplatin or Irinotecan as chemotherapeutic drugs along with the surgery. Multiple Drug Resistance to chemotherapeutic drugs is mainly due to over expression of ABC transporter members. As TCF4 site is located on the ABCB1 gene promoter, TCF4/B-catenin complex may be responsible for Multiple Drug Resistance. B-catenin migration to the nucleus, a sign of active Wnt pathway, would trigger formation of TCF4/b-catenin complex. Wnt pathway, a key player in development and cell division, is activated in the process of carcinogenesis and even metastasis.

**Method:** In this study we designed siRNA against TCF4 gene by on-line design tools such as Ambion, Dharmcon, Sirecords and Codex. SiRNA was cloned in the appropriate plasmid vector and then transfected to SW480 cell line (colon cancer cell line) by lipofection methods. These cells and non transfected SW480 cell line were treated with different concentrations of Oxaliplatin (1 -12 micro molar). The cell death in different concentrations of Oxaliplatin was assayed by MTT proliferation assay.

**Results:** While non transfected SW480 cells did not show any significant cell death in tested range (1-12 micro molar). In two different clones of cells transfected with siRNA against TCF4, the LC50 was in the range of 3.75 and 4.375 micro molar. This observation was seen in three rounds of tests and it showed that it was not random.

**Conclusion:** Wnt pathway is active in many colon cancer cell lines. Activation of this pathway leads to B-catenin aggregation in the nucleus and B-catenin/TCF4 complex formation. This complex stimulates transcription of Wnt related genes such as cyclin D or ABCB1 which leads to carcinogenesis. When B-catenin/TCF4 formation is inhibited through TCF4 gene silencing, its downstream genes such as ABCB1 will not be expressed which may be related to sensitizing these cells to chemotherapeutic drugs such as Oxaliplatin.

Send Date: 2012/09/27

Code: 2505

Category: 3. H.PYLORI

3.3 Pathogenesis: host factors/histo-pathology

T-S-060

### Gastric Cancer Risk in an Adult General Population Infected with Helicobacter Pylori: a Long-Term Follow-up Cohort Study

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**Introduction:** As there are currently no clear criteria to recognize individuals at risk of progressing towards gastric cancer (GC), this cohort study aimed to identify predictors of GC risk in a high-risk population.

**Method:** 896 randomly selected H.pylori positive permanent residents of Ardabil, Iran, without a history of gastrointestinal diseases, underwent upper endoscopy with targeted biopsy sampling in 2000-1. Patients were followed until 2011 for incident cancers, and Cox regression was used to estimate hazard ratios (HR) and 95 % confidence interval (CI).

**Results:** During 9,096 person-years of follow-up, GC was developed in 36 participants, yielding an incidence rate of 3.96/1000/year. In the multivariate model, baseline severe atrophic gastritis of gastric body was associated with increased GC risk. All levels of severity of intestinal metaplasia at gastric body, but only severe antral intestinal metaplasia were associated with significantly higher GC risk. Age over 50, family history of GC (HR=6.8; 3.0-15.1), smoking (HR=5.3; 2.0-13.9), and endoscopically confirmed gastric ulcer (HR=6.6; 2.5-9.1) were independently associated with GC risk. Duodenal ulcer and gastroesophageal reflux disease did not affect the risk of GC.

**Conclusion:** In this population with a high rate of H. pylori infection, age over 50, smoking, family history of GC, atrophic gastritis of corpus, intestinal metaplasia at either antrum or corpus, and particularly, previously

undiagnosed gastric ulcer were significant independent risk factors for GC. Assessment of a combination of these risk factors may identify individuals at risk of GC who may benefit from more intensive surveillance.

Send Date: 2012/09/30

Code : 2342

Category : 3. H.PYLORI

3.4 Diagnosis

T-S -061

#### **Effect of gastric Acidification on the 14C-UBT HELIPROBE® accuracy during Pantoprazol treatment in**

#### **Helicobacter Pylori positive patients**

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**Introduction:** The aim of this study was to evaluate the influence of using Citric Acid on false negative rates induced by PPIs during 14C –UBT in dyspeptic patients with H.Pylori infection.

**Method:** In a crossover randomized controlled clinical trial, one hundred dyspeptic patients (46 females and 54 males) with determined H. pylori infection who referred to gastrointestinal Outpatient Clinic of Razi Hospital-Rasht, Iran were enrolled in the study in 2011-2012. All the patients underwent a 14C-UBT HELIPROBE® baseline test and the positive ones entered the second phase. They were divided randomly to two groups and started PPIs treatment by Pantoprazol (Pantozol® Nycomed company). Both groups underwent two other UBTs in days 12-13 and 14-15 with and without 4 grams Citric Acid. Data were analyzed in SPSS 18.  $P < 0.05$  was considered significant.

**Results:** In group I who underwent UBT with Citric Acid in days 12-13 (UBT2) and UBT without Citric Acid in days 14-15 (UBT3), there was no significant difference between the UBT results with and without Citric Acid ( $P \geq 0.05$ ). In group II who underwent UBT without Citric Acid in days 12-13 (UBT2) and UBT with Citric Acid (UBT3) in days 14-15, the false negative rates were not significantly different between UBT with and without Citric Acid ( $P \geq 0.05$ ). In both groups the results of UBT without Citric Acid after Pantoprazol consumption didn't change

significantly compared to the baseline UBT. Also the difference between the false negative rates of baseline UBT and Ubt without citric acid was not significant ( $P > 0.05$ ).

**Conclusion:** These results suggest that acidification of gastric environment during 14C-UBT cannot prevent false negative results and do not increase the accuracy of the test in patients taking PPIs. Also this study has the novel finding that Pantoprazol doesn't influence the sensitivity of 14C-UBT at all.

Send Date: 2012/08/15

Code: 2343

Category: 3. H.PYLORI

3.4 Diagnosis

T-S-062

#### **Comparison of Serum Pepsinogen I and II and Gastrin 17 level in patients more than 50 years with dyspepsia with precancerous gastric lesions**

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**Introduction:** Serum screening systems are beneficial for gastric cancer surveys. The aim of this study was to comparison of serum Pepsinogens, Gastrin 17 and helicobacter pylori Antibody in patients with dyspepsia and precancerous lesions in gastric biopsy.

**Method:** In a cross sectional study, patients with dyspeptic symptoms who have underwent endoscopy for obtaining gastric specimen were enrolled in this study. Biopsy specimens were analyzed for Rapid Urease test and histopathological pattern. Precancerous lesions (40 patients) and chronic gastritis (88 patients) were considered as case and control. Serum pepsinogens I (PGI) and II (PGII), gastrin 17 (G-17), and antibodies against IgG H. pylori, and cytotoxin-associated gene A (CagA) antigen were measured among all patients in a private laboratory of Rasht. Data were analyzed using SPSS version 18.

**Results:** Among patients, 120 chronic non-atrophic gastritis, 39 metaplasia, 5 dysplasia and 6 neoplasia were seen. No atrophic gastritis was detected. Number of cases with PGI < normal in patients without metaplasia (75.9%) and neoplasia (96.6%) was significantly more than patients with metaplasia (24.1%) and neoplasia (3.4%) respectively ( $P < 0.05$ ). After

merging three group of metaplasia, dysplasia and atrophic gastritis as a new group of precancerous (case), significant differences were found in regard to PGI and PGI/PGII between case and control group ( $P<0.05$ ). Lower normal level of PGI and PGI/PGII was more frequent in precancerous patients (15%, 20% respectively) than chronic gastritis patients (1.1%, 5.7% respectively). Mean of PGI and PGI/PGII was lower in precancerous lesion (99.57  $\mu\text{g/L}$ , 5.89 respectively) rather than chronic gastritis patients (100.24  $\mu\text{g/L}$ , 8.77 respectively) ( $P<0.05$ ). No differences were found between group in regard to PGII, Gastrin 17, Anti HP Abs.

**Conclusion:** According to our findings, low PGI and PGI/PGII levels were useful markers for detection of gastric precancerous lesions. Further studies with larger sample size are recommended for sensitivity and specificity of serum markers and probable cut off for mentioned markers.

Send Date: 2012/08/15

Code: 2461

Category: 3. H.PYLORI

3.4 Diagnosis

T-S-063

#### Determining the optimum time to read the rapid urease test result

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**Introduction:** Considering the high prevalence of *Helicobacter pylori* (HP) infection in Iran and availability of the rapid urease test as a low cost, accurate and fast diagnostic test, this study aimed to determine the sensitivity, specificity and the optimum time for reading the test

**Method:** This study evaluated 167 patients being referred to the Endoscopy ward of Loghman Hospital in Tehran in 2010. HP infection was assessed by obtaining two biopsy specimens from the antrum of stomach. One biopsy was sent for pathologic study as the Gold Standard test and the other one for RUT. RUT results were serially read for up to 24 hours after taking the specimens.

**Results:** Sensitivity and specificity of the RUT were as follows: 41.5% and 100% after 10 min, 48.8 and 100% after 30 min, 52.4% and 100% after 1 hour, 62.2% and 96.5% after 3 hours, 68.3% and 94.1%

after 12 hours and 73.2% and 90.6% after 24 hours.

**Conclusion:** While positive RUT results obtained within one hour after endoscopy are highly reliable, negative results need to be kept and read after 24 hours.

Send Date: 2012/09/25

Code: 2335

Category: 3. H.PYLORI

3.5 Management strategies

T-S-064

#### Comparison of two most prescribed H. pylori eradication regimens in Zahedan

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**Introduction:** *Helicobacter pylori* infection is the most common infection of human. This organism responsible of majority of peptic ulcer disease, maltoma and gastric cancer, worldwide.

Several regimen therapy against *H.pylori* had developed but therapies have rarely been optimized, are prescribed empirically. In this study, we compare two regimens that used widely in Iran, triple regimen (clarithromycin, amoxicillin and omeprazole) and furazolidone based quaderable regimen (furazolidone, amoxicillin, bismuth and omeprazole), in some dyspeptic patients in Zahedan.

**Method:** In this cross-sectional study 482 consecutive dyspeptic patients that *H.pylori* infection was established with Urea Breath Test (UBT) randomized into one of the following groups; group A (treated with clarithromycin 500mg, amoxicillin 1000 mg and omeprazole 20 mg twice daily for 10 days) or group B (furazolidone 100 mg, amoxicillin 1000 mg, bismuth subcitrate 240 mg and omeprazole 20 mg twice daily for 14 days). One month after discontinuation of treatment, *H. pylori* eradication evaluated with UBT.

**Results:** Mean age of patients was  $35.9 \pm 12.3$  yaers and male to female ratio was 1: 1.6. From all patients, 131 (61 and 70 patients in group A and B, respectively) lost and 351 patients completed the study. In intention to treat analysis, eradication rate of *H.pylori* was 63.7 % in comparison with 80.3 % in group A and B, respectively ( $p< 0.004$ ).

**Conclusion:** Our study showed both routine regimen

that used for H. pylori eradication in Iran provide inferior results compared with antimicrobial therapies for other common infectious diseases, and furazolidone based quadruple regimen is superior to standard triple regimen.

Send Date: 2012/08/12

Code: 2364

Category: 3. H.PYLORI

3.5 Management strategies

T-S-065

**Quantile (5 drugs) regimen for H.pylori eradication in quadruple non-responder dyspeptic patients**

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**Introduction:** Helicobacter pylori (HP) infection is a common infection in developing countries. There are multiple regimens for the eradication of this infection but antibiotic resistance is increasing. The aim of this study is determination of HP eradication rate after 7-days quantile therapy in quadruple non-responder dyspeptic patients.

**Method:** This interventional study was performed at 2010-2011 in Rasht Razi hospital. Patient's age were 15-65 years. They were treated with a 2-weeks quadruple therapy, previously and were still HP positive. A seven-day course of quantile therapy with Amoxicillin(1g/BD), Tinidazole (500mg/BD), Clarithromycin(500mg/BD), Omeprazole 20mg/BD) and Bismuth Subcitrate (240 mg/BD) was started. Twelve weeks after the end of treatment, a C13-UBT test together with HP stool Ag was performed.

Eradication was considered successful if the results of both tests were negative. Chi-square test was used for statistical analysis A P-Value less than 0.05 was considered significant.

**Results:** Out of 97, 35 patients had been excluded due to intolerance to therapeutic regimen. The eradication rates were 82.3% and 52.5% by per-protocol & Intention-to-treat analysis, respectively.

There was no significant relation between HP-eradication rate and, age, gender, smoking and the presence of gag-A Antigen.

**Conclusion:** Despite acceptable eradication rate by

this regimen, significant intolerance and side-effects were the most important limitation of this regimen.

Send Date: 2012/08/21

Code: 2398

Category: 3. H.PYLORI

3.5 Management strategies

T-S-066

**Diagnostic value determination of stool Antigen test in diagnosis of Helicobacter pylori in compared with Rapid ureas test in dyspeptic patients**

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<sup>1</sup>shahid sadooghi medical university

**Introduction:** Helicobacter pylori is one of the common organisms in human and it is a main agent to cause peptic ulcer and gastric cancer, HP is a probable reason of dyspepsia. The diagnosis of HP is divided into 2 parts:

invasive methods such as endoscopy and taking biopsy and noninvasive methods such as urease breath test and stool Antigen test. In this study aimed to determine diagnostic value of stool Antigen test in diagnosis of Helicobacter Pylori in compared with rapid ureas test in dyspeptic patients.

**Method:** In this study 101 dyspeptic patient who are candidates for endoscopy are considered in Khatemol anbia gastrointestinal clinic, Rapid Ureas Test was done for this patient during endoscopy then Stool Antigen Test was done for the patients and results of two tests are compared. The results are analyzed with chi-square tests and kappa tests by SPSS ver 17 software.

**Results:** This study is done on 60 women(59.4%) and 41 men(40.6%) with average of 41.23 years.

It shows that there is a diagnostic relation between results of stool Ag test and RUT(p.value<0.005) Sensitivity= 91/4% specificity=96/96% Positive predictive value= 94/11% negative predictive value=95/52% Accuracy = 95/04%

**Conclusion:** It can be concluded from this study that Stool Antigen Test has a high sensitivity and specificity in diagnosis of HP and it can be used as an alternative test. In addition Stool Ag Test is a noninvasive and

rapid test.

Send Date: 2012/09/03

Code: 2429

Category: 3. H.PYLORI

3.5 Management strategies

T-S-067

**Comparison of the rate of helicobacter pylori eradication with half-dose and full-dose triple therapy regimens in patients with end-stage renal disease**

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**Introduction:** Helicobacter pylori (Hp) is one the most important causes of dyspepsia in patients with end-stage renal disease (ESRD). According to the renal failure, it is desirable to decrease the dosage of the antibiotics used for Hp eradication. The main purpose of current study was to compare the rate of successful Hp eradication in patients with ESRD on hemodialysis between half-dose and full-dose antibiotic therapy.

**Method:** Twenty six patients with ESRD were enrolled in the study with Hp infection and peptic disease with a need of Hp eradication. Patients were randomly assigned to full-dose group (A; 15 patients) or half-dose (B; 11 patients). Patients received clarithromycin 500 mg, amoxicillin 1000 mg and omeprazole 20 mg twice daily in group A and clarithromycin 250 mg and amoxicillin 500 mg twice daily and omeprazole 20 mg once daily in group B for 2 weeks. Patients provided stool samples at week 4 to assess the success of Hp eradication by Hp-specific stool antigen. Finally, the rate of eradication and complications were compared between 2 groups.

**Results:** The successful Hp eradication was achieved in 11 patients in group A (73.3%) and in 8 patients (72.7%) and the difference between 2 groups was not statistically significant ( $p=0.973$ ) (per protocol analysis). The rate of bitterness of the month and abdominal distention were significantly higher in the group A (86.6% and 46.7%, respectively) compared the group B (36.4% and 9.1%, respectively) ( $p=$

01.014 and 0.04, respectively). The rate of other complications did not differ between the groups.

**Conclusion:** Half-dose triple-therapy with clarithromycin, amoxicillin and omeprazole is as effective as full-dose triple-therapy to eradicate the Hp and according to lower toxicity, complications and cost is advised in patients with ESRD.

Send Date: 2012/09/12

Code: 2456

Category: 3. H.PYLORI

3.5 Management strategies

T-S-068

**Assessment of N-Acetyl Cysteine effect as an adjuvant treatment in patients with Helicobacter Pylori infection**

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**Introduction:** Helicobacter pylori (HP) colonization beneath the biofilm of gastric mucus enables the organism to survive in the hostile environment of the gastric mucosa. It has been proposed that N-acetylcysteine (NAC) induces a reduction of gastric barrier mucus thickness

**Method:** Fifty patients with definite indications for helicobacter pylori eradication at Loghman Hakim hospital were enrolled in this randomized placebo-controlled trial. The intervention group (A, n=25) received N-acetyl cysteine 600 mg twice daily and Identical inert effervescent tablets were given to the placebo group (B, n=25). Both groups received a triple regimen containing Omeprazole 20 mg, Clarithromycin 500 mg and Amoxicilin 1000 mg, twice daily for two weeks. The primary outcome measure was H. pylori eradication documented by urea breath test assessed 4-8 weeks after the end of treatment.

**Results:** The mean age of cases was 46.34 years (SD=16.33), of which 54% were female and 46% were male. The chief complaints of cases were epigastric pain in 62%, reflux in 28%, melena in 6% and hematemesis in 4%. Indications for H. pylori eradication were duodenal ulcer in 33 patients (66%), gastric ulcer in 8 patients (16%), and nine first degree relatives of patients with gastric cancer (18%). There was only nausea as side effect of drugs (8%), which

were all in group A. None of cases discontinued drugs because of side effects. Eradication rate was 84% in group A and 64% in group B on the intention to treat analysis. However, this difference did not reach statistical significance ( $p=0.196$ ).

**Conclusion:** Although we were unable to find a statistically significant difference between the two groups, these preliminary results show some promise for the use of N-acetyl cysteine in H. pylori eradication regimens, if our results are confirmed in further studies.

Send Date: 2012/09/25

Code: 2513

Category: 3. H.PYLORI

3.5 Management strategies

T-S-069

#### **Eradication rate of Helicobacter pylori with a two-week quadruple therapy:**

#### **A report from the south region of Iran**

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**Introduction:** The use of quadruple therapy for Helicobacter Pylori (H Pylori) eradication has been commonly considered as a gold standard regimen with high efficacy; however, some studies have suggested its-related high compliance problems and side effects. In current study, we evaluated the H pylori eradication rate following a quadruple therapy including omeprazole, bismuth, amoxicillin, and metronidazole in Hormozgan, the most southern province in Iran with high rates of H Pylori infection and its-related disorders.

**Method:** One hundred patients with with dyspepsia and H Pylori infection documented by (13)C-urea breath test (UBT) or rapid ureas test were treated with a quadruple regimen containing bismuth subcitrate (120 mg, 2 tablet/Q12h), amoxicillin (500 mg/Q8h), metronidazole (250 mg/Q8h), and omeprazole (20 mg/Q12h) for two weeks. Our primary efficacy outcome was H pylori eradication, established by negative UBT at least four weeks after the end of

treatment.

**Results:** Positive eradication response was revealed in 82% of participants. Quadruple therapy was similar in women and men in eradicating H Pylori (81.0% versus 83.3%); that this difference was statistically insignificant. H Pylori eradication rates with quadruple therapy were found better in the younger group so that the eradication rate in the three age categorizations of 16-20 years, 21-40 years, and 41-60 years was 100%, 81%, and 77.8%, respectively ( $p = 0.001$ ). There was no significant difference in H Pylori eradication rate between the genders in the age groups of less than 20 years and the middle age group, however in the older group; eradication rate was significantly higher in women than men (100% versus 66.6%).

**Conclusion:** A two-week quadruple therapy including omeprazole, bismuth, amoxicillin, and metronidazole results in high effectiveness on H pylori infection with an acceptable eradication rate in the south region of Iran. The eradication rate seems to be lower in older men than in young men or in women.

Send Date: 2012/09/30

Code: 2518

Category: 3. H.PYLORI

3.5 Management strategies

T-S-070

تعیین اثربخشی رژیم چهار دارویی آموکسی سیلین، تتراسایکلین، امپرازول و بیسموت بر ریشه کنی هلیکوباکتر پیلوری در بیماران با شکایت دیس پیسی

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زمینه و هدف: با توجه به مشاهده مقاومت به مترونیدازول در بیماران و عوارض بالای فورازولیدون و هزینه بالای کلاریترومایسین و نیز عوارض و مقاومت کم گزارش شده به تتراسایکلین و آموکسی سلین در درمان خط اول ریشه کنی هلیکوباکتر پیلوری، بر آن شدیم تا تاثیر این رژیم ۴ دارویی را در مبتلایان به دیس پیسی H pylori مثبت ارزیابی نماییم.

روش بررسی: این مطالعه بر روی ۱۸۸ بیمار، با شکایت دیس پیسی صورت پذیرفت. به بیماران ۱۴روز رژیم ۴دارویی تتراسایکلین (BD)، بیسموت (BD)، آموکسی سیلین (BD) و PPI (BD) تجویز شد. بیماران ۴ هفته درمان نگهدارنده PPI (BD) دریافت و ۲ هفته پس از قطع آن، تمامی بیماران تحت UBT قرار

گرفتند. نتایج با SPSSv16 مورد آنالیز آماری قرار گرفت. یافته ها: از بین ۱۸۸ بیمار، ۷۴ نفر (۳۹/۴٪) مرد و ۱۱۴ نفر (۶۰/۶٪) زن و میانگین سنی ۲۱/۲۱ ± ۴۳/۴۳ سال بود. قبل از شروع تجویز دارو از ۱۴۸ بیمار (۷۸/۷۲ درصد) آندوسکوپی به عمل آمد که گاستریت شایع ترین یافته آندوسکوپی آنها بود. ۱۲۱ بیمار (۶۴/۳ درصد) با بیوپسی، ۳۳ بیمار (۱۷/۵) با RUT، ۳۰ بیمار (۱۶ درصد) با سرولوژی و ۴ بیمار (۲/۲ درصد) با UBT تشخیص عفونت هلیکوباکتریلوری در آنها گذاشته شد. ۱۸۵ نفر (۹۸/۵ درصد) مطالعه را به پایان رسانده و ۳ بیمار (۱/۵٪) به دلیل سردرد شدید و درد شدید شکم دوره درمانی را نیمه تمام گذاشتند. در ۱۵ بیمار عوارض جانبی قابل تحمل مشاهده شد که شایع ترین آن تهوع در ۹ بیمار (۴/۸۶ درصد) بود. ریشه کنی موفقیت آمیز عفونت در ۱۷۳ بیمار (۹۳/۵ درصد) مشاهده شد و درصد ریشه کنی با آنالیز Per protocol ۹۳/۵ درصد و Intention to treat ۹۲/۰۲ درصد محاسبه گردید. نتیجه گیری: این مطالعه نشان داد که این رژیم چهار دارویی با میزان ریشه کنی بسیار بالا، هزینه پایین و عوارض کم، می تواند به عنوان یک رژیم خط اول در ریشه کنی این عفونت بکار گرفته شود.

Send Date: 2012/09/30

Code: 2384

Category: 4. INTESTINAL

4.2 Coeliac disease/malabsorption syndromes and food enteropathies

T-S-071

#### Knowledge, attitude, and practice of Iranian patients with celiac disease

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**Introduction:** Limited data are available on knowledge, attitude, and practice (KAP) of patients with celiac disease, and there is no report in this regard from Iran. We investigated the KAP among Iranian patients with celiac disease.

**Method:** Patients with celiac disease who have been registered by the Iranian Celiac Society (ICA) in Isfahan, participated in this study. An appropriate

questionnaire was designed in a pilot study for measuring the KAP, the validity was approved by face validity and the reliability by Cronbach's Alpha. The total score of knowledge and practice was calculated from 100. Patients responded to the KAP questionnaire and the Gastrointestinal Symptom Rating Scale.

**Results:** From 96 patients, 72 responded to the questionnaires (response rate = 75%). There were 57 adult and 15 children patients (for whom the parents responded). The total knowledge score was 51.5±16.3 (6.9 to 84.9), with higher knowledge of the patients in domains of pathophysiology (63.2±25.5) and diet (60.0±18.0). About half of the patients concerned about the quality, taste, appearance, and energy of gluten free foods. They didn't trust food stores when they buying gluten free foods. Emotion of the patients were generally positive to their disease. Total practice score was 55.9±14.3 (17.9 to 82.1). Adherence to gluten free diet was complete, partial, and no adherence in 60.9%, 30.4%, and 8.7% of the patients, respectively. The most important causes of non-adherence were the lack of gluten free food store. No association was found between knowledge and practice scores. The lack of gluten free food store and time consuming of preparing such foods were associated with lower practice scores and higher symptom severity ( $r = -0.316$  and  $0.343$ ).

**Conclusion:** The current status of Iranian patients with celiac disease regarding their knowledge is not fair. Their attitude, however, regarding their disease reflect the problems they have in seeking and preparing gluten free foods, leading to non-adherence to the diet. Iranian patients with celiac disease need more education about the disease and facilities for accessing gluten free foods.

Send Date: 2012/09/02

Code: 2385

Category: 4. INTESTINAL

4.2 Coeliac disease/malabsorption syndromes and food enteropathies

T-S-072

#### Quality of life and psychological state in Iranian celiac patients

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**Introduction:** Limited data are available about the impact of celiac disease (CD) on patients quality of life (QOL) and associated factors. We assessed the QOL and psychological state of Iranian patients with CD.

**Method:** Biopsy-proven CD patients (n=57; mean age = 40.3±14.5 yrs, mean disease duration = 3.9±2.7 yrs; range 1-10 yrs; female 75.4%) completed The Short-Form 36-Item (SF-36) QOL measure, The Hospital Anxiety and Depression Scale (HADS), Gastrointestinal Symptom Rating Scale (GSRS), adherence to GFD, overall compliance to treatments, and demographic questionnaire.

**Results:** Patients' quality of life was significantly lower in most domains compared with age matched control data from the general population. Anxiety and depression scores were above the cut-off levels (+8) in 80.7% and 43.9% of the patients. Total SF-36 scores were associated with age (-0.375, P = 0.006), anxiety (-0.741, P < 0.001), depression (-0.591, P < 0.001), and GSRS scores (-0.459, P < 0.001). In multivariate analyses, mental disorder, higher age, and more severe symptoms were associated with a reduced physical summary score of the SF-36, but only mental disorder predicted a reduced mental summary score of the SF-36. Adherence to GFD was partial in 63.1% and others were non-adherent to GFD. Higher depression scores were associated with lower overall compliance, and in turn higher compliance was associated with lower GSRS-indigestion syndrome. Lower adherence to GFD was associated to GSRS-diarrhea syndrome.

**Conclusion:** Reduced health-related quality of life in Iranian celiac patients is associated with physical symptoms and mental health of the patients. Adherence to GFD and overall compliance to treatments are associated with lower symptoms. Further studies with larger sample sizes are warranted in this regard.

Send Date: 2012/09/02

Code: 2386

Category: 4. INTESTINAL

4.2 Coeliac disease/malabsorption syndromes and food enteropathies

T-S-073

### Prevalence of Inflammatory Bowel Disease in Iranian Patients with Celiac Disease

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**Introduction:** Limited and controversial data are available on the association between celiac disease and inflammatory bowel diseases (IBD). We assessed the prevalence of IBD in Iranian patients with celiac disease.

**Method:** Biopsy-proven celiac disease patients who have been registered between 2002 and 2012 in Iranian Celiac Association were investigated. Patients who had endoscopic and pathologic evidence of IBD were identified, and their pathology was reviewed.

**Results:** Among 157 adult patients with celiac disease, IBD was identified in 5 cases (3.8%, mean age = 34.0±13.8). Three patients had ulcerative colitis and two had Crohn's disease. Celiac pathology were included four MARSH III and one MARSH I, and presentations were with diarrhea in three and with liver dysfunction and amenorrhea in each of the other patients. Celiac patients with IBD were similar to those without IBD regarding age and gender, but diarrhea was the major presenting symptom more frequently in those with IBD than those without. In two patients with diarrhea, no response to gluten free diet lead us to further diagnostic evaluations and the final diagnosis of concurrent IBD. Two of the patients with IBD also had primary sclerosing cholangitis.

**Conclusion:** Within Iranian patients with celiac disease, IBD is significantly more common than what is expected from the general population. Pathology of celiac in patients with concurrent IBD shows a more severe disease in these patients. Diarrhea in a celiac patient non-response to gluten free diet can suggest concurrent IBD and should be further investigated. More studies are required on clinical importance of the association between celiac disease and IBD.

Send Date: 2012/09/02

Code: 2387

Category: 4. INTESTINAL

4.2 Coeliac disease/malabsorption syndromes and food enteropathies

T-S-074

**Mortality and causes of death  
in Iranian patients with celiac disease**

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**Introduction:** Celiac disease (CD) is one of the most prevalent autoimmune gastrointestinal disorders, but diagnosis is often delayed or missed. Patients with CD have an increased risk of death from gastrointestinal malignancies and lymphomas, but little is known about mortality from other causes and few studies have assessed long-term outcomes in our society. We evaluated mortality and the cause of death in registered patients with celiac disease in Isfahan celiac research center as a branch of Iranians Celiac Association (ICA).

**Method:** A document review and telephone interview was done for patients with CD who have been diagnosed and registered in ICA from 2002 to 2012, including 157 adult and 70 children patients with definite CD. Disease related causes of death was investigated.

**Results:** Six patients died during the evaluation period because of a disease including 5 adult patients and one child. Presentations were diarrhea in 2 (40%) and liver dysfunction in 3 (60%) of the adults and diarrhea in the child. Of the adults, only one patient followed gluten free diet (GFD) completely, and the others were partially adherent. The child was completely adherent to GFD. The direct cause of death was diarrhea in the child, cirrhosis in three adults, adenocarcinoma and primary abdominal lymphoma in each of the other adult patients.

**Conclusion:** Mortality from celiac disease in our geographical area is increased compared with the general population, and this increased risk seems to

be due to hepatic failure and malignancies in adults and intractable diarrhea in children that occurred because of in compliance to diet and probably delay in diagnosis.

Send Date: 2012/09/02

Code: 2389

Category: 4. INTESTINAL

4.2 Coeliac disease/malabsorption syndromes and food enteropathies

T-S-075

**First Round on the Iranian Celiac  
Association Guideline on Diagnostic  
Approach and Follow-up Protocol of  
Patients with Celiac Disease**

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**Introduction:** We aimed to prepare a guideline on diagnostic approach and follow-up protocol of patients with Celiac disease in our society.

**Method:** For this aim, current guidelines were reviewed and a primary guideline was developed based on our experiences with celiac patients in

Iranian Celiac Association (ICA), including pitfalls of diagnosis and treatment we observed during about 10 years from 2002. Also, related data from our studies and those from others that were done in Iran on celiac disease epidemiology, diagnostic tests, and etc. were considered. The guideline was then tested for one year and revised accordingly.

**Results:** The ICA guideline includes diagnostic approach for patients suspicious to celiac disease and follow-up protocol that are useful for both specialized and general physicians. It is now sent to experts in the field for their opinions and will be revised in a consensus, parallel with the congress. The guideline is available from [www.celiacngo.ir](http://www.celiacngo.ir).

Send Date : 2012/09/02

Code: 2400

Category: 4. INTESTINAL

4.2 Coeliac disease/malabsorption syndromes and food enteropathies

T-S-076

#### **Comparison of prevalence of celiac serology between patients with microscopic colitis and normal population in Kurdistan province**

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**Introduction:** Celiac disease is one of the most important malabsorption diseases, caused by the reaction to Gluten and resulting inflammation in the small intestine. Increased intraepithelial lymphocyte (IEL) is one of pathologic changes in celiac disease. The most important pathologic change in lymphocytic colitis (one type of microscopic colitis) is also increased number of IEL. This similar pathologic change poses some correlation between microscopic colitis and celiac disease (pathologically, epidemiologically and or etiologically). So this study was designed to evaluate any epidemiological co incidence between microscopic colitis and positive serology of anti celiac antibodies. It is crystal clear that further evaluations with pathologic confirmation of celiac disease need in order to pose any correlation between celiac and microscopic colitis.

**Method:** This case control study has been performed

on 60 patients with microscopic colitis (pathologically approved) and 120 age and sex matched control group referred to Sanandaj Tohid hospital in 1391. The control group was selected from family members of patients that had been admitted in ENT ward; not suffering from any GI problem (like diarrhea), weight loss or anemia (the anemia was excluded by a CBC test). Demographic data was taken and documented whenever the patients referred to the clinic and Blood sampling for measuring the Ig-G anti gliadin and Ig-A anti tissue trans glutaminase level (By Eliza method) was performed for them. Once one of the antibodies became positive, "positive serology" term was used in this study. The prevalence of positive serology was compared statistically in patient and control groups.

**Results:** From 60 patients with microscopic colitis (32 male, 28 female) 53 had lymphocytic and 7 cases had Collagenous colitis.

From patients with lymphocytic colitis twenty four(45%) and from patients with Collagenous colitis three patients(42%) had positive serology for anti celiac antibodies (45% of all patients with microscopic colitis).

From 120 healthy cases (64 male, 56 female) 19 persons (15.8%) were positive for Celiac serology.

The mean age was  $35.8 \pm 13.1$  for the patients with microscopic colitis and  $35.1 \pm 12$  in healthy cases.

From 23 patients with pathologically proved microscopic colitis, for whom small intestine biopsy had been performed either, 13 cases (56.5%) were positive for criteria of celiac disease in their duodenal biopsy.

**Conclusion:** In this study the rate of positive serology tests for Celiac disease was higher significantly in patients with microscopic colitis comparing to the healthy individuals in Kurdistan province. So it is wisely to recommend evaluating any patient with microscopic colitis for coincident celiac disease, especially if symptomatic relief not achieved after ordinary treatment of microscopic colitis. Also it can be recommended to evaluate any patient with refractory celiac disease for having coincidental microscopic colitis.

Send Date: 2012/09/03

Code: 2495

Category: 4. INTESTINAL

4.2 Coeliac disease/malabsorption syndromes and food enteropathies

T-S-077

### The Clinical Presentation of Iranian Celiac Disease

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**Introduction:** Celiac disease (CD) is characterized by small intestinal malabsorption of nutrients. The clinical presentation of celiac disease is remarkably varied and that is why CD described as iceberg. The clinical presentation of celiac disease dependent to age and duration of disease, but the patient may be found without any symptom in screening program. Knowledge and thinking of physician about CD is important for diagnosis of CD. The AIM of this study is the description of clinical presentation and paraclinical findings of celiac disease in Firoozgar Hospital, a general referral Hospital in Tehran, Iran

**Method:** We determined 133 patients with CD in a descriptive case-series study from 2005 to 2012. Data including demographics, clinical symptoms, past medical history, associated disorders and laboratories finding (serologic markers {anti-TTG, AGA, EMA} , CBC, Ferritin) of 133 patients with CD collected by a trained physician using a structured questionnaire. Upper endoscopic and biopsy had been done for all suspected cases according to the clinical or paraclinical findings. The diagnosis of CD was made by at least two serologic markers and histologic finding according to MARSH classification

**Results:** The mean age of patients was 42 years from 3.5 to 70 years old and 60% were men and 40 % were women. The most common chief complaint was diarrhea in 57 patients (43%) .The other chief complaints including significant weight loss (8), Anemia (26), chronic fatigue (12), constipation (8), reflux (8), chronic dyspepsia (8), recurrent abortion (2), infertility (1), cirrhosis (1), ulcerative colitis (1), chronic intestinal pseudoobstruction (1). Endoscopy was reported by Marsh Classification. 3 patients classified as Marsh I. 6 patients with Marsh

II and 114 patients with Marsh III including (43 IIIa , 36 IIIb , 35 IIIc). TTG serum has been elevated in 113 patients ( > 15 ) . EMA was positive in 95 patients which were examined for it and 33 have elevated AGA antibody (>10).

**Conclusion:** Classic symptoms of celiac disease are rarely seen today. we concluded that atypical presentation of celiac disease is the important reason for misdiagnosing of celiac and causes increasing prevalence for celiac. These non specific symptoms cause delay in diagnosis or not well managing for CD Most of the patients were under symptom therapy without any documented diagnosis. Some of them had been referred to gastroenterologist with complication such as lymphoma, severe anemia or cirrhosis. We concluded that celiac is being missed among physician and internist and just been diagnosed in gastroenterology center and this is because lack of organized referral system for CD diagnosis.

Send Date: 2012/09/30

Code: 2543

Category: 4. INTESTINAL

4.2 Coeliac disease/malabsorption syndromes and food enteropathies

T-S-078

### Comparative study of histopathological Marsh grading with body mass index (BMI) in celiac disease in IRAN

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**Introduction:** Anorexia is a classic symptom of CD. However recently the trends of societies are toward weigh gain and obesity which could mask CD presentation. This study aimed to establish the correlation between BMI and severity of CD according to Marsh classification.

**Method:** Patients demographics, clinical presentation , and Body Mass Index (BMI) recorded and statistically analyzed . Endoscopic biopsy was performed in all patients.

**Results:** Age of participants varied from 3.5 to 87 years. out of 122 CD patients diagnosed between

2005 and 2012, 73 patients were female and 49 male. Body mass indexes (BMI) of participants in "Grade 1 and 2" group were higher than other marsh grade groups ( $P < 0.05$ ).

**Conclusion:** We determined the correlation between severity of CD and BMI, and the patients with higher grade in marsh classification were gone underweight and so we suggest the need for a careful follow-up of nutritional status after diagnosis of CD.

Send Date: 2012/10/01

Code: 2552

Category: 4. INTESTINAL

4.2 Coeliac disease/malabsorption syndromes and food enteropathies

T-S-079

#### **Correlation between histopathological marsh grading and anti-TTG among celiac disease patients**

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**Introduction:** CD screening is facilitated by IgA based tests including CD anti-TTG antibody. Diagnosis is based on histological characteristics changes based on Marsh scoring system. The aim of this study was to investigate the correlation between anti-TTG antibody and Marsh grading score.

**Method:** The subjects refer to Firoozgar hospital with CD before treatments were included. The IgA anti-TTG antibody was measured for all of them by ELISA technique. The eligible cases underwent upper endoscopy and biopsy of duodenum. The specimens were evaluated and classified on Marsh grading Score.

**Results:** Age of participants varied from 3.5 to 87 years with mean of  $35.4 \pm 15.4$ . Of them 40.2% were female. It was not a significant correlation between age and sex and Marsh grading score ( $P > 0.05$ ). It was an correlation between Anti-tTG levels and "grade 3c ( $P = 0.02$ ) also we find an association between anti-TTG level with grade 1,2,3a ( $P = 0.049$ ).

**Conclusion:** Anti-TTG levels have been proven to correlate with increasing severity of mucosal damage. Increased awareness among clinicians and

pathologists about adult CD, especially in its atypical forms will aid in diagnosing more cases from the "celiac iceberg".

Send Date: 2012/10/01

Code: 2341

Category: 5. IBD

5.2 Etiology/epidemiology

T-S-080

#### **Frequency of clinical and demographic characteristics of Inflammatory Bowel Disease patients in Guilan province and produce an IBD Database**

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**Introduction:** In respect to importance of inflammatory bowel diseases in different countries in recent decades, the goal of this study was evaluation of frequency of clinical and demographic characteristic of IBD including & ulcerative colitis Crohn's disease patients and preparation of databank for this disease in Guilan Province.

**Method:** Patients diagnosed as inflammatory bowel disease and referred to gastrointestinal tertiary center were included in this study. Databank in 28 pages was created.

**Results:** Among 55 patients, 45 (81.8%) and 10 (18.2%) were Ulcerative colitis and Crohn's disease, respectively. Mean age and standard deviation of patients with Crohn's disease and Ulcerative colitis  $36.6 \pm 15.9$  and  $43.2 \pm 11.95$ , respectively. Sixty percent of patients were female. None of the patients with Crohn's disease and a total of 39 (86.4%) of patients with IBD had never smoked. The most common symptom in Crohn's disease and Ulcerative colitis was abdominal pain. The most common site of involvement in Crohn's disease and Ulcerative colitis was small bowel and H sided colitis, respectively.

**Conclusion:** Due to chronicity of IBD and necessity for frequent visit and follow up of these patients, creation of a clinical databank will be an inevitable issue.

Send Date: 2012/08/15

Code: 2407

Category: 5. IBD

5.2 Etiology/epidemiology

T-S-081

**Musculoskeletal manifestations  
of inflammatory bowel disease  
in Iranian patients**

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**Introduction:** The most common extra-intestinal manifestations of IBD are musculoskeletal disorders. There are rare information about epidemiology and pattern of musculoskeletal involvement in Iranian population. Our goal in this study was to determine demographic pattern, the prevalence and clinical spectrum of musculoskeletal complication of IBD in Iranian patients.

**Method:** 350 definite cases of IBD were interviewed and examined by a rheumatologist and followed for one year for the evaluation of rheumatologic manifestations. For patients with active arthritis HLA-27, P-ANCA, C-ANCA, ANA, ASCA, ESR and CRP were recommended.

**Results:** In 350 patients with IBD, 162 female and 188 male, four patients had at least one active arthritis, three of them with peripheral involvement, one with AS. Five patients had a history of peripheral arthritis but no active involvement. One patient had Fibromyalgia. Three patients expired and one left the study.

**Conclusion:** Our study shows a low prevalence of musculoskeletal manifestations in Iranian IBD patients. The clinical spectrum is just that defined by spondyloarthropathy criteria.

Send Date: 2012/09/04

Code: 2475

Category: 5. IBD

5.2 Etiology/epidemiology

T-S-082

**Inflammatory bowel disease  
in center of Iran, Qom**

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**Introduction:** Inflammatory bowel disease (IBD) is an immune-mediated chronic intestinal condition. Ulcerative colitis (UC) and Crohn's disease (CD) are the two major types of IBD. Unfortunately, the true epidemiologic profile of IBD in Iran is still unknown. Age, Sex, History of Appendectomy and Tonsilectomy in patients, OCP and Alcohol using, Cigarette smoking, Family history of IBD, Chief complaint of patients, Demographic and clinical features, extraintestinal manifestations, The mean lag time between the onset of complaints and confirmation of diagnosis of 204 patients with ulcerative colitis (UC), 32 with Crohn's disease (CD) were assessed retrospectively.

**Method:** This was descriptive, analytical cross-sectional study, including 236 patients with IBD (UC&CD) diagnosis referral to GI clinic's of QOM from 2007-2011. The exact course of physicians' visits of 100 IBD patients was asked through face-to-face interview and analyzed with statistical test.

**Results:** Mean age at diagnosis was 35.39 years in UC and 33.03 years in CD patients. The male to female ratio was 1 for UC and 1.28 for CD. The percentage of CD and UC patients who were non-smokers was 87.3% and 87.5%, respectively. Patients with UC presented with rectal bleeding (64.2%), whereas those with CD complained of abdominal pain (65.6%). Among UC patients, proctosigmoid was affected in 47%. The mean lag time between the onset of symptoms and definite diagnosis was 13.8 and 20.56 months for UC and CD patients, respectively.

**Conclusion:** The demographic and clinical picture of IBD is more or less the same as that of other developing countries; however, the rarity of CD in Iran is noted. In this study we clarified IBD. We need more studies for determination of indication of epidemiologic status of it more carefully. Key words: Inflammatory bowel disease, Crohn's disease, epidemiology, ulcerative colitis.

Send Date: 2012/09/28

Code: 2562

Category: 5. IBD

5.2 Etiology/epidemiology

T-S-083

**Epidemiology of Inflammatory  
Bowel Diseases (IBD) in Iran:  
A review of 740 patients in Southern Iran**

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**Introduction:** To study of recent epidemiological aspects of patients with Inflammatory Bowel Disease (IBD) in the southern parts of Iran the data from a population based registry of Inflammatory Bowel Diseases were analyzed, retrospectively.

**Method:** Between 1989 and 2010, 740 patients with IBD, 620 ones with ulcerative colitis (UC) and 120 ones with crohn's disease (CD), were diagnosed as IBD cases and referred to our center. Their demographic characteristics, disease related manifestations, complications, and chief complaints were analyzed.

**Results:** The mean age at diagnosis was 34.68±1.44 (range: 8 – 79 years) for UC patients and 32.97±1.34 (range: 9 – 80 years) for CD ones. The male/female ratio was 0.9/1 and 0.98/1 for UC and CD patients, respectively. In comparison to rural patients, more urban ones with both UC and CD were registered (86.4).

**Conclusion:** An obvious increase in the number of IBD patients has been detected in our population during the past decades. This can be attributed to either improvement in the patients' and the physicians' knowledge and availability of diagnostic tools or a real increase in the incidence rate of the disease.

Send Date : 2012/10/01

Code: 2428

Category: 5. IBD

5.3 Genetics

T-S-084

**Studying association between  
C3435T gene polymorphism  
in the MDR1 gene and ulcerative colitis**

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**Introduction:** Ulcerative colitis (UC) is an inflammatory disorder with unknown cause in which genetic, immunological and environmental factors may be involved. P-glycoprotein is an important factor in the deposition of many drugs and toxins from cells and is expressed by MDR1 gene. MDR1 gene polymorphisms such as C3435T are correlated with low P-glycoprotein expression and susceptibility for UC.

**Method:** 85 UC patients and 100 healthy ethnically matched controls were enrolled in our study. PCR-RFLP method was recruited to detect C3435T gene polymorphism in MDR1 gene.

**Results:** There was no association between C3435T gene polymorphism in MDR1 gene and susceptibility of ulcerative colitis (p value = 0.71) in our population.

**Conclusion:** Association between C3435T gene polymorphism in the MDR1 gene and ulcerative colitis has been reported in several western populations. However there is also a controversy regarding the above-mentioned polymorphism studies with UC. For example our results are similar to the published data from Milan population, but also are not in agreement with results of genetic study in Tehran, Iran, which might be related to heterogeneity of Iranian populations and sample size of various studies. We suggest that increasing the sample size for future genetic studies might have influence on the accuracy of data with regard to ulcerative colitis disease in the population of south east of Iran.

Send Date: 2012/09/10

Code: 2497  
 Category: 5. IBD  
 5.3 Genetics  
 T-S-085

**Multidrug resistance 1 gene polymorphism and susceptibility to inflammatory bowel disease in Azeri patients from northwest of Iran**

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**Introduction:** The Multidrug resistance 1 gene is an attractive candidate gene for the pathogenesis of inflammatory bowel disease (IBD) and response to therapy, with evidences at both functional and genetic levels. MDR1 produces the P-glycoprotein (P-gp) that acts as a transmembrane efflux pump thus influencing disposition and response of many drugs, some of whom (i.e. glucocorticoids) central to IBD therapy. In addition P-gp is highly expressed in many epithelial surfaces, included gastrointestinal tract (G-I) with an assumed role in decreasing the absorption of endogenous or exogenous toxins, and host-bacteria interaction. Many genetic variations of MDR1 gene has been described and in some instances evidences for different P-gp expression as well drugs metabolism have been provided.

However data are often conflicting due to genetic heterogeneity and different methodologies employed. Studies investigating MDR1 gene polymorphism and predisposition to IBD have also shown conflicting results, owing to the known difficulties in complex diseases, especially when the supposed genetic contribution is weak.

**Method:** Our main objective was to evaluate the MDR1 gene polymorphism at C3435T in inflammatory bowel disease. The present study included 173 IBD and 85 age-sex matched control samples for the analysis of MDR1 C3435T polymorphism, by the PCR-RFLP method.

**Results:** The MDR1 genotype distribution revealed an evaluated frequency of the CC genotype in IBD cases (25.4%) as compared to control (15.3%). The homozygous TT genotype was observed in 24.9% and 29.4% of case and control respectively. The heterozygous CT genotype was found in 49.7% of

patient compared with 55.3% of healthy subjects.

**Conclusion:** In this study we have evaluated a SNP polymorphism (C3435T) in IBD; Interestingly, In contrast with other studies in IRAN, a significant association was found between the MDR1 C3435T polymorphism and patients from Iranian Azeri Turk ethnic group in northwest of Iran with (OR = 1.88; 95% CI: 0.88-4.05).

Send Date: 2012/09/30

Code: 2366  
 Category: 6. COLONIC AND ANORECTAL DISORDERS

6.1 Malignant disease - pathogenesis  
 T-S-086

**Evaluation of methylation of MGMT (O6- methyl guanine methyl transferase) gene promoter in sporadic colon cancer**

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**Introduction:** Sporadic colorectal cancers often arise from a region of cells characterized by a “ field defect ” that has not been well defined molecularly. DNA methylation has been proposed as a candidate mediator of this field defect. The DNA repair gene O 6 -methylguanine-DNA methyltransferase (MGMT) is frequently methylated in colorectal cancer. We hypothesized that MGMT methylation could be one of the mediators of field cancerization in the colon mucosa.

**Method:** We studied MGMT promoter methylation percent by real-time Quantitative Methylation-Specific PCR (QMSP) and bisulfite-based techniques in tumor, five and ten centimeter distance of tumor from 40 known case patients with colorectal cancer in four Stage (Ten patients in each stage ) and in colon mucosa from 30 subjects with no evidence of cancer. Statistical tests were two-sided.

**Results:** MGMT promoter methylation was present in 27.5% of the tumors. Patients whose cancer had MGMT promoter methylation also had substantial

MGMT promoter methylation in 5centimeter distant of tumors(12.5% )and in 10 centimeter distant of tumors(10%). Mean MGMT promoter methylation percent was  $6.25\pm 17.02$  of tumors and  $0.86\pm 0.36$  from subjects with no evidence of cancer( $p<0.001$ ) (T-test).But in comparison of mean MGMT promoter methylation percent between four stages of patients there was not significant statistical difference ( $p=0.06$ ) .Comparison of mean MGMT promoter methylation percent between three grades of tumors there was not significant statistical difference ( $p=0.175$ ) (T-test)

**Conclusion:** Mean MGMT promoter methylation percent significantly increased in patients with colorectal cancer in comparison from subjects with no evidence of cancer,but between stages and grades Mean MGMT promoter methylation percent is not significant.

Send Date: 2012/08/23

Code: 2462

Category: 6. COLONIC AND ANORECTAL DISORDERS

6.1 Malignant disease - pathogenesis

T-S-087

### Is There any Correlation Between Colorectal Cancer and intestinal flora?

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**Introduction:** Colorectal cancer is the most common gastrointestinal cancer and the second leading cause of cancer death .Risk factors of colorectal cancer include both hereditary and environmental Factors. Dietary habits and intestinal flora have been discussed in several studies lately. It has been reported that dietary factors as nonhereditary factor affect on intestinal flora and effect of diet on carcinogenic process could be mediated by composition of colonic micro flora . Intestinal bacteria could play a part in initiation of colon cancer

through production of carcinogens, cocarcinogens and pro carcinogens. In fact colon is a place for complex variety of microorganisms that is critical for normal health and alteration in balance challenges the normal role of these microorganisms colonization.

**Method:** This case control study were carried out from October 2010 till August 2011 on 77 out patients include 42 colorectal cancer and 35 control group. A questionnaire was completed for routine dietary intake in two groups. One week following colonoscopy 4 gram stool sample was obtained and cultured immediately within 5 minutes of samplings . Incubation was done for 25 to 48 hours for aerobic and 72 hours for anaerobic culture in oxygen free jar. All colonies particularly four bacterial species were calculated include Entrococcus spp. and Streptococcus Bovis, Eschreshia colli , Bacteroid fragilis. All individuals were asked about routine basal weekly dietary habits includes meat, fresh vegetables, fruits and dairy in last year. Statistical analysis was performed to determine correlation of intestinal flora and diet in colorectal cancers and comparing with normal individuals.

**Results:** In our study airobic bacterial count was higher in cotrol group . There was no significant difference between two groups in total colony count (sum of aerobic and anaerobic counts).Comparing particular species of bacteria between two groups revealed just significant difference for streptococcus bovis (P-value=0.003), and no significant difference in Bacteroid fragilis,Entrococcus and Escherichia coli. There was significant difference in meat consumption between two groups and aerobic colony count bacteria. Association of aerobic colony count and dairy consumption was not significant but individuals with more consumption showed higher counts for bacterial flora.

There was significant difference between weekly fresh vegetables and fruits consumption and Steptococcus bovis (P-value=0.042), and other three bacteria did not show any association. There was no significant difference in aerobic and anaerobic counts in proximal and distal colon cancers but their counts were lower in diagnosed proximal cancers compared with distal colon cancer.

**Conclusion:** Our study provides evidence that diet and intestinal flora can play a role in promotion and

aggravation of mucosal health and we found positive correlation of colorectal cancer and low aerobic colony counts. We found correlation between *Strep. Bovis* and colorectal cancer and even between less consumption of vegetables and more *Strep. Bovis*  
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Code: 2576

Category: 6. COLONIC AND ANORECTAL DISORDERS

6.1 Malignant disease - pathogenesis

T-S-088

**KRAS Mutation and BAT-26  
(Microsatellite Instability) in Young  
Indonesia Colorectal Cancer Patients**

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**Introduction:** Significant numbers of Indonesian colorectal cancer patients are younger than 40 years old. To determine the molecular alterations in these patients, we evaluated the status of KRAS and BAT-26.

**Methods:** Tumour DNA samples were isolated from 43 sporadic cases of whom 16 young patients ( $\leq 40$  yrs) and 27 old patients ( $\geq 60$  yrs). KRAS mutations were screened using PCR High Resolution Melting followed by DNA sequencing. Microsatellite instability (MSI) was tested using PCR with BAT-26 primers.

**Results:** Tumour DNA isolated from 43 evaluable patient samples were screened for KRAS and MSI. Overall KRAS mutation rate was 16.3% with Young patients (25%) have slightly higher rate than old patients 11.2% ( $p > 0.05$ ) MSI was found in 2 out of 13 young patients (15%) and None in old patients. Young female patients have higher rate of either KRAS mutation or MSI (40%) than old female patients (19%) ( $p = 0.014$ ). Molecular alteration has not been found in male patients yet.

**Conclusions:** While overall KRAS mutation or MSI

may be low in Indonesia these molecular alterations have occurred largely in young female patients.

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Code: 2413

Category: 6. COLONIC AND ANORECTAL DISORDERS

6.2 Malignant disease - diagnosis/histopathology

T-S-089

**Rapid detection of Glutathione  
S-transferase Theta1 gene variant on the  
LightCycler by hybridization probes  
and outcome of colorectal cancer**

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**Introduction:** Glutathione S-transferase Theta (GSTTs) are detoxifying enzymes encoded by a set of polymorphic genes. Wide variety of free radicals, carcinogens and chemotherapeutics are the substrates of GSTs. Gene deletion of GSTT1 is expected to have an impaired ability to metabolically eliminate carcinogens and free radicals. The aim of this study was to investigate the possible effect of GST Theta1 null genotype on susceptibility to developing clinical outcome of colorectal cancer in a group of CRC patients in comparison to age and gender matched control group.

**Method:** DNA was extracted from blood of 140 CRC patients and 90 healthy individuals and a set of sequence specific hybridization probes was used for GSTT1 genotyping by real-time PCR in Light-Cycler instrument. Chi-squared test was used to assess the statistical significance of observed differences between the patient and control subjects of different genders and ages. To estimate the risk for overall and stratified analyses, odds ratios (OR) with 95% confidence intervals (CI) computed with logistic regression.

**Results:** The differences between GSTT1 null genotype in case and control groups was not significant ( $p$ -value=0.5). No significant association was found ( $P > 0.05$ ) between the GSTT1 null

genotype with tumor site (right, left, rectum). No significant trend was observed between GSTT1 null genotype frequency and tumor differentiation (well, moderately, p-value 0.5).

**Conclusion:** The analysis of the GSTT1 in 230 DNA samples with this LC assay revealed that this method is reliable for high throughput analysis of this key polymorphism in the GSTT1 gene. Our findings suggest that the GSTT1 null genotype may not contribute to colorectal cancer development in this study groups.

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Code: 2442

Category: 6. COLONIC AND ANORECTAL DISORDERS

6.3 Malignant disease – management

T-S-090

#### Positive colonoscopy findings for colorectal cancer in relation with age and gender

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**Introduction:** Colorectal cancer (CRC) is a major cause of morbidity and mortality throughout the world. It is the third most common cancer worldwide and the fourth most common cause of death. Colonoscopic screening has been recommended for all persons who have had a colorectal adenoma or carcinoma. Colonoscopy has the advantage of allowing biopsy and/or removal of lesions during the same procedure. In this study we aimed to analyze the colonoscopy results of 3650 patients for CRC risk factors and find the relation of them with age and gender.

**Method:** All records (n=3650) patients undergoing colonoscopy from 2008 to 2012 at Tabriz University of Medical science were analyzed. We also evaluated the age, gender, having polyp, signs and symptoms, other colonoscopy findings and relationship between

them. We used t-test for descriptive variables and Chi-square tests to compare categorical variables.

**Results:** In this study 3650 patients were enrolled and all of them underwent complete examination of the colon. From 1984 males (54.3%) and 1666 females (45.7%), mean age of our patients was 48.7±18.6 [5-100]. The risk factors most likely to be associated with a finding of colorectal cancer were rectorrhagia (34%), abdominal pain (18.4%), diarrhea (17.9%), constipation (12.6%), anemia (9.1%), history of CRC (7.3%) and positive fecal occult blood test (0.7%), respectively. From those who had rectorrhagia 52.7% were males and 47.3% were females. Polyps were detected in 545 patients (15%). From those who had polyp 326 patients were male (59.8%) and 219 patients were female (40.2%). Most common location of polyp was in rectum (26.5%). Other colonoscopy findings were hemorrhoid (78.1%), skin tag (8.7%), anal fissure (6.5%), diverticule (4.6%) and lesions (2.1%), respectively. From those who had hemorrhoid 52.6% were males and 47.4% were females. From those who had history of colorectal cancer 56.4% were males and 43.6% were females.

**Conclusion:** There was a significant relation between CRC risk factors and male gender. Most frequently associated with positive colonoscopy findings were rectorrhagia, presence of abdominal pain and history of CRC. A history to include these risk factors can serve to prioritize the need for a colonoscopic examination.

Send Date: 2012/09/20

Code: 2345

Category: 6. COLONIC AND ANORECTAL DISORDERS

6.4 Other colonic and anorectal disorders

T-S-091

#### Colonoscopic findings in patients with hematochezia

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**Introduction:** Hematochezia refers to passage blood per rectum commonly originating from lower gastrointestinal tract. Several lesions could cause hematochezia which benign etiologies are common

among them.

Lower GI endoscopy is the examination of choice for diagnosis. This study was designed to evaluate the lesions cause hematochezia and associated symptoms.

**Method:** In this cross-sectional study, one hundred and seventeen patients presenting with hematochezia and underwent colonoscopy at 5-Azar Hospital, Golestan province, Northeast of Iran during 2010. Biopsies were taken. Cases with a positive personal history of colorectal cancer or inflammatory bowel disease and those with a suspected source of upper GI were excluded. Associated symptoms (abdominal pain, weight loss, diarrhea, constipation) were recorded. Data were entered into SPSS-16 software and a descriptive analysis was done.

**Results:** Sixty seven females and 50 males with a mean ( $\pm$ SD) age of 44.7 ( $\pm$  16.1) years (range= 18-87 years) were included. Colonoscopic findings included: hemorrhoid (28.2%), adenocarcinoma (24.8%), ulcerative colitis (20.5%), anal fissures (8.5%), polyps (7.7%), solitary rectal ulcer (4.3%), diverticular disease (3.4%) and ischemic colitis (0.9%) and 2 (1.7%) had normal colonoscopy. The most common associated symptom in our patients was abdominal pain (46.2%). There was a significant relationship between abdominal pain and weight loss with cancer (P-value=0.004 and 0.001, respectively). The relationship between diarrhea and constipation with cancer was not statistically significant.

**Conclusion:** The most common colonoscopic findings in our study were hemorrhoid, adenocarcinoma and ulcerative colitis. Rectal bleeding should be considered as an important issue to suspect a malignancy especially in high risk areas like the studied region.

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Code: 2368

Category: 6. COLONIC AND ANORECTAL DISORDERS

6.4 Other colonic and anorectal disorders

T-S-092

**The Outbreak of Irritable Bowel Syndrome ,  
Its Clinical Symptoms And Related Factors  
Among Adult Population In Kerman City**

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**Introduction:** Irritable bowel syndrome (IBS) is the most prevalent gastrointestinal functional disorder, characterized by non-specific symptoms such as abdominal pain and discomfort, altered bowel habit and bloating .Its prevalence varies between 3.5 to 30 percent in the world .This study was conducted in order to determine of prevalence of IBS in the adult population of Kerman city, which is a representative of population living in southeast of Iran, in 2010-2011.

**Method:** The study was conducted in a cross sectional design. The sampling method was one stage randomized clustering. 2259 persons were recruited and interviewed in a specialty clinic. The questionnaire for collecting data was based on ROME III criteria and demographic form. Data was analyzed by SPSS 16 software and chisquare and logistic regression tests were used for analysis of data. Level of significance was considered as P value less than 0.05.

**Results:** The population consisted of 1088 (48.2%) male and 1171(51.8%) female. Mean age was 43 $\pm$ 16 years and the prevalence of IBS was (4.38%).The regression analysis showed that there is a significant inverse relationship between IBS and age (P=0.0001). The most common symptoms of IBS were need to strain on defecation and bloating .The most common subgroup of IBS was IBS-D (IBS with diarrhea predominant) (49.5%).

**Conclusion:** The result of this study showed the prevalence of IBS in Kerman was less than of what were in the western countries but it is common in young population so it should be considered as important disease due to composition of Iran population that are mostly in young ages.

Send Date: 2012/08/29

Code: 2441

Category: 6. COLONIC AND ANORECTAL DISORDERS

6.4 Other colonic and anorectal disorders  
T-S-093

**Large intestine polyp location  
in relation to age and gender**

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**Introduction:** An enlarging body of evidence supports the importance of the colonic polyp as a precursor to the development of colorectal cancer. Although there are exceptions, most authors agree that the majority of polyps are found in the distal 25 cm. of the colon. In this study we aimed to analyze the relationship of age and gender with location of large intestine polyps in Tabriz University of medical science clinic clients through colonoscopy.

**Method:** All records (n=3650) patients undergoing colonoscopy from 2008 to 2012 at Tabriz University of Medical science were analyzed. We also evaluated the age, gender, having polyp, location of polyps and relationship between them. We used t-test for descriptive variables and Chi-square tests to compare categorical variables.

**Results:** Out of 3650 patients, 1984 males (54.3%) and 1666 females (45.7%), polyps were detected in 545 patients (15%). Mean age of our patients was 48.7±18.6 [5-100]. The mean age in males were 48.7±19.3 and in females were 48.6±17.8. From those who had polyp 326 patients were male (59.8%) and 219 patients were female (40.2%). The most common age range in patients who had polyp was 60-70 year (22.4%). Most common locations of polyp were in rectum (26.5%), sigmoid (25.5%), ascending colon (14.9%), descending colon (14.4%), transverse colon (13.1%), anal canal (3.6%), all colon (1%) and cecum (1%) in those who had polyps, respectively. Polyp location in males were in rectum (28.4%), sigmoid (25.8%), ascending colon (16.3%), transverse colon (13.2%), descending colon (11%), anal canal (3.1%), cecum (1.4%) and all colon

(0.8%), respectively. Polyps location in females were in sigmoid (25%), rectum (23.8%), descending colon (19.4%), ascending colon (12.9%), transverse colon (12.9%), anal canal (4.4%), all colon (1.2%) and cecum (0.4%), respectively.

**Conclusion:** There was significant relation between age and gender with location of polyps. Due to our results colonic polyps were more prevalent in males. Most common location of polyps in males was rectum and in females was sigmoid.

Send Date: 2012/09/20

Code: 2510

Category : 6. COLONIC AND ANORECTAL DIS-  
ORDERS

6.4 Other colonic and anorectal disorders  
T-S-094

**Prevalence and the demographic  
risk factors of constipation and  
functional constipation in Isfahan, Iran**

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**Introduction:** Constipation is a common symptom and Functional constipation is another term, known as constipation that has no apparent physical or physiological cause, and does not meet irritable bowel syndrome criteria. The aim of this study was to evaluate the prevalence of constipation and functional constipation in a community-based adult population in Isfahan, Iran and investigate its association with demographic factors.

**Method:** This study is a part of the Study on the Epidemiology of Psychological, Alimentary Health and Nutrition (SEPAHAN). The participants fulfilled two self-administered questionnaires aimed to collect data on demographic information and constipation and functional constipation symptoms.

**Results:** Overall, 4763 subjects with a mean age of 36.58 ± 8.093 (44.2% male, 55.8% female) participated in this study. The prevalence of constipation and functional constipation were 33.4% and 23.5%, respectively (Constipation: 24.8% in men, 40.2% in women; Functional constipation:

14.9% in men, 30.3% in women). Except for the severity of lumpy or hard stool, that did not have a significant difference among men and women, other symptoms of constipation were more severe in women. About 55.3% of participants had at least one symptom of constipation. Constipation and functional constipation were associated with education level, however these disorders were found to have no relation with marital status or age. The prevalence of constipation symptoms including fewer than 3 defecation per week, lumpy or hard stool, straining during defecation, sensation of incomplete evacuation, sensation of anorectal obstruction and manual maneuver were 21.2%, 34.7%, 47.3%, 48.0%, 31.3% and 18%, respectively. Sensation of incomplete evacuation and manual maneuver were the most and the less prevalent symptoms.

**Conclusion:** According to this study, further population-based studies are needed to investigate the prevalence of constipation and functional constipation in society.

Send Date: 2012/09/30

Code: 2308

Category: 7. LIVER

7.2 Nutrition - metabolism – pharmacology

T-S-095

**The effect of helicobacter pylori eradication on liver function tests in non-diabetic non-alcoholic steatohepatitis patients**

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**Introduction:** Helicobacter pylori (HP) antigens have been found in the liver of individuals with benign and malignant liver diseases. The role of HP in the pathogenesis of non-alcoholic steatohepatitis (NASH) is controversial. The aim of study is to evaluate the effect of HP eradication on liver function tests, lipid profile, and homeostasis model assessment-IR (HOMA-IR) index in NASH patients.

**Method:** This randomized double blind clinical trial was performed in non-diabetic dyspeptic patients with positive antibody to HP who were referred to

gastroenterology clinic with evidence of fatty liver in ultrasonography. After excluding other causes, participants with persistent elevated alanine aminotransferase (ALT) levels were presumed to have NASH and were enrolled.

They were randomly assigned to lifestyle modification alone or lifestyle modification plus HP eradication. HP eradication was documented by urea breath test after six weeks post treatment. Fasting serum glucose (FSG), ALT, aspartate aminotransferase (AST), alkaline phosphatase (ALP), triglyceride (TG), cholesterol (CHOL), high and low-density lipoprotein (HDL, LDL), and HOMA-IR were checked at baseline and six weeks post-treatment.

**Results:** Forty patients (20 males) with mean age of 41.57 ( $\pm$  12.30) were included. HP eradication rate was 95%. Serum level of AST, ALT, ALP, FSG, TG, CHOL, LDL, HDL, and HOMA-IR, were decreased from baseline to six weeks post-treatment in both groups (All P values < 0.05).

No statistically significant differences were seen between the two treatment groups with regard to the changes of laboratory parameters from baseline to six weeks post-treatment (All P values > 0.05).

**Conclusion:** It seems that successful HP eradication per se might not affect liver function tests, lipid profile and insulin resistance more than life style modification in non-diabetic NAFLD patients.

Send Date: 2012/07/19

Code: 2444

Category: 7. LIVER

7.2 Nutrition - metabolism – pharmacology

T-S-096

**How does addition of regular aerobic exercise influence the efficacy of calorie-restricted diet on ultrasonographic features and quality of life in patients with NASH?**

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**Introduction:** Nonalcoholic Steatohepatitis (NASH) is part of a broad spectrum of nonalcoholic fatty liver disease (NAFLD). We aimed to compare the effect of aerobic exercise along with diet and diet alone on ultrasonographic features and quality of life in patients with NASH.

**Method:** Twenty-five NASH patients were randomly divided in two groups and underwent aerobic exercise along with diet (n=12) or diet alone (n=13). In this study, low-caloric diet in both groups included 500 kilocalories of energy less than estimated daily energy requirement. In addition to diet, the first group were participated in aerobic exercises for a period of 12 weeks, 3 days a week with 55–60% heart rate reserve.

Liver ultrasonography was done by a single expert radiologist at the beginning and the end of the study. Quality of life questionnaires (SF-36) were filled before and after intervention by the patients.

**Results:** Twenty-five patients (24 men and one woman), with mean age of 36 years (18-55 years) completed 12 weeks of intervention. Improvement in ultrasonographic features of fatty liver was found only in those who treated with aerobic exercise as well (P=0.01). In assessment of quality of life in diet plus aerobic exercise group, physical function, role limitations due to physical health, physical component score, general health, vitality and in other group general health and vitality improved after intervention but was not meaningful difference in compare of groups.

**Conclusion:** Regular aerobic exercise along with low-caloric diet may be more effective than low-caloric diet alone in treatment of patients with nonalcoholic steatohepatitis.

Send Date: 2012/09/20

Code: 2490

Category: 7. LIVER

7.2 Nutrition - metabolism – pharmacology

T-S-097

**Prevalence of non-alcoholic fatty liver disease (NAFLD) and its best predictors in north of Iran, Amol**

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**Introduction:** Recent studies have shown an increasing rise in the prevalence of NAFLD in eastern countries but a few studies are available on the prevalence of NAFLD and its potential risk factors in Iran. So the aims of this study were to determine the prevalence of NAFLD, its potential risk factors and their sex distribution in north of Iran, Amol.

**Method:** This population based cross-sectional study included adult individuals who were randomly selected from Amol healthcare centers and its suburbs. Clinical histories were reviewed and anthropometric measurements, blood analysis and hepatic sonography were performed for each individual. Men and women with more than 30 g/day and 20 g/day of alcohol intake respectively and individuals with cognitive and chronic liver diseases were excluded from the study. Metabolic syndrome was defined according to National Cholesterol Education Program Adult Treatment Panel III criteria (ATPIII).

**Results:** 5023 individuals with mean age of 45.35±15.87 years entered into this study.

The prevalence of NAFLD and metabolic syndrome was 43.8% and 29.6% respectively. Both NAFLD and Metabolic Syndrome were significantly more prevalent in women than men (P= 0.01 and P<0.001 respectively). Among the components of metabolic syndrome women had significantly higher waist circumference and fasting Serum Glucose and lower HDL (all, P<0.001). The best cut-off points of serum ALT to detect NAFLD in men and women were 20.9 U/L and 15.9 U/L respectively. The strongest predictors of NAFLD in men were waist circumference, serum alanine aminotransferase and the age group of 40-60 years. The strongest predictors of NAFLD in women were waist circumference, the age groups of 40-60 years and >60 years.

**Conclusion:** This study showed a high prevalence of NAFLD and metabolic syndrome in Amol and its

suburbs. Women were more at risk of having metabolic syndrome and NAFLD. Waist circumference and the age group of 40-60 years were the strongest predictors of NAFLD in both sexes.

Send Date: 2012/09/30

Code: 2499

Category : 7. LIVER

7.2 Nutrition - metabolism – pharmacology

T-S-098

**Captopril ameliorates aflatoxin B1 –induced biochemical, peroxidative changes in isolated perfused rat liver**

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**Introduction:** The liver is the major target organ for aflatoxin B1 (AFB1) and ingestion of aflatoxin in contaminated food and feed is known to cause hepatotoxicity. To find new agent to help the hepatotoxicity induced by aflatoxin, the protective effects of captopril was suggested.

**Method:** The isolated perfused rat liver (IPRL) was chosen for evaluating hepatic function. Sixteen rats were divided randomly into four experimental groups: control, captopril, AFB1 and AFB1 + captopril. The level of glutathione content and lipid peroxidation, as marker of oxidative stress was determined. Lactate dehydrogenase (LDH), alanine transaminase (ALT) and aspartate transaminase (AST) activities were measured as biochemical analysis.

**Results:** There was a significant decrease in lipid peroxidation and same increase was observed in glutathione level. Treatment with captopril also modulated the enzymes activity and pH of perfusate.

**Conclusion:** This experimental result that captopril intervention ameliorates the AFB1 induced toxicity. Therefore, the effects of captopril treatment suggested a new strategy to reduce of aflatoxins toxicity.

Send Date: 2012/09/30

Code: 2512

Category: 7. LIVER

7.2 Nutrition - metabolism – pharmacology  
T-S-099

**Beneficial effects of Silymarin on reducing liver aminotransferases in patients with nonalcoholic steatohepatitis**

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**Introduction:** Hepatoprotective effects of Silymarin have been confirmed by various researchers from all over the world; however a few studies are available about the therapeutic impact of Silymarin on the level of aminotransferases in patients with Nonalcoholic steatohepatitis (NASH). Our purpose was to determine whether Silymarin improves serum level of aminotransferases in patients with NASH.

**Method:** A double blind, randomized, placebo-controlled trial was performed on 100 patients with NASH. Subjects were randomized to receive Silymarin (two tablet containing 140 mg silymarin per day for three months or placebo in the same manner. A blood sample was drawn at baseline (before treatment) as well as after the completion of treatment schedule for assessing serum levels of aminotransferases. Body mass index (BMI) was measured before and after administration of the drug and placebo for both groups of patients.

**Results:** The changes of BMI in both Silymarin and placebo groups were insignificant. The mean serum level of ALT in the case group was significantly changed from 84.06 to 68.54 IU/mL following treatment with Silymarin ( $P < 0.001$ ), while this change was not meaningful in the control group. The mean serum AST level in the case group was significantly decreased from 71.94 to 54.70 IU/mL after treatment with Silymarin, while this change in the placebo group was not significant (from 62.94 to 61.56 IU/mL).

**Conclusion:** Administration of Silymarin can effectively reduce liver aminotransferases without any changes in BMI in patients with NASH disease.

Send Date: 2012/09/30

Code: 2396

Category: 7. LIVER

7.3 Metabolic/genetic disorders

F-T-100

**Comparison of the therapeutic effects of metformin and pioglitazone in nonalcoholic steatohepatitis**Mohsen razavizadeh<sup>1\*</sup>, Abbas Arj<sup>1</sup>, Seyyed Mohammad Matini<sup>2</sup>, Effat Taherkhani<sup>2</sup>, Seyyed Alireza Moraveji<sup>3</sup><sup>1</sup>Internal Medicine Ward Shahid Beheshti Kashan Hospital, Kashan University of Medical Sciences<sup>2</sup> Internal Medicine Ward Shahid Beheshti Kashan Hospital, Kashan University of Medical Sciences<sup>3</sup> Department of Community Medicine, Kashan University of Medical Sciences

**Introduction:** Non-alcoholic steatohepatitis (NASH) is one of the common liver diseases that may progress to cirrhosis without treatment. There is a strong association of NASH with insulin resistance and, hence, insulin sensitizer drugs for this disease have been used. The aim of this study was comparison the effect of pioglitazone with metformin on liver transaminases, HOMA index and Adiponectin in patients with NASH.

**Method:** This double blind clinical trial performed on 80 patients with NASH according to imaging finding and abnormal liver function test. Patients divided to two 40 member groups based on block randomization. In one group patients received metformin 500 mg BID and other group received pioglitazone 30 mg daily for 4 months. AST, ALT, ALKP, FBS and lipid profile were evaluated before study, 2 and 4 months after. HOMA Index and Adiponectin evaluated before study and 4 months after. Data analysis carried out with spss by using repeated measurement and ANCOVA tests.  $P < 0.05$  was considered significant.

**Results:** Forty patients (37 male) in pioglitazone group and forty patients (31 male) in metformin group were included. There was no significant difference in both groups between age, sex and weight. The ALT and ALKP levels decreased significantly in pioglitazone group in comparison with metformin group. There was no significant difference in both groups about AST, FBS, TG, LDL, HDL and HOMA Index. After treatment adiponectin level in metformin group was less than pioglitazone group.

**Conclusion:** The results showed that pioglitazone is more effective versus metformin and led to greater reduction in liver transaminases level. Pioglitazone and metformin had the same effect on FBS and HOMA Index. Both drugs reduced adiponectin, but

this effect in pioglitazone group was lesser than metformin group.

Send Date: 2012/09/03

Code: 2430

Category: 7. LIVER

7.3 Metabolic/genetic disorders

F-T-101

**Diagnostic value of plasma pentraxin3 and hs-CRP level in patients with non-alcoholic fatty liver disease**Iradj Maleki<sup>1\*</sup>, Alireza Rafiei<sup>1</sup>, Maryam Barzin<sup>1</sup>, Tarang Taghvaei<sup>1</sup>, Vahid Hosseini<sup>1</sup>, Azadeh Rastegar<sup>1</sup><sup>1</sup> Faculty of Medicine, Mazandaran University of Medical Sciences

**Introduction:** The spectrum of changes in the liver in nonalcoholic fatty liver disease (NAFLD) range from steatosis to Steatohepatitis (NASH). However it has remained difficult to differentiate between NASH and non-progressive NAFLD on the basis of the clinical and para-clinical findings alone, making liver biopsy a gold standard in this regard.

**Method:** In this study we investigated the clinical usefulness of plasma Pentraxin3 (PTX3) and hs-CRP levels to predict NASH. Plasma PTX3 and hs-CRP was measured in 34 patients with histologically verified NAFLD (24 with non-NASH and 9 with NASH) and 36 healthy control subjects.

**Results:** There was no significant difference between the plasma PTX3 and hs-CRP in the NAFLD cases and controls. There is no significant difference between the plasma PTX3 and hs-CRP in NASH cases and non-NASH cases either. The plasma hs-CRP level was significantly higher in the NASH cases in stages 3-4 than in the NASH cases in stages 1-2 fibrosis.

**Conclusion:** The results suggest that plasma PTX3 levels cannot predict the severity of NASH but plasma hs-CRP levels maybe can be a marker of the severity of hepatic fibrosis in NASH.

Send Date: 2012/09/12

Code: 2538

Category: 7. LIVER

7.3 Metabolic/genetic disorders

F-T-102

**evaluation of frequency of causes of persistently elevated ALT levels in patients referred to the GI clinics of Ghaem and Emam reza hospitals**

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**Introduction:** Chronic liver disease is a major cause of morbidity and mortality in all over the world. Causes of elevated serum alanine aminotransferase (ALT) levels vary depending on the population under study. The aim of this study was to evaluation of frequency of causes of persistently elevated alanine aminotransferase levels in patients referred to the gastroentrol clinic in Ghaem and Emam Reza hospitals.

**Method:** A total of 100 patients who had persistently elevated ALT level (Those with  $\geq 2$  times within 6 months of ALT > 40 u/l) and referred to the gastroentrol clinic in Ghaem and Emam Reza hospitals were studied. A comprehensive history regarding alcohol drinking and medication was taken, physical examination was done, then underwent Blood tests and ultrasonography, and if it was necessary, liver biopsy was done.

**Results:** A total of 100 patients participated in the study, %55 with non-alcoholic fatty liver disease (NAFLD), %17 with hepatitis B, %13 with autoimmune hepatitis, %4 with hepatitis C, %2 with autoimmune hepatitis & hepatitis C, %2 with overlap autoimmune disease, %1 with Wilson diseases, %1 with PSC, %2 was cryptogenic.

**Conclusion:** NAFLD is the most common cause of persistently elevated serum ALT level in this study.

Send Date: 2012/10/01

Code: 2560

Category: 7. LIVER

7.3 Metabolic/genetic disorders

F-T-103

**Effect of a Probiotic and Metformin on Nonalcoholic Steatohepatitis:**

**A double blind randomized clinical trial**

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**Introduction:** Non-alcoholic steatohepatitis (NASH) is a clinicopathological entity that is being recognized more frequently in recent years. This study aimed to evaluate the effects of Metformin, with and without a probiotic supplement on liver function in patients with NASH.

**Method:** Patients were randomized to one of the following treatments for 6 months: group I, probiotic (Protexin two tablets per day) plus Metformin 500 mg two tablets per day (Met/Pro), or group II, Metformin 500 mg two tablets per day plus two placebo tablet (Met/P).

**Results:** In group I, serum alanine aminotransferase (ALT: 133.7 $\pm$ 70 vs 45.2 $\pm$ 32.5; P < 0.001 ), and aspartate aminotransferase activity (AST: 123.1 $\pm$ 72 vs 44.2 $\pm$ 33.9; P < 0.001), and ultrasound grading of NASH (P<0.001) all decreased significantly by the end of the treatment period. In group II, whilst serum alanine aminotransferase (ALT) was not significantly reduced (118.4 $\pm$ 67.9 vs 112.5 $\pm$ 68.7; P < 0.064), aspartate aminotransferase activity (AST: 125.3 $\pm$ 71 vs 113.4 $\pm$ 71; P < 0.001), and ultrasound grading of NASH did fall significantly (P<0.01). Body mass Index(BMI), Fasting blood sugar(FBS), cholesterol and triglyceride fell significantly in both groups.

**Conclusion:** Probiotic combination with Metformin improves liver function better than metformin alone

Send Date: 2012/10/01

Code: 2334

Category: 7. LIVER

7.6 Cirrhosis and complications: clinical aspects

F-T-104

**Effects of losartan on renal hemodynamics in patients with cirrhosis**

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**Introduction:** Portal hypertension is a major complication of liver cirrhosis, and non- selective beta blockers (such as propranolol) are used to treat this problem. It has been reported that losartan, an angiotensin II receptor antagonist, also have a portal

hypotensive effect, but studies of their usefulness for portal hypertension is scarce. In this study, effect of losartan on renal arterial resistive indices (RI), a mirror of hepatic vein pressure gradient (HVPG), was examined.

**Method:** Thirty patients with cirrhosis and portal hypertension on routine drugs used for portal hypertension (propranolol) were studied. Renal arterial Resistive Indices (RI) was measured prior to and 14 days after oral administration of 12.5 mg losartan twice daily, using Doppler ultrasonography.

**Results:** Mean age of patients was  $42.9 \pm 15.2$  years and male to female ratio was 1: 1.8. 18 (60%) and 12 (40%) of patients had Child-Pugh score B and C, respectively. The mean renal arterial Resistive Index (RI) prior losartan administration was  $0.659 \pm 0.584$  in comparison with  $0.635 \pm 0.597$  after treatment with losartan ( $p=0.005$ ).

**Conclusion:** Effect of losartan on renal arterial Resistive Index (RI) appear significant and may become one of the effective treatments for portal hypertension in the future.

Send Date: 2012/08/12

Code: 2416

Category: 7. LIVER

7.6 Cirrhosis and complications: clinical aspects  
F-T-105

**Outcome of Hepatocellular  
Carcinoma after Liver Transplantation:  
A single center experience from Iran**

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**Introduction:** Liver transplantation is one of the accepted treatment modalities for hepatocellular carcinoma (HCC) that can lead to cure. Defining the most precise pre transplant criteria to predict post transplant tumor recurrence may be challenging as the rate of tumor recurrence may be significantly high despite careful patient selection.

**Method:** The study was done on all 35 recipients of liver organ with pathologically documented HCC in their explants in Nemazi hospital organ transplant

center from September 1995 to September 2011.

Patients' recorded information and tumor characteristics were analyzed and compared between those with and without tumor recurrence.

**Results:** Of 1236 liver transplantations, HCC was reported in explanted livers of 35 recipients. In 5 out of 35 patients the tumors were incidental pathological findings without pre transplant diagnosis. Triphasic dynamic computed tomography (CT) findings were typical in 17 cases (48.6%) and suggestive in 12 cases (34.3%) and pre transplant diagnosis of HCC in one case was made only by ultrasound and confirmed by tissue biopsy. HCC recurrence rate was 14.3% (5 cases). The sites of recurrent tumors were lung, bone, regional lymph nodes and transplanted liver. All cause mortality rate during study time was 28.6% (10 cases) and only 3 deaths (9%) were related to HCC recurrence. Significant factors associated with tumor recurrence in clinical aspects was extrahepatic tumor involvement at the time of transplant and in pathologic aspects were poorly differentiated tumor, TNM stage beyond IIB and tumors exceeding University of California, San Francisco (UCSF) criteria (a single HCC nodule up to 6.5 cm, or up to three lesions, the largest of which is 4.5 cm or smaller and the sum of the diameters no larger than 8 cm).

**Conclusion:** Liver transplantation is an effective treatment for HCC with an acceptable recurrence rate. Post transplant HCC recurrence is likely the result of microscopic extrahepatic disease that mandates more precise pre transplant evaluation. Pathology of the explanted liver may be useful to detect patients at high risk for tumor recurrence.

Send Date: 2012/09/05

Code: 2435

Category: 7. LIVER

7.6 Cirrhosis and complications: clinical aspects  
F-T-106

**Noradrenalin versus the combination  
of Midodrine and Octreotide in  
patients with hepatorenal syndrome:  
a prospective, randomized, unblinded study**

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**Introduction:** Among the various complications of cirrhosis, hepatorenal syndrome (HRS) bears the worst prognosis. Vasoconstrictors have been shown to be effective in improving renal function and extending the patients' survival before liver transplantation. This study assessed the efficacy of Noradrenalin, a widely available and non-expensive alpha-adrenergic agonist, in comparison with the efficacy of the combination of Midodrine and Octreotide in the treatment of patients with HPS type 1 and 2.

**Method:** Twenty-three cirrhotic patients with HRS (15 with HRS type 1; 8 with HRS type 2) were enrolled consecutively into the study. Patients were randomly selected to be treated with noradrenalin (0.1–0.7 µg/kg/min) and albumin (11 patients) or with combination of Midodrine and Octreotide (Octreotide 100-200 µg subcutaneously TID, Midodrine 5-15 mg orally TID) and albumin (12 patients). Treatment was continued until HRS reversal or for a maximum of 14 days. Survived patients were followed-up for three months.

**Results:** Complete response of HRS was observed in 9 of the 11 patients (81.8%) treated with noradrenalin and in 9 of the 12 patients (75%) treated with Midoderin-Octreotide,  $p = ns$ . Renal and circulatory function improved in both groups without appearance of myocardial ischemia or any major side effect. After three months, 5 of the 9 patients (55.5%) responded to noradrenalin and 6 of the 9 patients (67%) responded to Midoderin-Octreotide were survived,  $p = ns$ .

**Conclusion:** Both noradrenaline and Midoderin-Octreotide are efficient in reversal of HRS and can improve three-month survival of the patients. Noradrenaline, because of being more available and lower cost, may be a preferred vasoconstrictor in HRS.  
Send Date: 2012/09/16

Code: 2451

Category: 7. LIVER

7.6 Cirrhosis and complications: clinical aspects

F-T-107

### Thyroid Hormone Levels in Children with Liver Cirrhosis Who Waiting a Liver Transplant

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**Introduction:** There is some evidence that decrease in triiodothyronine (T3) and thyroxine (T4) ratio have a direct relationship with liver disease and they could be used in disease prognosis. According to these studies thyroid hormone levels have an association with the severity of liver disease but there are some paradoxes in the results. This study aimed to evaluate the correlation between thyroid hormone levels and severity of liver disease.

**Method:** Levels of thyroid hormones were measured in 83 children with liver cirrhosis using radioimmunoassay techniques.

**Results:** Four patients (4.8%) showed a decrease in the amount of T3 and nine (10.8%) revealed increased levels of T3. Also, the decrease in the amount of T4 was seen in 7 patients (8.4%) and 4 (4.8%) patients showed the increase in the level of T4. Serum albumin was lower and INR was higher in patients with low T3 and low T4 insignificantly. This study reveals that PELD/MELD scores are statistically related to the decreased amounts of T4. ( $p=0.036$ ) Mean PELD/MELD and Child scores were higher in low T3 patients insignificantly. ( $p>0.05$ )

**Conclusion:** Decrease levels of thyroid hormones are seen in more advanced cirrhosis and correlated to severity of disease. The patients with the decreased T4 levels need liver transplantation more immediately compared to other patients.

Send Date: 2012/09/23

Code: 2295

Category: 7. LIVER

7.7 Viral hepatitis: basic aspects

F-T-108

### Do thalassemia and hemophilia patients with chronic hepatitis C need to be vaccinated against

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**Introduction:** Individuals with poly-transfused disease such as thalassemia and inherited bleeding disorders like hemophilia are at higher risk of viral hepatitis. Hepatitis A virus (HAV) infection, a self-limited disease, usually spread through oral- fecal rout but blood transfusion is also known as one of the routes of transmission. We aimed to determine the seroprevalence of anti HAV antibody in thalassemia and hemophilia patients who already infected with hepatitis C virus (HCV) in Iran.

**Method:** Sera of 219 patients with thalassemia and hemophilia infected with HCV, referred to Tehran Hepatitis center between “2009-2010” from all provinces of Iran, were evaluated by Enzyme-linked immunosorbent assay (ELISA) to detect HAV total Ab.

**Results:** Sixty thalassemia patients (93.8 %) had HAV total antibody but this rate was lower in hemophilia group, (n=104, 67.1 %,  $p < 0.001$ ). Patients that received first blood unit or coagulation factor between” 1982-1991”in both groups had higher prevalence of HAV Ab than the others. Also, HAV Ab was associated with male gender, single status, and residency in urban area ( $P < 0.05$ ) and there was no relationship between level of education with risk of HAV infection.

**Conclusion:** In our study, thalassemia group was younger than hemophilia but with higher prevalence of HAV Ab. It seems that blood transfusion is an important rout of HAV infection and the risk of transmission increases with times of blood transfusion in thalassemia patients. On the other hand, these patients already infected with HCV and if HAV superinfected, it could lead to severe hepatitis. Vaccination of high risk groups for HAV infection especially thalassemia patients in younger ages is recommended.

Send Date: 2012/07/07

Code: 2296

Category: 7. LIVER

7.7 Viral hepatitis: basic aspects

F-T-109

### Blood transfusion is not a risk factor for acquiring Hepatitis E virus infection among thalassemia and hemophilia patients

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**Introduction:** Hepatitis E virus (HEV) infection as a self-limited disease usually spreads through oral- fecal rout. In endemic area such as Iran, blood transfusion is a probably rout of transmission especially in thalassemia and hemophilia patients. In these patients that already infected with hepatitis C virus (HCV), if HEV superinfected, it could lead to severe hepatitis. We aimed to find out the prevalence of anti HEV antibody in thalassemia and hemophilia patients with chronic hepatitis C in Iran.

**Method:** Sera of 217 patients with thalassemia and hemophilia with HCV, referred to Tehran Hepatitis center between “2009-2010” from all provinces of Iran, were evaluated by Enzyme-linked immunosorbent assay (ELISA) to detect HEV total Ab level.

**Results:** Six patients (2.8%) were seropositive for HEV total Ab (one thalassemia and 5hemophilia). Neither gender nor age had significant relationship with HEV infection. All seropositive cases were from urban areas. However, the risk of HEV infection was related to low level education ( $P < 0.05$ ).

**Conclusion:** HEV infection prevalence among Iranian thalassemia and hemophilia patients, infected with HCV, is similar to previous studies in general population of Iran (2.3% -9.6%) but lower than previously reported in other countries among thalassemia and hemophilia patients. This offers that blood transfusion in our country cannot be an important rout of HEV transmission.

Send Date: 2012/07/07

Code: 2356

Category: 7. LIVER

7.7 Viral hepatitis: basic aspects  
F-T-110

**The Potential Function of APOBEC3G for Limited Replication of Hepatitis B Virus: Report of Case Series and the Review of Literature**

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**Introduction:** Recent findings introduced APOBEC3G (A3G) as a host factor that blocks viral replication. It induces G to A hypermutations in viral DNA at the step of reverse transcription and in response to interferon. This study aimed to investigate the expression of liver A3G protein in association with both replication of HBV and frequency of G to A mutations in BCP (basal core promoter)-PC (pre-core) region.

**Method:** Fifty one liver biopsies of naïve chronic hepatitis B (CHB) patients enrolled for the expression of A3G by immunohistochemistry (IHC) standard method. The presence of HBV DNA and sequences of BCP-PC region in the time of liver biopsy were investigated in all patients.

**Results:** Among thirty four patients with detectable HBV DNA, 31 carried a range of 1 to 5 G to A mutations in BCP-PC region. IHC results showed that the expression level of A3G in CHB patients' liver was very low. Of all patients, A3G expressed in three undetectable HBV DNA subjects and a patient with 2.24x10<sup>4</sup> copies/mL of HBV DNA. G to A Mutated residues were indicated at position 1727, 1757, and 1896 of HBV genome of this patient.

**Conclusion:** This study indicates that despite very low levels of both A3G in liver and the number of positive subjects, A3G has a potential role to restrict in vivo replication of HBV.

Send Date: 2012/08/18

Code: 2517

Category: 7. LIVER

7.7 Viral hepatitis: basic aspects

F-T-111

**Hepatitis B knowledge among Iranian adolescents: a National Survey**

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**Introduction:** Hepatitis B is the most prevalent chronic infectious liver disease worldwide with serious sequel. Prevention of the infection can be provided by universal vaccination and improving knowledge and behavior about disease transmission. Provision of any educational program requires inquiry about target g

**Method:** We conducted a questionnaire-based national survey of 18-year-old adolescents according to stratified cluster random sampling in Iran during 2010.

**Results:** Response rate was 87%. Most adolescents (60%) knew that HBV infects the liver. Percent of adolescents who gave correct answers to major routes of HBV transmission were: spouse of an infected person 59%, multi-partners 66%, intravenous drug use 73%, body piercing 55% and personal belongings 55%. Higher levels of education, living in rural areas, marriage and (except for body piercing) female gender were associated with better knowledge. The knowledge of HBV infected persons about major routes of HBV transmission were low (P<0.001).

**Conclusion:** There are important deficits in adolescents' knowledge about HBV that requires attention of health educators with tailoring of it to specific groups.

Send Date: 2012/09/30

Code: 2346

Category: 7. LIVER

7.8 Viral hepatitis B: clinical aspects

F-T-112

**Vaccine therapy in hepatitis B carriers: a randomized double blind clinical trial**

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**Introduction:** Hepatitis B virus (HBV) infection is a common infectious disease throughout the world. Chronic carrier state is an important source of concern in management of HBV infection. Some of HBV carriers are asymptomatic, but severe complications including cirrhosis and hepatocellular carcinoma may develop in others. Anyway, HBV carriers are persistent sources of the virus and may transmit HBV to healthy individuals. Finding effective methods for reducing or eliminating viral load in these patients has been considered as an interesting issue in recent studies. This study was conducted to assess therapeutic effects of HBV vaccine in HBV carriers.

**Method:** This study was a randomized double blind clinical trial. Study population included chronic HBV carriers aged 20 to 65 years old. Patients with clinical manifestations of HBV infection as well as alanine aminotransferase (ALT) levels of higher than 40 IU/L were excluded. Subjects were randomly allocated in four groups. Group 1, 2 and 3 were received placebo, one dose and two doses of HBV vaccine, respectively in months 0, 1 and 6. Group 4 was administered two doses of HBV vaccine in months 0, 1, 2 and 6. All patients in intervention groups received standard HBV vaccine manufactured by the same factory. HBV viral load (IU/ml) was assessed before the first dose and two months after the last dose of HBV vaccine using real-time PCR method. Reducing or elimination of HBV viral load was considered as main outcomes. This study was approved by the Ethics committee of Golestan University of Medical Sciences.

**Results:** At the beginning of study, 105 HBV carriers were recruited. At the end of study, 90 patients received all doses of HBV vaccines including 23, 21, 24 and 22 cases in groups 1, 2, 3 and 4, respectively. The mean age of participants was 33.6 years and 44% of them were male. There was no significant difference in age and sex between groups. The mean of viral load in intervention groups was significantly lower after vaccination ( $P < 0.01$ ). HBV viral load elimination was occurred in 8.3%, 13.2%, 10.5% and 15.7% in groups 1, 2, 3 and 4, respectively ( $P = 0.23$ ). HBV Viral loads decreased to lower than 100000 IU/ml in 76.1%, 88.9%, 85.3% and 92.4% in groups 1, 2, 3 and 4, respectively ( $P = 0.09$ ). No adverse

reaction was reported.

**Conclusion:** Our findings showed that HBV vaccine have had positive effects on reduction or elimination of HBV viral load. Responses to HBV vaccine therapy may be influenced by number of doses and interval of injections. These factors may be considered as possible reasons why we did not find significant therapeutic effect. HBV vaccine is a safe and cost-effective option for reducing or eliminating HBV viral load in chronic carriers. Further studies are needed to identify the best protocol for HBV vaccine therapy.

Send Date: 2012/08/15

Code: 2357

Category: 7. LIVER

7.8 Viral hepatitis B: clinical aspects

F-T-113

#### **Association of TLR2 Protein with serum ALT in Chronic Hepatitis B Patients Harboring Pre-core Mutant**

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**Introduction:** Chronic hepatitis B patients harboring pre-core mutant variants of hepatitis B virus (HBV) may show fluctuating of ALT levels with histologic activity on biopsies indicative of inflammation and injury. Toll-like receptor 2 (TLR2), as a mediator of microbial patterns recognition has important role in elimination of pathogens. The aim of this study was to investigate the association of serum TLR2 with clinical findings of HBeAg negative chronic hepatitis B patients.

**Method:** Fifty one HBeAg negative patients with detectable HBV DNA were examined for the presence of mutations in pre-core region of HBV genome. Concentration of serum TLR2 was measured by enzyme-linked immunoassays. Interaction of tertiary structure of truncated HBeAg and TLR2 (2Z80 A) was evaluated with molecular docking.

**Results:** Patients with G1896A mutation had higher concentration of serum TLR2 compare to patients without this mutation ( $4.8 \pm 2.9$  vs  $3.4 \pm 2.2$  ng/mL,  $P = 0.03$ ). Estimating regression equations in pre-core

mutant patients showed with increasing serum TLR2 concentration bigger than 6, serum ALT raises sharply. Computational molecular docking studies showed an interaction between truncated HBeAg and TLR2.

**Conclusion:** Present results suggest that serum TLR2 level might reflect higher expression of membrane-bound TLR2 and its pro-inflammatory results in liver damage and serum ALT elevation.

Send Date: 2012/08/18

Code: 2294

Category: 7. LIVER

7.9 Viral hepatitis C: clinical aspects

F-T-114

#### **An Important Role of IL28B Haplotypes on Response to Antiviral Therapy in Patients with Chronic Hepatitis C**

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**Introduction:** Chronic hepatitis C is the major cause of liver failure worldwide. With current standard therapy including a pegylated interferon (PEG-IFN) and ribavirin (RBV), approximately half of these patients achieve sustained virologic response (SVR). Recently, several genome-wide association studies found that the particular polymorphisms near IL28B gene such as rs12979860 and rs8099917 polymorphisms are associated with response to PEG-IFN and RBV therapy. Although few studies suggested that the rs12979860 polymorphism is the stronger predictor of SVR than the rs8099917 polymorphism, the exact impact of each of these two polymorphisms on hepatitis C virus (HCV) treatment outcome is unclear. Here, we assessed the impact of IL28B haplotypes, which are tagged by the rs12979860 and rs8099917

polymorphisms, on the HCV treatment response.

**Method:** One hundred and ninety-nine Iranian patients with chronic hepatitis C genotype 1 (M/F: 167/32), that have been treated with PEG-IFN and RBV were enrolled in the present study. For IL28B genotyping, genomic DNA was extracted from peripheral blood using QIAamp DNA Mini Kit. Two common IL28B polymorphisms (rs12979860 and rs8099917) were genotyped by PCR- RFLP method and haplotype estimation of the IL28B gene was performed using Expectation Maximization Algorithm

**Results:** We found three IL28B haplotypes (rs12979860-rs8099917) in our patients including C-T, T-G and TT haplotypes. We didn't find the C-G haplotype in any of our patients. The IL28B C-T haplotype was associated with higher rates of SVR than the T-T haplotype (P=0.01, OR=2.08) and than the T-G haplotype (P=0.0001, OR=2.63). There was no significant difference in achieving SVR between the IL28B T-T and T-G haplotypes (P=0.487, OR=0.79).

**Conclusion:** In the current study we showed that the IL28B C-T haplotype is associated with favorable treatment outcome, while the T-T and T-G haplotypes are associated with treatment failure. Also, we found that there is no significant difference between achieving SVR by the IL28B T-T and T-G haplotypes which also, shows that the IL28B rs12979860 polymorphism predict SVR stronger than the rs8099917 polymorphism.

Send Date: 2012/07/07

Code: 2297

Category: 7. LIVER

7.9 Viral hepatitis C: clinical aspects

F-T-115

#### **High Virologic Response of HCV Treatment among Thalassemia and Hemophilia HCV Infected Children in Comparison of Adults**

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**Introduction:** Hepatitis C is a major cause of liver disease. In children it is associated with a mild and often asymptomatic disease. Hepatitis C virus (HCV) infection is the most prevalent transfusion transmitted infection in hemophilic and thalassemic patients. Therapeutic trials in HCV infected children are still lacking, especially in hemophilic and thalassemic children. So, we decided to evaluate the virologic response to Pegylated interferon (PEG-IFN) alfa among these two high risk groups of children comparing with adults.

**Method:** This study was carried out on 22 thalassemic children patients and 28 hemophilic children patients in comparison with another two groups of 144 thalassemic adult patients and 313 hemophilic adult patients that were similar in HCV genotypes, sex and stage of liver disease (cirrhosis or chronic hepatitis). All patients were treated with the same therapy regimen.

**Results:** In thalassemic children, there were 10 patients with HCV genotype 1, 9 patients with genotype 3, and 2 patients with mixed genotypes. There were 7 patients with liver cirrhosis in this group. Among hemophilic children, there were 23 patients with HCV genotype 1, and 3 patients with genotype 3. There was not any case of cirrhosis in this group. In thalassemic patients, sustained virologic response (SVR) was achieved in 78.9% of children, compared to 33.8% of adults ( $P < 0.001$ ,  $OR = 7.36$ ,  $95\%CI = 3.24-9.87$ ). In hemophilic patients, SVR was achieved in 81.5% of children, compared to 62.9% of adults ( $P = 0.043$ ,  $OR = 2.6$ ,  $95\%CI = 1.8-4.32$ ).

**Conclusion:** These results show an improved SVR rate in HCV infected children compared to reference series in adults with the same regimen, especially in thalassemic children patients. Also, this result is similar to the rate of SVR in non-hemophilic and non-thalassemic children patients. Histological changes among HCV infected children are mild and cirrhosis is rare which can explain the high virologic response in children.

Send Date: 2012/07/07

Code: 2298

Category: 7. LIVER

7.9 Viral hepatitis C: clinical aspects  
F-T-116

### The Impressive Role of Genetic Factors in Treatment of HCV Infected Transfusion Dependent

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**Introduction:** The role of genetic factors in response to interferon (IFN) based treatment among Hepatitis C virus (HCV) infected patients has been determined. Recently, IL28B polymorphism has been identified as a strong predictor HCV treatment response. The HCV infection is the most prevalent transfusion-transmitted infection in transfusion dependent thalassemic patients but there is no data about the role of IL28B polymorphisms in HCV treatment of thalassemic patients in the literature. In this study, we decided to identify the role of IL28B polymorphisms in response to IFN based treatment among Iranian thalassemic patients.

**Method:** Sixty eight poly-transfused thalassemic patients with chronic hepatitis C were evaluated six months after cessation of treatment with Pegylated IFN Alpha 2a and Ribavirin. For IL28B genotyping, genomic DNA was extracted from peripheral blood using QIAamp DNA Mini Kit. Two common IL28B polymorphisms (rs8099917 and rs12979860) were genotyped by PCR-RFLP method.

**Results:** From total of 68 thalassemic patients, 43

individuals were infected with HCV genotypes 1 and 25 individuals with HCV genotypes 3. The prevalence of the rs12979860 CC genotype in patients with HCV genotype 1 who achieved sustained virologic response (SVR) was significantly higher than in nonresponder patients ( $P=0.043$ ). We didn't observe such association between the IL28B rs8099917 polymorphism and achieving SVR in HCV genotype 1 infected patients ( $P=0.3$ ). Also, in HCV genotype 3 infected patients no association between the IL28B polymorphisms and treatment response was observed. For HCV genotype 1 infected patients, we detected an association between achieving complete early virologic response (cEVR) and SVR ( $P<0.001$ ). Also, the SVR rate in HCV genotype 1 infection was significantly higher among patients without cirrhosis comparing patients with cirrhosis ( $P=0.002$ ).

**Conclusion:** These results demonstrate that among HCV genotype 1 infected thalassemic patients, the rs12979860 CC genotype is associated with higher rates of SVR. Identification of these polymorphisms in HCV infected thalassemic patients before treatment can help physicians to predict the efficacy of Pegylated IFN and Ribavirin therapy.

Send Date: 2012/07/08

Code: 2309

Category: 7. LIVER

7.9 Viral hepatitis C: clinical aspects

F-T-117

### **IL28B Polymorphism is a Critical Predictor of Sustained Virologic Response in Hemophilic Patients with Chronic Hepatitis C**

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**Introduction:** Chronic hepatitis C is the major cause of liver disease in patients with hereditary bleeding disorders. The current standard therapy of chronic hepatitis C in hemophilic patients is a combination of pegylated interferon alpha (PEG-IFN) and ribavirin (RBV). Recent studies revealed that the genetic variation of IL28B region can influence the sustained virologic response (SVR) in hepatitis C virus (HCV) infected patients. Here, we evaluated the influence of IL28B genotypes on response to antiviral therapy in Iranian hemophilic patients with chronic hepatitis C.

**Method:** One hundred and ten Iranian hemophilic patients (M/F: 102/8) with chronic hepatitis C, who were infected with HCV genotype 1 were enrolled in the present study. They were treated with PEG-IFN alpha-2a and RBV for 48 weeks, during 2008-2009. Two common polymorphisms of the IL28B gene (rs8099917 and rs12979860) were genotyped by PCR-RFLP method.

**Results:** This study showed that the rs12979860 CC genotype is a strong predictor of achieving SVR ( $P=0.005$ ). The SVR rates were 71.4%, 54.5% and 30% for the CC, CT and TT genotypes, respectively. Also, the rs8099917 TT genotype was associated with achieving SVR ( $P=0.006$ ). In addition, 66.7% of patients with the rs8099917 TT genotype achieved SVR vs. 41.5% and 37.5% in the GT and GG genotypes, respectively. Also, other predictors of SVR including younger age ( $P=0.0001$ ), male sex ( $P=0.32$ ), complete EVR ( $P=0.0001$ ) and patients without cirrhosis ( $P=0.18$ ) were assessed.

**Conclusion:** In hemophilic patients the rs8099917 and rs12979860 polymorphisms are two important predictors of response to PEG-IFN and RBV therapy. Liver biopsy in these patients is contraindicated, so the use of degree of liver fibrosis as a predictor of SVR is limited. As a result, clinicians can predict SVR with assessment of these two polymorphisms combined with other response predictors in these patients.

Send Date: 2012/07/22

Code: 2313

Category: 7. LIVER

7.9 Viral hepatitis C: clinical aspects

F-T-118

### **THE PREVALENCE of HTLV-I INFECTION in**

**IRANIAN THALASSEMIC  
and HAEMOPHILIC PATIENTS  
with CHRONIC HEPATITIS C**

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**Introduction:** Human T cell lymphotropic virus type 1 (HTLV-1) infection is endemic in Iran. HTLV-1 is transmitted vertically mainly through breast-feeding and then blood transfusion in endemic areas. Transfusion related thalassemia and haemophilia patients are high risk groups for blood borne infections such as HTLV-1. The interaction between HCV and HTLV1 infections is a mystery subject. We performed a study to determine the prevalence of HTLV-1 in Iranian thalassemic and haemophilic patients with chronic hepatitis C.

**Method:** The prevalence of HTLV-I infection was investigated in a sample of 218 thalassemic and hemophilic patients followed in our clinic for last 18 months. All the patients we enrolled in our study have positive test for HCV PCR for more than 6 months. The subjects were initially screened by an enzyme immunoassay and reactive samples were further confirmed by Western blot and polymerase chain reaction. We assess the relation between the gender, marital status, education and the living place (rural or urban) with the prevalence of HTLV1.

**Results:** A total number of 218 patients, consisting of 64 thalassemic and 154 haemophilic patients with mean age of 28.8 were analyzed. The prevalence of HTLV-I infection in thalassemic patients was 10.9 % (7cases) and in haemophilic patients was 1.3 % (2cases). The HTLV-1 PCR test was only positive in 3 thalassemic and 2 haemophilic patients. HTLV1 infections is more prevalent in Khorasan and Gilan provinces. The results of this study shows that HTLV infection is more frequent among the rural population than urban area. No relation was founded between the gender, marital status, education and the prevalence of HTLV1.

**Conclusion:** Present study shows a significant rate of HTLV1 infection in thalassemic patients with chronic hepatitis C. Regard to these data, we suggest the screening test of anti HTLV1 in all of the thalassemic and hemophilic patients and also in chronic hepatitis c patients with a history of transfusion. Furthermore, this study showed that blood transfusion has been an important rout of HTLV1 transmission especially in some provinces. Although screening for anti- HTLV-I antibodies in volunteer blood donors has been routinely done in Khorasan, but it seems that HTLV1 screening test should be done in some other provinces. Further studies should be determined to changing epidemiology of HTLV-I infection in Iran and the interaction of HCV and HTLV1 infections.

Send Date: 2012/07/22

Code: 2434

Category: 7. LIVER

7.9 Viral hepatitis C: clinical aspects

F-T-119

**Efficacy of double dose recombinant hepatitis B  
vaccination in chronic hepatitis C patients,  
compared to standard dose vaccination**

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**Introduction:** Hepatitis B vaccination is a well known, safe and effective way for protection against hepatitis B infection however, non-responders remain susceptible to infection with hepatitis B virus. This is so important in patients with any kind of chronic liver disease, especially chronic hepatitis C patients in whom acute hepatitis B may lead to decompensating liver disease. Some studies have shown that immunogenicity of hepatitis B vaccination is decreased in these patients. The aim of this study was to evaluate the efficacy and safety of double dose vaccination of hepatitis B in these patients, compared

to standard dose vaccination in similar patients and healthy adults.

**Method:** Sixty-four chronic hepatitis C patients were randomized into 2 groups of 32. Group A received standard dose hepatitis B (HBV) vaccine, at 0, 1, 6 months, whereas group B received double dose HBV vaccine. Group C consisted of 32 healthy adults who also received standard dose vaccination. One month after the end of vaccination, HBsAb titer was checked in all participants and the results were compared.

**Results:** There was no significant difference in age or sex among three groups. The response rate in groups B and C was 100% (all had HBsAb titer >10 mIU/mL), while in group A, 4 patients (12.5%) were non-responders (HBsAb titer <10 mIU/mL). The difference in response rate was statistically significant between group A to the other two groups (P < 0.05).

**Conclusion:** The efficacy of standard dose HBV vaccination in chronic hepatitis C patients was suboptimal. Using double dose vaccination in these patients was an effective way to increase the antibody response.

Send Date: 2012/09/15

Code: 2553

Category: 7. LIVER

7.10 Immunology - autoimmune liver disease

F-T-120

#### Autoimmune hepatitis and International criteria

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**Introduction:** Autoimmune hepatitis is an inflammation of the liver of unknown cause. One of widely used criteria for diagnosis is International Autoimmune Hepatitis Group (IAHG) recommendation. This study aimed at evaluating the clinical and paraclinical characteristics of AIH, comparing them with IAHG criteria.

**Method:** Sixty patients with AIH attended to university clinic in Tabriz University of medical science, during a 12-month period were assessed in a case series study. They were evaluated regarding their signs and symptoms, paraclinical results and the

degree of accordance with the diagnostic criteria of IAHG.

**Results:** Sixty patients, 40 females and 20 males, with the mean age of 39.45±17.50 years were enrolled in the study. The most common sign and symptoms in descending order were fatigue (100%), icter (66.7%), abdominal discomfort (33.3%), abdominal distension (28.3%), dark urine (23.3%), edema (23.3%), haematemesis (20.0%), pruritus (20.0%), melena (11.7%) and pale stool (10.0%). Hyper gammaglobulinemia was detected in 95.0% cases. ALKM-1, P-ANCA, ANA and ASMA were positive in 71.4%, 66.7%, 42.4% and 19.4% cases, respectively. Due to paraclinical study findings, portal hypertensive gastropathy (45.0%), esophageal varices (41.7%) and cirrhosis (40.0%) were the most complications of autoimmune hepatitis in patients. According to IAHG, 80.0% of cases had definite diagnosis, 15.0% of cases had probable diagnosis and 5.0% of cases no AIH.

**Conclusion:** This study showed that the majority cases of our study are diagnosed according to the criteria of IAHG and these criteria is very useful.

Send Date: 2012/10/01

Code: 2393

Category: 7. LIVER

7.13 Miscellaneous

F-T-121

#### Normal limits of alanine transaminase and aspartate transaminase in healthy individuals in Kerman, Iran.

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**Introduction:** Alanine transaminase (ALT) and aspartate transaminase (AST) are sensitive and useful tools for determination of liver damage. There is no consensus on the upper normal limits for these enzymes in healthy people. They are probably affected by race and age. If we could find a new cut off point, we will be able to diagnose a chronic liver

disease in earlier stages and in case of a higher cut off point, the previous normal levels will be confirmed again.

**Method:** In this descriptive cross sectional study 2745 subjects were selected according to randomized cluster sampling. They were the healthy people with Body Mass Index (BMI) of 20 to 24.9 without any evidence of acute or chronic liver diseases. Blood samples were drawn after fasting for 12 hours for biochemical determinations of cholesterol, triglycerides, fasting blood sugar, ALT and AST. The data and physical examination were collected on a direct interview.

**Results:** The mean age (years  $\pm$  SD) of the subjects was  $44.7 \pm 16.3$ . 42.5% of them were male. Overall the mean, standard deviation and median for AST, were 23.89, 12.87, and 22 respectively and for ALT they were 22.4, 19.55 and 18. The level of ALT and AST for 95% of subjects were respectively less than 50 and 40 IU/dL. Men had higher average enzyme levels than women ( $P < 0.0001$ ). Both enzymes were significantly correlated with age ( $P = 0.001$ ).

**Conclusion:** Overall in this study, the ALT and AST levels were lower than previously estimated levels in healthy subjects. These normal levels are affected by age and gender.

Send Date: 2012/09/03

Code: 2290

Category: 8. BILIARY

8-2 Gallstones

F-T-122

**Laparoscopic Common Bile Duct Exploration; new targets for the surgeon, new opportunity for the patient. Does it stand against ERCP?**

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**Introduction:** Common bile duct (CBD) stones are found in approximately 16% of patients undergoing laparoscopic cholecystectomy (LC). Clinical models are inaccurate in predicting CBD stones. Prior to the development of LC, the management of these patients included CBD exploration at the time of cholecystectomy. In the era of LC, because of an obvious lack of expertise in laparoscopic surgery, if the diagnosis of choledocholithiasis was established during intraoperative cholangiography (IOC), the

surgeon was confronted with the choice between conversion to open surgery, or postoperative ERCP (two-stage treatment). With increasing experience of laparoscopic surgeons, it seemed logical to develop a mini-invasive one-stage Laparoscopic common bile duct exploration (LCBDE).

**Method:** This study evaluates our results of LCBDE in a series of 690 patients treated over 56 months [2006(Apr) – 2011(Jan)]. The purpose of this study is to evaluate the feasibility and safety of LCBDE during LC. The inclusion criterion was the presence of ultrasound proven gallstones. Patients were excluded from the study if there was evidence of carcinoma of the gallbladder.

**Results:** CBD stones were demonstrated in 99 patients by routine IOC (68 cases) or pre-operative MRCP (31 cases). LCBDE was done in 78 patients. In 17 cases of MRCP-diagnosed and 61 cases of IOC-diagnosed CBD stone(s) scheduled for LCBDE we had 3 failure in CBD cleaning (3.8%), cleaned by ERCP. Among 24 patients referred for ERCP [14 pre-op MRCP-diagnosed and 7 IOC-diagnosed and 3 failed LCBDE], we had 3 failed ERCP (12.5%) needed reoperations. In 21 patients, CBD closed on a C-Tube and in 10 patients LCBDE completed with T-tube insertion. In 23 cases no CBD drainage was performed. Choledochoduodenostomy was performed in 24 cases. In 60 cases flexible choledochoscopy was done. The mean operative time was 90-130 minutes (mean 95), which is significantly greater than conventional LC (range 20-40 minutes, mean 30). LCBDE was performed without immediate or late complications. We had 2 major bile leakages that in 1 case needed ERCP/ES and in the other stopped spontaneously. The conversion rate to open surgery was 3.8%. We had no mortality related to our surgery.

**Conclusion:** There are no debates in the detection and the management of CBD stones in the era of LC. LCBDE is a cost-effective, efficient, and minimally invasive method of treating choledocholithiasis.

Send Date: 2012/06/17

Code: 2458

Category: 8. BILIARY

8-2 Gallstones

F-T-123

**Prevalence of endoscopic  
esophagogastrointestinal Lesions  
prior to cholecystectomy in loghman hospital**

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**Introduction:** Peptic ulcer disease is a common cause for epigastric pains in patients with cholelithiasis considered for laparoscopic cholecystectomy and undiagnosed gastric or duodenal ulcer may be the cause of persistent pains after cholecystectomy. The aim of this study was to assess the value of a routine preoperative esophagogastroduodenoscopy for patients undergoing laparoscopic cholecystectomy.

**Method:** Consecutive candidates for cholecystectomy (cholecystitis, group A or symptomatic cholelithiasis, group B) at the ward of general surgery of Loghman Hakim were enrolled in this prospective study. Upper gastrointestinal endoscopy was performed in all cases to evaluate the prevalence of significant GI lesions. Peptic ulcer, upper GI malignancy and duodenal erosion were defined as significant lesions.

**Results:** A total of 434 patients (286 female and 148 male, mean age 45) were studied. Significant lesions requiring treatment were found in 10% of patients in group A and 9% of patients in group B (p=0.46). Endoscopic finding changed the surgical plan in 2% patients of group B

**Conclusion:** Peptic ulcers are common findings in patients selected for cholecystectomy. We suggest further studies to address the optimal assessment of patients with biliary symptoms considered for cholecystectomy.

Send Date: 2012/09/25

Code: 2494

Category: 8. BILIARY

8-2 Gallstones

F-T-124

**The Prevalence of cholelithiasis  
among asymptomatic subjects;  
A population based study**

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**Introduction:** Cholelithiasis is a one of the most common gastrointestinal disorder and an important health problem. The incidence of this problem is not follow a homogenized pattern in different parts of word. However there are few reports of its frequency in Iran which were limited to patient. The aim of this cohort study was recognition of frequency of cholelithiasis in general population and consequently its risk factors that would be the first step for manage this problem in our society.

**Method:** This is a population based study on 6138 subjects of urban and rural populations in different age groups. Sample selection was stratified –cluster-systematic randomization. Health's centers were considered as a cluster. A questionnaire including demographic, anthropometrics and laboratories data along with medical history, physical exam and ultrasonography data was completed.

**Results:** Of 6143 eligible subjects Mean age was 42.71 years. Samples consist of 3507 (57.1%) male. The prevalence of gallstone disease was 0.8%. Binary logistic regression model showed that Age, residency state, diastolic hypertension and TG serum level were potential predictors of Gallstone disease. After adjusting of other covariates, the risk of gallstone disease for residency in village and diastolic hypertension was 3.29 (95%CI: 1.73- 6.26) and 1.81 (95%CI: 1.002- 3.28) times higher, respectively. With each year rise in age the risk of gallstone disease would increase 1.04 (95%CI: 1.02- 1.06) times and with each mmHg rise in diastolic blood pressure the risk of this disease would increase 1.002 (1- 1.004).

**Conclusion:** despite low incidence gallstone in our survey increasing age, diastolic hypertension and also or rural residency were associated with gallstone formation in a multivariate analysis. Female gender in our study was not correlation with gallstone disease. However cholesterol levels and hypertension have associated with this disease. we can reverse that the major of risk factors could be prevented by changing life style and diet.

Send Date: 2012/09/30

Code: 2340

Category: 8. BILIARY

## 8.3 Malignant hepato-biliary diseases

F-T-125

**Cholangiocarcinoma: Demographic characteristics, diagnostic modalities, therapeutic options and risk factors in an endemic area of human fascioliasis**Fariborz Mansour-Ghanaei<sup>1\*</sup>, Farahnaz Joukar<sup>1</sup>, Javid Rasolian<sup>2</sup><sup>1</sup> Gastrointestinal and Liver Diseases Research Center of Guilan University of Medical Sciences<sup>2</sup> Gastrointestinal and Liver Diseases Research Center of Guilan University of Medical Sciences**Introduction:** To assess the demographic characteristics, diagnostic modalities, therapeutic options and risk factors of cholangiocarcinoma in an endemic area of human fascioliasis.**Method:** Twenty two patients with cholangiocarcinoma (CCA) and 48 control subjects were enrolled in this study. Controls included twenty four healthy subjects and twenty four inpatients with gastrointestinal malignancy and without liver or other systemic disease. All cases and controls were carried out from 2010 to 2011. The medical records and Information about liver diseases, family history, past medical history, smoking, and alcohol consumption were collected on both groups. Blood from all participants was tested for HBV and HCV and fasciola markers and then analyzed.**Results:** Twenty two cholangiocarcinoma cases with a median age of 68 years were included. Twenty one were extrahepatic and only one Intrahepatic CCA. Thirteen (59%) had Jaundice and Abdominal pain at presentation. Using of CT scan with ERCP or MRCP findings and elevated tumor markers (CA19-9, CEA) were the most diagnostic procedure in patients. The prevalence of smoking and alcohol consumption were not significantly different between cases and controls. Compared with controls, patients had not a higher prevalence of positive HCV Ab (Elisa) and HBs Ag. Anti Fasciola Ab was Negative in all cases and controls.**Conclusion:** These findings support that there is not positive association between smoking, alcohol consumption and Infection with HBV, HCV and Fascioliasis with Cholangiocarcinoma in Guilan province. However the number of patients was fairly low in our study and this limits our ability to detect actual association between these factors and

## Cholangiocarcinoma.

Send Date: 2012/08/15

Code: 2304

Category: 9. PANCREAS

9.5 Malignant disease and endocrine tumors of the pancreas

F-T-126

**Serum CA19\_9 in patients with solid pancreatic mass**Mahmood Baghbanian<sup>1\*</sup>, Hasan Salmanroghani<sup>1</sup>, Bijan Shabazkhani<sup>2</sup>, Mohamadkazem Amirbeigi<sup>1</sup>, Mohsen Akhondi<sup>1</sup>, Hadi Ghofrani<sup>2</sup><sup>1</sup>Sadoughi Hospital, Yazd University of medical science<sup>2</sup> Imam Hospital, Tehran University of medical science**Introduction:** A wide variety of tumor markers have been proposed for pancreatic cancer, but currently the only one with any practical usefulness for diagnosis, prognosis, and monitoring of treatment is "CA 19-9". This study aims at evaluating the results and value of serum CA19-9 in patients with pancreatic solid mass.**Method:** The present study which is of a descriptive, prospective and case series nature, has been studying patients with pancreatic solid mass for a duration of two years since November 2009.**Results:** Serum CA19-9 checked in 159 patients. The majority of whom was male (68%) and 81% had mass in the head of pancreas. The result of cytopathology revealed 131 adenocarcinoma (82%), 10 other malignancy (6%), 7 benign lesion (4%) and 11 non-diagnostic cases (7%). Mean level of this tumor marker in patients with adenocarcinoma, non-adenocarcinoma malignancy, benign and nondiagnostic pathology was 1094, 1004, 120, 259 U/ML respectively. There wasn't any significant relation between Serum CA19-9 value and histopathology of solid pancreatic mass.**Conclusion:** Concerning adenocarcinoma, 58 U/ML Cut Off Point of CA19-9; Sensitivity, specificity, PPV, NPV and accuracy were 85%, 67%, 88%, 60% and 81% respectively. This marker has limited sensitivity and specificity and cannot be used as a definite diagnostic test. So the use of this tumor marker for the differentiation of pancreatic cancer should be applied individually, depending on the clinical situation and imaging finding.

Send Date: 2012/07/18

Code: 2476  
 Category: 10. NUTRITION  
 10.2 Nutrients and gut function  
 F-T-127

ارتباط مصرف غذاهای ادویه دار با سندرم روده تحریک پذیر

در جمعیت شهر اصفهان: مطالعه SEPAHAN

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**زمینه و هدف:** مطالعات محدودی به ارتباط بین مصرف غذاهای ادویه دار با بیماری های گوارشی پرداخته اند. هدف از مطالعه حاضر بررسی ارتباط مصرف غذاهای ادویه دار با شیوع سندرم روده تحریک پذیر در جمعیت شهر اصفهان می باشد.

**روش بررسی:** مطالعه مقطعی حاضر بر روی ۴۶۶۹ نفر از افراد بالغ اصفهانی انجام گرفت. اطلاعات مربوط به مصرف غذاهای ادویه دار با استفاده از پرسشنامه عادات غذایی با پرسش در مورد تکرار مصرف غذای ادویه دار در هفته (معمولاً در هفته چند بار از غذاهای ادویه دار (دارچین، زردچوبه، فلفل، کاری و زنجبیل) استفاده می کنید؟ که افراد سوال را به صورت تقریباً هرگز، ۳-۱ بار، ۴-۶ بار، ۷-۹ بار و بیشتر از ۱۰ بار پاسخ دادند) جمع آوری شد. داده های مربوط به عملکرد سیستم گوارشی با استفاده از پرسشنامه استاندارد شده ROMEIII جمع آوری شد. سندرم روده تحریک پذیر به مواردی اطلاق گردید که ناراحتی و درد شکمی در طی حداقل ۳ روز از ماه در طی ۳ ماه اخیر به همراه حداقل دو مورد از موارد زیر: بهبودی درد به دنبال دفع، شروع درد همراه با تغییر در تکرار دفع و قوام مدفوع داشتند.

یافته ها: نتایج این مطالعه نشان داد که شیوع سندرم روده تحریک پذیر در افراد مورد مطالعه ۲۱.۷٪ (۱۸.۶٪ در مردان و ۲۴.۱٪ در زنان) بود. هم در مردان و هم در زنان با افزایش تکرار مصرف ادویه ها، شیوع سندرم روده تحریک پذیر افزایش داشت. پس از کنترل عوامل مخدوشگر افرادی که بیشتر و مساوی ۱۰ بار در هفته غذاهای ادویه دار مصرف می کردند در مقایسه با افرادی که هرگز غذای ادویه دار مصرف نمی کردند، ۸۵٪ شانس بیشتری جهت ابتلا به سندرم روده تحریک پذیر داشتند ( $OR = 1.85; 1.18-2.90, p_{trend} < 0.05$ ).

وقتی که داده ها به تفکیک جنس آنالیز شدند، مشاهده گردید که در زنان این ارتباط معنی دار بین مصرف غذاهای ادویه دار با سندرم روده تحریک پذیر وجود دارد ( $OR = 2.03; 1.09-3.77, p_{trend} < 0.05$ )، اما در مردان با افزایش مصرف غذاهای ادویه دار شانس ابتلا به سندرم روده تحریک پذیر افزایش پیدا نمی کرد. نتیجه گیری: یافته های این مطالعه حاکی از وجود ارتباط معنی دار بین مصرف غذاهای ادویه دار با شیوع سندرم روده تحریک پذیر در زنان می باشد. انجام مطالعات بیشتر جهت شفاف شدن این ارتباط پیشنهاد می گردد.

Send Date: 2012/09/28

Code: 2361  
 Category: 12. SURGERY  
 12.1 Esophagus / stomach / duodenum  
 F-T-128

Esophageal Cancer Resection

### Complication, Comparing Hand-swen and Stapler Anastomosis

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**Introduction:** Cancer of esophagus is a highly lethal malignancy and the 6th most common cause of death in the world. Anecdotal reports indicated that the high rates of esophageal cancer in Iran reflected very high incidence rates in certain areas of this country, especially Mazandaran and Khorasan Provinces. The objective of this study is to compare the outcome if hand-sewn & staple method in esophago gastric anastomosis, focusing on mortality, anastomosis leakage, stricture, other organ failure, and infections during first 30 days post operation.

**Method:** In a cross sectional study in Razavi Hospital during 2006-2011 Data of 79 patients who were undergone surgery for squamous cell carcinoma of thoracic esophagus, by single high volume surgeon, was collected through their review of medical records, surgical procedure charts, intensive care unit and surgical ward notes, histopathological reports during hospitalization and surgeon notes for each patient during weekly visits for first month post operation. We used SPSS version 16.5 for statistical analysis.

**Results:** 79 patients, 36(45.6%) male & 43(54.4%) female with 66(83.5%) hand-sewn & 13(16.5) staple anastomosis were entered to the study. 37(56%) of hand-sewn & 9(75%) of staple group had received neoadjuvant therapy before operation. 4(6.1%) of hand-sewn & 11(84.6%) of staple group had peri-operative bleeding more than 500 ml, which was significantly more in using staple method ( $P=0.00$ ). We had no anastomotic stricture or mortality in neither groups. anastomotic leakage was reported in only one patient in hand-sewn group. two case of arrhythmia requiring intervention, one case of sever infection (intra abdominal abscess) and one case of sever pleural effusion was reported in hand-sewn group. one case of sever pleural effusion and one case if DVT, was reported in staple group.

**Conclusion:** From this study it could be concluded that both hand-sewn & staple method are safe. It seems that using stapler method causes more peri-operative bleeding. non of these groups had stricture & mortality, which is remarkable.

Send Date: 2012/08/19

Code: 2401

Category: 13. ONCOLOGY-BASIC

13.2 Molecular biology/genetics/pathology

F-T-129

**CXCR7 is Expressed at Low Level on gastric Precancerous Lesions and is Increased Along With Progression to Cancer**

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**Introduction:** Stromal derived factor-1 (SDF-1 or CXCL12), a member of the alpha chemokines (CXCL) and the ligand for the CXCR4 receptor, has been shown in the past to be an effective chemoattractant for various CXCR4-expressing cells. SDF-1 is secreted by stromal and endothelial cells in bone marrow, lung, skeletal muscle, liver, kidney and brain. It is therefore important for metastasis of cancer cells to these organs. We have recently shown that CXCR4 is highly expressed on gastric cancers and is upregulated by H.pylori infectious. Recent studies have shown that a newly identified receptor for SDF-1, CXCR7, is expressed on many tumors and play a critical role in tumor metastasis. However, its expression in gastric cancer have not yet been studied.

**Method:** Herein, we studied the expression of CXCR7 on gastric samples from patients with precancerous lesions (atrophy, metaplasia and dysplasia) and gastric adenocarcinoma as well as human gastric carcinoma epithelial cell line, AGS, by employing RT-PCR, immunohistochemistry (IHC) and Fluorescence Activated Cell Sorting (FACS) techniques.

**Results:** RT-PCR data show that CXCR7 is highly expressed on AGS cells. This was confirmed by IHC and FACS as CXCR7 is detected in cell membrane and cytoplasm of AGS cell line. More importantly, we found that CXCR7 is strongly expressed on primary gastric cancer cells from patients, but not on normal gastric cells from normal individuals (as detected by IHC staining and RT-PCR). Furthermore, at low level on gastric precancerous lesions and is increased along with progression to cancer.

**Conclusion:** we present evidence that CXCR7 is expressed on gastric carcinoma and thus CXCR4 may

be a suitable marker for diagnosis of gastric cancer. In addition, we demonstrate for the first time that CXCR7 expression is enhanced as premalignant lesions progress to malignant tumors, indicating that targeting CXCR7 could be a new approach for treatment of gastric cancer.

Send Date: 2012/09/04

Code: 2402

Category: 13. ONCOLOGY-BASIC

13.2 Molecular biology/genetics/pathology

F-T-130

**The Effect of H.Pylori on SDF-1/CXCR4 Axis: A Novel Mechanism for Migration of Human Bone Marrow-Derived Mesenchymal Stem Cells into Gastric Tissues**

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**Introduction:** Mesenchymal stem cells (MSC) are multipotent stem cells which are capable to migrate across tissues and depending on the surrounding microenvironment; they can differentiate into variety of cell types. On the other hand, these cells could be the origin of transformed cells in many tumors such as adenocarcinoma. Recent studies have demonstrated that persistence infection with helicobacter pylori (H.pylori) leads to migration of human bone marrow-derived MSC (BMD-MSC) to gastric tissues and transforming to adenocarcinoma. However, the mechanism of the BMD-MSC recruitment and migration of these cells into gastric tissues is unknown. It is a known concept that chemokines and their receptors are key players in cell trafficking and among them stromal-derived factor-1(SDF-1) and its receptor, CXCR4, play a pivotal role in migration of immune cells, stem cells as well as metathesis of cancerous cells.

**Method:** Herein, we investigated the possible effects of H.pylori on SDF-1/CXCR4 axis. First, BMD-MSC cells were isolated from bone marrow of healthy subjects, cultured for four passages and their

phenotypes were examined by flow cytometry. BMD-MSC cells showed to be positive for CD90 and CD73 and negative for CD45, indicating that these cells are MSC. Next, we co-cultured either BMD-MSC or a human gastric epithelial cell line, AGS with H.pylori for 24 hours.

**Results:** We found that H.pylori induces SDF-1 expression in AGS cells upregulates SDF-1 in BMD-MSC as detected by RT-PCR and Elisa upregulate CXCR4 in BMD-MSC as determined by flow cytometry and Real-Time PCR. In addition, we have found that H.Pylori significantly enhances the migration of BMD-MSC toward SDF-1.

**Conclusion:** Our data indicate for the first time the H.pylori infectious may induce SDF-1 in gastric epithelial cells as well as upregulates CXCR4 on BMD-MSC, and that SDF-1 chemoattracts BMD-MSC into gastric tissues.

Send Date: 2012/09/04

Code: 2414

Category: 13. ONCOLOGY-BASIC

13.2 Molecular biology/genetics/pathology

F-T-131

#### **Secreted frizzled related protein 1 expression profiling in 11 patients of colorectal cancer and its clinical implication**

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**Introduction:** Colorectal cancer is the third- fourth most common cancer in Iranian women and men. Five thousand new cases of colorectal cancer are diagnose devery year, it is estimated that 1130 people die annually due to colorectal cancer in Iran. Wnt signaling pathway is responsible for multiple aspects of homeostasis like development, proliferation, differentiation, cellpolarity and migration. In addition, hyperactivity of Wnt signaling is one of the major factors in tumorigenesis in human cancer. Down regulation of the secreted frizzled related protein 1 (SFRP1) expression, which antagonizes Wnt signaling pathway, has been seen in many types of cancers. In this study, we compared the expression status of SFRP-1 gene in tumor tissues samples in comparison with their adjacent normal tissue in 11 patients.

**Method:** We obtained 11 fresh colorectal tumor tissues and their adjacent normal samples from Imam Khomeini Hospital. Total RNA of samples were extracted and then their cDNA were synthesized. SFRP1 and  $\beta$  actin and GAPDH (the last two ones as reference genes) expression were analyzed by syber green master mix (Applied BioSystem, USA) with Realtime analyzer ABI 7500 fast.

**Results:** Twenty seven percent of cases had suffered from rectal cancer while 73% of cases had colon cancer. In 72% of tumor samples the SFRP1 expression was reduced or not detectable in comparison with adjacent normal tissues. The SFRP-1 gene expression of tumor tissues from Rectum had been reduced 2.78 times in comparison to adjacent normal tissues. In case suffering from tumors in colon the difference of expression between normal and tumor tissues were diverse. Also in all female cases SFRP-1 expression were decreased in tumor tissues in comparison to normal adjacent tissues. However, the reduction in expression was also observed in a male cases suffering from rectal cancer.

**Conclusion:** The observation that rectal cancer had different expression in normal and tumor tissues indicate that the expression of SFRP-1 gene showed that over activation of wnt signaling pathway through inhibiting this antagonist is more prominent in rectal cancer while there should be more studies about the role of this antagonist in inhibiting wnt signaling pathway in females.

Send Date: 2012/09/05

Code: 2415

Category: 13. ONCOLOGY-BASIC

13.2 Molecular biology/genetics/pathology

F-T-132

### SFRP-5 gene expression profiling in colorectal cancer patients and its clinical implications

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**Introduction:** Colorectal cancer (CRC) is one of the most common and well-studied malignancies in the world. The disease is thought to originate from multipotential stem cells located in intestinal crypts from which (non)polypoid precursor lesions and finally metastatic CRC can develop. Colorectal cancer (CRC) arises as a consequence of the accumulation of genetic and epigenetic alterations in colonic epithelial cells during neoplastic transformation. Epigenetic modifications, particularly DNA methylation in CpG islands of Tumor suppressor gene promoters (e.g., SFRPs gene promoters in Wnt signaling pathway), causes the expression of these genes to be decreased and this event is recognized as common molecular alterations in human tumors. We studied expression status of SFRP-5 gene in tissue samples of colon cancer and their normal adjacent tissue in 19 colon cancer patients.

**Method:** Total RNA was extracted from colon cancer tissue samples and their normal adjacent tissue. Total RNA was converted to cDNA and then the expression status of SFRP-5 gene in tumor and Normal tissue along with expression status of the reference gene (GAPDH) was studied by syber Green mastermix (Applied Biosystem, USA) in a Real-time

PCR analyzer.

**Results:** About 73.5% of cases were female. In 36% of samples, expression of SFRP-5 gene was decreased in tumor tissues in comparison to their normal adjacent tissue while in 31.5% of cases, expression status of SFRP-5 in tumors tissue had no significant difference with their normal counterparts. The SFRP-5 gene was not expressed in 31% of samples. The expression status of SFRP-5 in tumoral samples of patients suffering from colon tumors had decreased while in patients with rectal cancer this observation was not seen.

**Conclusion:** According to our samples, we can conclude that this disease is more common in females. Also we can say that the over activation of Wnt signaling pathway through decreased expression of wnt inhibitory factors such as SFRP-5 is more common in colon cancer in comparison to rectal cancer. This may be due to higher proliferation rate in colon tissue in comparison to rectum tissue and other factors may be responsible which should be studied well in future.

Send Date: 2012/09/05

Code: 2292

Category: 14. ONCOLOGY-CLINICAL

14.1 Malignant disease - epidemiology - screening and prevention

F-T-133

### Diagnostic value of Pepsinogen I & II for pre-cancerous gastric lesions in dyspeptic patients

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**Introduction:** The strategy of gastric cancer screening differs around the world. Measurement of pepsinogen I and II as markers of gastric atrophy could be an alternative to endoscopy. The aim of this study is to determine the diagnostic value of pepsinogen I and II as a noninvasive way for evaluation of precancerous lesions in comparison with histologic specimens obtained by endoscopic biopsy.

**Method:** Upper endoscopy performed for all dyspeptic patients above 40 year old and five biopsy

samples obtained. The specimens were evaluated based on Updated Sydney classification and simultaneously serum pepsinogen I and II levels were measured. Intestinal metaplasia and any type of dysplasia were interpreted as premalignant lesion. The sensitivity, specificity and positive and negative predictive value of serum pepsinogen for detecting these lesions were determined.

**Results:** Overall 176 patients including 92 men and 84 women (average age  $53.97 \pm 10.25$ ) participated in this study. The average serum level of pepsinogen II was more elevated in male patients over 50. pepsinogen I and II levels were lowest in corpus involvement ( $P=0.0001$ ). With progression of gastritis, the average level of pepsinogen I decreased but the decrease in pepsinogen II and pepsinogen I/II ratio were meaningful in dysplasia and in different pathologic situations ( $p=0.0001$ ). sensitivity, specificity, positive predictive value and negative predictive value of pepsinogen I < 70 and pepsinogen II < 7.5 For detection of premalignant lesions were respectively (58%, 82%, 78%, 64% versus to 45%, 65%, 58%, 52%). These values for pepsinogen I/II < 3 were 32%, 95%, 38% and 57% respectively. In case of positive results of all three items the values were 15%, 97.6%, 87.5% and 52% respectively.

**Conclusion:** It seems that low sensitivity of these tests limits the ability of these biomarkers for screening of premalignant lesions but may be they could have a role as one of first steps in evaluation of high risk persons for gastric cancer.

Send Date: 2012/06/28

Code: 2344

Category: 14. ONCOLOGY-CLINICAL

14.1 Malignant disease - epidemiology - screening and prevention

F-T-134

#### Endoscopic Findings in a Mass Screening Program for Gastric Cancer in a High Risk Region - Guilan Province of Iran

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**Introduction:** Gastric cancer is a leading cause of cancer-related deaths in both sexes in Iran. This study was designed to assess upper GI endoscopic findings among people > 50 years targeted in a mass screening program in a hot-point region.

**Method:** Based on the pilot results in Guilan Cancer Registry study (GCRS), one of the high point regions for GC –Lashtenesha- was selected. The target population was called mainly using two methods: in rural regions, by house-house direct referral and in urban areas using public media. Upper GI endoscopy was performed by trained endoscopists. All participants underwent biopsies for rapid urea test (RUT) from the antrum and also further biopsies from five defined points of stomach for detection of precancerous lesions. In cases of visible gross lesions, more diagnostic biopsies were taken and submitted for histopathologic evaluation.

**Results:** Of 1,394 initial participants, finally 1,382 persons (702 women, 680 men) with a mean age of  $61.7 \pm 9.0$  years (range: 50-87 years) underwent upper GI endoscopy. H. pylori infection based on the RUT was positive in 66.6%. Gastric adenocarcinoma and squamous cell carcinoma of esophagus were detected in seven (0.5%) and one (0.07%) persons, respectively. A remarkable proportion of studied participants were found to have esophageal hiatal hernia (38.4%). Asymptomatic gastric masses found in 1.1% (15) of cases which were mostly located in antrum (33.3%), cardia (20.0%) and prepyloric area (20.0%). Gastric and duodenal ulcers were found in 5.9% (82) and 6.9% (96) of the screened population.

**Conclusion:** Upper endoscopy screening is an effective technique for early detection of GC especially in high risk populations. Further studies are required to evaluate cost effectiveness, cost benefit and mortality and morbidity of this method among high and moderate risk population before recommending this method for the GC surveillance program at the national level.

Send Date: 2012/08/15

Code: 2347

Category: 14. ONCOLOGY-CLINICAL

#### 14.1 Malignant disease - epidemiology - screening and prevention

F-T-135

##### **Changing epidemiology of colorectal cancer in a high risk area for upper gastrointestinal cancers**

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**Introduction:** Golestan province located in northeast of Iran had been known as a high risk area for upper gastrointestinal (GI) cancers since about 40 years ago. Previous studies showed that despite a very high incidence rate of esophageal and stomach cancers, the rate of colorectal cancer (CRC) was considerably low in this region. Recent reports suggested a declining trend in the incidence rate of upper GI cancers. In contrast, an increasing was shown in the rate of lower GI malignancies. This study was conducted to determine the epidemiology of CRC in Golestan province of Iran.

**Method:** This study was part of Golestan population-based cancer registry (GPCR) founded by the Golestan Research Center of Gastroenterology and Hepatology (GRCGH) under supervision by the Digestive Disease Research Center. All newly diagnosed CRC cases in the province were registered between 2004 and 2008. Demographic characteristics of patients as well as information about the tumor were collected using structured questionnaire from all centers delivering diagnostic and therapeutic services to CRC patients. Data about Golestan population was obtained from the vice-chancellor for health of Golestan University of Medical Sciences (GOUMS). Age standardized incidence rate (ASR) was calculated using the 18 grouped world standard population.

**Results:** There were 614 newly diagnosed CRC cases during the study period. It was the fifth common cancer in Golestan province. The mean (SD) age of the CRC patients was 55.3 (10.1) years. 374 (56.5%) of cases were male. The proportion of microscopic verification was 73%. The method of diagnosis in

5.2% of cases was "death certificate only". The ASR of CRC was 12.3 and 9.4 per 100000 person-year in males and females, respectively.

**Conclusion:** Our findings showed an increasing trend in the incidence of CRC in our region. Previous reports suggested that this cancer is not common in our area. However, we found that CRC is among five leading cancers and its incidence rate has dramatically increased during recent decades. Changes in the lifestyle and dietary habits of our population into the westernized pattern may be the possible explanation for this trend. So, besides the upper GI cancers, controlling the CRC should be considered as a priority in future health policy making in Golestan province of Iran.

Send Date: 2012/08/15

Code: 2348

Category: 14. ONCOLOGY-CLINICAL

14.1 Malignant disease - epidemiology - screening and prevention

F-T-136

##### **Survival rate of esophageal cancer patients in Golestan province of Iran**

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**Introduction:** Golestan province has been known as a high risk area for esophageal cancer (EC). This study was conducted to assess the population-based survival rate in EC patients in Golestan province of Iran.

**Method:** Newly diagnosed EC patients registered in Golestan population-based cancer registry in 2007 and 2008 were recruited. Data and documents about stage of tumor and patients' vital status were collected. Stage of tumor was determined using summary staging system. Kaplan-Meier method was used to calculate median survival and log rank test was used to compare survival rates between subgroups of variables. Multivariate Cox regression model was used to determine adjusted hazard ratios (AHR) for different variables.

**Results:** From 223 patient, 129(57/8%) were male. The mean age of participants was 64/3 years. The

median survival in our study was 11.08 months. Survival rates for 6, 12 and 36 months were 70%, 47% and 15%, respectively. The results of Cox regression analysis showed that the AHR for patients with metastasis stage and regional stage (compared to those with localized stage) were 9.21 (95% CI: 5.64-15.05) and 3.2 (95% CI: 1.94-5.29), respectively.

**Conclusion:** Our results showed that survival rate of EC patient in our study was higher than the rate reported in a previous study from this region. But it was still lower than those reported from developed countries. Regarding the stage of tumor as the most important determinant of survival in these patients, it seems that implementation of appropriate programs to detect the disease in early stages (screening programs) will increase the survival rate in these patients.

Send Date: 2012/08/15

Code: 2491

Category: 14. ONCOLOGY-CLINICAL

14.1 Malignant disease - epidemiology - screening and prevention

F-T-137

#### Colonoscopy screening in average-risk population

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**Introduction:** Colorectal cancer(CRC) is one of the most prevalent cause of death worldwide. In Middle East The prevalence of colorectal cancer is estimated to be around 0.7-0.8%. In Iran cancer also is the major health problem and cancer is the third most common cause of death. The aim of this investigation is determination of prevalence of preneoplastic and neoplastic lesions of the colon in the average risk population to find the best age group who benefit from screening.

**Method:** This is a longitudinal prospective study for CRC screening on asymptomatic, average-risk adults between 2007-2012, aged more than 40 years old, between 2007-20012 who had no symptom referable to gastrointestinal tract in Firoozgar general

hospital. All eligible subjects underwent total colonoscopy. All lesions were removed and sent to pathology centre of hospital for histopathological evaluation. The colorectal were classified by size, location, numbers and pathologic findings.

**Results:** A total of 1208 eligible participants were enrolled in this study. Of them 623 subjects were male. The mean age was  $56.45 \pm 9.59$ . The distribution of participants in 40-49, 50-59, 60-69 and  $\geq 70$  years old group were 30.1%, 36.8%, 25.4% and 7.7% respectively. Overall prevalence of polyp was 16.5%. The prevalence of polyp were more common among 50-60 (n=76) followed by 60-70 (n=63) years old group. The most common histopathology finding was tubular adenoma by 69.3% (n=138). Age (OR=3.17) and male sex (OR=1.81) have positive correlation with advanced pathological finding. In Multivariate analysis the pathological finding has not significant correlation with sex, age, Location and number of lesions.

**Conclusion:** This study revealed that overall prevalence of adenomatose lesions in Iran is almost similar to the western countries. But the prevalence of malignancy is lower than these countries. We also concluded that the subjects aged 40-49 years have a measurable risk to developing a colorectal neoplasia and age 60-69 are more prone to develop polyp and cancer. Also male sex and age could be considered as risk of colorectal adenoma.

Send Date: 2012/09/30

Code: 2311

Category: 15. NERVE GUT AND MOTILITY

15.5 Functional gastrointestinal disorders (clinical - management)

F-T-138

#### Evaluating the relationship between irritable bowel syndrome and Perfectionism in medical students

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**Introduction:** Perfectionism seems to play an important role in etiology, aggravation and flare-up of many disorders specially psychosomatic disorders such as irritable bowel syndrome; however there are not many data exist to clarify the relationship between perfectionism and IBS .

**Method:** In this cross-sectional study 250 medical students from Islamic Azad university, Najafabad Branch in different grades were included. Irritable bowel syndrome was evaluated using valid and reliable farsi version of ROME III criteria and perfectionism was evaluated by a valid and reliable questionnaire

**Results:** In basic science grade 14.7%, in physioathology grade 16.1%, 21.5 % of staggers and 19.3% of interns had IBS. Positive perfectionism was diagnosed in 81.9% of basic science grade, 87.1% of physioathology grade, 83% of staggers and 91.9% of interns. Negative perfectionism was diagnosed in 69.9% of basic science grade, 75.8% of physioathology grade, 70.7% of staggers and 80.6% of interns. There was a significant correlation between IBS and possitive perfectionism scores in medical students but there was no significant correlation between IBS and negative perfectionism ( $P < 0.031$  ,  $P < 0.231$  ).

**Conclusion:** Prevalence of IBS and both positive and negative perfectionism in medical students were higher than general population. This significant difference in perfectionism could be explained because both medical students themselves and society expect a lot from educated individuals specially physicians and perfectionism could aggravate IBS symptoms.

Send Date: 2012/07/22

Code: 2312

Category: 15. NERVE GUT AND MOTILITY  
15.5 Functional gastrointestinal disorders (clinical - management)

F-T-139

#### Irritable bowel syndrome symptoms during pregnancy trimesters

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**Introduction:** Irritable bowel syndrome is one of the most common functional gastrointestinal disorders which is presented by bowel habit change and abdominal pain without any structural defect. The Prevalence in Iran is reported between 4.2-18.4 %. Although the etiology is still unknown but many factors such as motility disorders, genetics, nutrition, behavioral disorders may cause it. During Pregnancy GI symptoms like nausea and vomiting are so common. The anxiety level will also increase during this period .Due to the relationship between IBS and these factors this study was designed to evaluate the IBS symptoms during pregnancy in comparison with normal objects.

**Method:** This was a cross-sectional study to evaluate Irritable bowel syndrome (IBS) symptoms in comparison with normal objects Patients were included to the study after full-filling the valid and reliable farsi version of ROME III criteria IBS questionnaire.

**Results:** 323 pregnant and 98 controls were included. IBS was seen in 23.5% of pregnant and 13.3% of patients in control group. ( $P < 0.05$ ) . IBS-C had a significant increase in third trimester comparing with first and second trimester ( $P < 0.05$ ). IBS-D had a significant increase in second and third trimester comparing with control group ( $P = 0.042$ ). IBS-M had a significant increase in third trimester comparing with control group ( $P = 0.008$ ).

**Conclusion:** In this study frequency of IBS symptoms was higher in pregnant than control group and this could be because of hormonal changes and psychological factors which are changing during pregnancy.

Send Date: 2012/07/22

Code: 2431

Category: 15. NERVE GUT AND MOTILITY

15.5 Functional gastrointestinal disorders (clinical - management)

F-T-140

خوشه بندی اختلالات عملکردی گوارشی با استفاده از روش های داده کاوی

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زمینه و هدف: اختلالات عملکردی گوارش به دسته ای از بیماری های دستگاه گوارش اطلاق می شود که علیرغم وجود اختلال ساختاری در دستگاه گوارش باعث ایجاد علائم آزاردهنده ای می گردند. این اختلالات به شدت کیفیت زندگی فرد مبتلا را مختل می کنند و در صدر مراجعات گوارشی قرار دارند. با این حال به دلیل عدم وجود روش تشخیص قطعی یا درمانی مشخص، هزینه های بالایی بر جامعه تحمیل می کنند. تلاش های انجام شده تاکنون، در جهت طبقه بندی انواع اختلالات عملکردی گوارش، محدود به استفاده از روش های آماری بوده است و در حال حاضر ابزار اصلی تشخیص و طبقه بندی این اختلالات معیارهای ROME III می باشد که بر اساس روش تصمیم گیری دلفی تدوین شده است. هدف این مطالعه استفاده از تکنیک های داده کاوی برای خوشه بندی اختلالات عملکردی گوارشی است.

روش بررسی: داده های این تحقیق شامل ۶۲۳۹ رکورد و ۱۸۳ مشخصه هستند که متعلق به بخش دوم پروژه ی SEPAHAN می باشند. این مجموعه ی داده ای بر اساس متدولوژی CRISP-DM، توسط الگوریتم k-means و با استفاده از نرم افزارهای Weka و Clementine مورد بررسی قرار گرفت.

یافته ها: در این مقاله با اعمال تکنیک های داده کاوی، موفق به شناسایی خوشه هایی شدیم که بیانگر الگوی روابط موجود مابین اختلالات عملکردی گوارشی می باشند. نتیجه گیری: نتایج حاصل از مقایسه ی خوشه ها با دسته بندی ROME III بیانگر ایجاد دو نوع خوشه می باشد: خوشه هایی که با تعاریف قبلی اختلالات عملکردی گوارشی در دسته بندی ROME III سازگارند و خوشه هایی که در تعاریف قبل وجود ندارند ولی طبق یافته های بالینی، وجود بیماری با این اختلالات منطقی به نظر می رسد. پیشنهاد می شود در مطالعات آتی با اعمال الگوریتم های دیگر خوشه بندی به بررسی میزان همپوشانی در خوشه ها پرداخته شود.

Send Date : 2012/09/13

Code : 2469

Category: 15. NERVE GUT AND MOTILITY

15.5 Functional gastrointestinal disorders (clinical - management)

F-T-141

### Personality Factors in Irritable Bowel Syndrome: A cross-sectional study

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**Introduction:** We investigated whether the personality factors measured in individuals with irritable bowel syndrome (IBS) symptoms differ from healthy participants, taking into account the subgroups of IBS (IBS-diarrhea, IBS-constipation, IBS-mixed and IBS-undetermined).

**Method:** A cross-sectional survey of 4763 participants was carried out in Isfahan University of medical sciences. They were asked to fill two questionnaires:

A validated questionnaire which fulfilled Rome III criteria for IBS considering their sociodemographic and lifestyle data as well, and the NEO-FFI questionnaire. Data was processed and analyzed using SPSS, Student's t-test for quantitative variables and Chi-squared statistic test for qualitative variables. Prevalence of each IBS subgroups was also assessed according to predominant stool pattern.

**Results:** There were significant differences between IBS and non-IBS group in all dimension except openness ( $p < 0.01$ ). The mean score of neuroticism was significantly lower in non-IBS group but they showed a significantly higher level of extraversion, agreeableness and conscientiousness. Mean score of all dimensions was reported to be higher in female patients except extraversion ( $p < 0.01$ ).

**Conclusion:** The results indicate that the personality dimensions in irritable bowel syndrome differ from non-IBS group.

Send Date: 2012/09/27

Code: 2419

Category: 16. IMMUNOLOGY/MICROBIOLOGY

16.3 Gastrointestinal infections

F-T-142

**Enterococcus faecalis in subgingival biofilm of patients with chronic refractory periodontitis**  
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**Introduction:** Enterococci are normal human commensals adapted to the nutrient-rich, oxygen-depleted, and ecologically complex environments of the oral cavity, gastrointestinal tract, and vaginal vault. Enterococci now rank among the top three nosocomial bacterial pathogens and strains resistant to currently available antibiotics and pose real therapeutic difficulties. Up to 90% of enterococcal infections in humans are caused by Enterococcus faecalis especially in gastrointestinal tract. The presence of E. faecalis in the oral cavity raises the question of whether the mouth could be a source for infection with this microorganism. In addition, the microorganism has been reported as the species most commonly recovered from teeth with failed endodontic treatment and persistent infections. Refractory periodontitis is the occurrence of additional clinical attachment loss after repeated attempts to control the infection with conventional periodontal therapy. Some microorganisms seem to be involved in the pathogenesis of chronic refractory periodontitis. The prevalence of Enterococcus faecalis in the oral cavity seems to be higher in individuals with periodontitis. Therefore, the present study investigated the presence of E. faecalis in subgingival biofilm of patients with chronic refractory periodontal disease.

**Method:** Periodontal treatment was instituted for 100 patients suffering from chronic periodontitis. Then samples were obtained from 27 successfully treated and 27 chronic refractory periodontitis subjects and then cultured. Statistical evaluation was performed for descriptive purposes.

**Results:** 27% of the patients had chronic refractory periodontitis. The difference in the presence of E. faecalis in the pockets between the successfully treated (11.1%) and chronic refractory (51.8%) groups by culture methods was statistically significant ( $P < 0.05$ ).

**Conclusion:** Data showed that E. faecalis is probably involved in the pathogenesis of refractory periodontitis. Accurate knowledge about the pathogen and its role in the pathogenesis of refractory

infections helps develop effective treating strategies.  
Send Date: 2012/09/05

Code: 2482

Category: 18. GASTROINTESTINAL BLEEDING  
F-T-143

بررسی فراوانی نسبی خونریزی دستگاه گوارش فوقانی پس از عمل بای پس عروق کرونری در بیمارستان قلب شهید رجایی در سال ۱۳۸۹ و عوامل خطر آن

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زمینه و هدف: خونریزی دستگاه گوارش فوقانی یکی از جدی ترین عوارض جراحی بای پس عروق کرونری می باشد. اگر چه شیوع این عارضه ۱ تا ۳ درصد است، اما با میزان مرگ و میر و عوارض بالا (۴۰ تا ۶۰ درصد) گزارش شده است. تاکنون مطالعات کمی در مورد ریسک فاکتورها و عوامل پیشگیری کننده انجام شده است. هدف این پژوهش بررسی میزان بروز خونریزی و شناسایی عوامل خطر جهت جلوگیری و درمان سریعتر عارضه است

روش بررسی: این پژوهش توصیفی می باشد، در این مطالعه پرونده ۶۴۰ بیمار که در سال ۱۳۸۹ در مرکز قلب و عروق شهید رجایی تهران تحت عمل بای پس عروق کرونری قرار گرفته بودند، مورد مطالعه قرار گرفت و پس از احتساب معیارهای خروج (عمل همزمان غیر از بای پس، خونریزی گوارشی قبل از بای پس در بستری اخیر، فوت قبل از ترخیص، اطلاعات ناکامل پرونده) ۵۴۸ بیمار وارد مطالعه شدند و سپس با استفاده از ابزارهای آماری SPSS آنالیز اطلاعات پرسشنامه انجام گرفت. یافته ها: ۱۸ نفر از ۶۴۰ نفر دچار UGIB پس از جراحی شدند (۲/۸ درصد). پس از اعمال معیارهای خروج از ۵۴۸ بیمار، ۱۰ بیمار (۱/۸٪) دچار UGIB شدند. ۱۵ نفر از ۵۴۸ بیمار پس از عمل فوت کردند که ۳ نفر از آنها دچار UGIB نیز شده بودند.

در مطالعه میزان مرگ و میر (مورتالیتی) کلی ۰/۴۵ درصد و مورتالیتی نسبی ۲۰ درصد برای UGIB بدست آمد. بیشترین علت مرگ ایست قلبی تنفسی بود اما در سه بیمار، خونریزی گوارشی فوقانی ارتباط مستقیمی با مرگ داشت، در واقع می توان گفت در این مطالعه میزان کشندگی UGIB، ۶۶/۱۶ درصد بود. بین UGIB و متغیرهای زیر ارتباط آماری معنا داری بدست آمد:

و نتیلاسیون مکانیکی (P-value: 0.014) [CI: 1.001-1.009] OR: 1.005

سابقه زخم گوارشی بیمار (P-value: 0.005) [CI: 2.221-83.688] OR: 13.634

سن (P-value: 0.34) [CI: 1.500-1.122] OR: 1.62

در این مطالعه میزان خونریزی قسمت فوقانی دستگاه گوارشی ۱/۸ درصد بدست آمد که این میزان در محدوده آمار دیگر کشورها و بلکه از بسیاری از آنها کمتر است، ریسک فاکتورهای مهم در این مطالعه شامل سن بالای ۶۰، سابقه زخم گوارشی

و طول مدت بیشتر و نتایج مکی بود که از لحاظ بالینی نیز قابل قبول می باشد. نتیجه گیری: لذا پیشنهاد می گردد افرادی که این ریسک فاکتورها بویژه سابقه زخم گوارشی را دارند، پروفیلاکسی قبل از عمل شروع شود و پس از عمل نیز بررسی و مراقبت بیشتری صورت پذیرد.

Send Date: 2012/09/28

Code: 2329

Category: 19. ENDOSCOPY AND IMAGING

19.1 Endoscopy - Upper GI

F-T-144

**Blue rubber bean nevus syndrome a rare cause of iron deficiency anemia :a case report**

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**Introduction:** Blue Rubber Bleb Nevus Syndrome (BRBNS) is a disorder characterized by multiple cutaneous venous malformations in the skin and gastrointestinal tract. Iron deficiency anemia (IDA) is the most common clinical presentation of BRBNS, however melena, hematochezia and involvement of internal organs have also been reported. It is a rare Syndrome of abnormal blood vessels affecting the gastrointestinal tract and according to our MEDLINE search about 200 case reports has been published till 2012 in English lectures.

**Case Report:** We present a case of 22-year old man who was referred to gastroenterology department in our hospital for evaluation of IDA. At the physical examination, he had some compressible bluish nodules (fig.1) of 0.5 cm to 1.5 cm in diameter at the sole of the foot on his lower extremity, and these nodules tended to refill with blood after compression. The upper endoscopy revealed one bluish vascular lesion in the proximity of 10mm in diameter and wrinkled surface in proximal of duodenum (fig.2-a) and similar lesion in colonoscopy in descending part of colon(fig.2-b). He refused enteroscopy for detecting potential lesions in small bowel.

A diagnosis of BRBNS in this case was made on the basis of the typical skin lesions, bluish nevi in duodenum and colon on GI endoscopy, and histological picture of venous malformation on skin biopsy.

The patient was about the benign nature of the disease, and the bleeding lesions were managed conservatively with iron supplement, along with an advice for periodic follow-up.

**Conclusion:** Mainly, Treatment of BRBNS is conservative but laparotomy with intraoperative endoscopy may be best approach in patient with severe anemia and multiple lesions in GI tract.

Send Date: 2012/08/06

Code: 2330

Category: 19. ENDOSCOPY AND IMAGING

19.1 Endoscopy - Upper GI

F-T-145

**High dose versus low dose intravenous pantoperazole infusion in bleedig peptic ulcer**

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**Introduction:** An appropriate dose of proton pump inhibitors drugs in the treatment of patients with upper gastrointestinal bleeding is still controversial. The aim of this study is to compare High-dose Iv PPI with Low-dose for preventing the complications of gastrointestinal bleeding.

**Method:** At first, 166 patients with gastrointestinal bleeding who had an etiology of peptic ulcer were stabilized their hemodynamic status, and then, they underwent the therapeutic endoscopy by using method APC and injected with epinephrine. Patients were randomly classified into two groups: High-dose (Pantoprazole 80 mg bolus and then, 8 mg per hour) and Low-dose (Pantoprazole 40 mg bolus and then, 4 mg per hour) for three days and underwent infusion. Initial results were: re-bleeding, need for surgery, hemoglobin drop of more than two units, hospitalization for more than five days; and secondary results included mortality rate and need for surgery.

**Results:** 83 patients were grouped into High-dose, and 83 patients were grouped into Low-dose. The average age of persons in the High dose group was 59/50±15 /6years and it was 52/3±13/ 3years in the Low dose group (P =0.58). In terms of gender, most patients were male (69/7). In the High-dose group,

the mean of received blood was  $3.3 \pm 1.71$  units and in the Low-dose group was  $2.82 \pm 1.73$  units ( $P = 0.50$ ). 36 patients (43.37%) in the High-dose group and 40 patients (48.19%) in the Low-dose group had more than 5 days of residence duration ( $P=0.53$ ). 27 patients (32.53%) in the High-dose group and 21 patients (25.30%) in the Low-dose group with re-bleeding ( $P = 0.30$ ). 29 patients (34.93%) belonging to the High-dose group and 38 patients (45.78%) in the Low-dose group had more than two units of drop in hemoglobin ( $P=0.15$ ). 4 patients (4.8%) in the High-dose group and 5 patients (6.02%) in the Low-dose group died ( $P=0.99$ ). 6 patients (7.22%) in the High-dose group and 9 patients (10.48%) belonging to the Low-dose group underwent surgery ( $P=0.75$ ).

**Conclusion:** This study showed that there is not a difference between primary and secondary results in terms of high dose of pantoprazole compared with low dose of it in controlling upper gastrointestinal bleeding.

Send Date: 2012/08/09

Code: 2575

Category: 19. ENDOSCOPY AND IMAGING

19.1 Endoscopy - Upper GI

F-T-146

بررسی مقایسه ای اثربخشی آموزش مستقیم شفاهی

با ارائه اطلاعات کتبی بر میزان اضطراب بیماران تحت آندوسکوپی

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**زمینه و هدف:** بیماری های گوارشی یکی از اختلالات شایع بوده و آندوسکوپی مهم ترین وسیله تشخیصی برای این اختلالات است. اضطراب قبل از آندوسکوپی می تواند ناشی از نقص اطلاعات بیماران در مورد آن و ترس از بروز درد حین انجام آندوسکوپی باشد که باعث کاهش تمایل بیماران و افزایش زمان انجام آندوسکوپی می گردد. این مطالعه با هدف تعیین نقش انواع مختلف آموزش (شفاهی، کتبی، شفاهی، کتبی) در کاهش سطح اضطراب بیماران معرفی شده به آندوسکوپی انجام شد.

**روش بررسی:** صد بیمار که برای اولین بار جهت آندوسکوپی فوقانی انتخاب شده بودند در گروه های چهار گانه قرار گرفتند. در کلینیک سنجش اولیه اضطراب افراد منتخب با پرسشنامه استاندارد اضطراب یک (شامل ۲۱ سوال) انجام گرفت. سپس اطلاعات لازم به بیماران منتقل گردید. روز بعد نیم ساعت قبل از انجام

آندوسکوپی مجددا پرسشنامه اضطراب یک توسط بیماران پر شد و اثربخشی روش های مختلف مورد ارزیابی قرار گرفت.

**یافته ها:** نتایج نشان داد که تمایل بیماران به همکاری افزایش یافته میانگین نمره اضطراب گروه شاهد با گروه شفاهی و گروه کتبی و گروه توأم پس از مداخله از لحاظ آماری تفاوت معنی دار دارد ( $P < 0.001$ ). ولی این تفاوت میانگین نمره اضطراب بین گروه شفاهی با گروه کتبی و گروه شفاهی - کتبی از لحاظ آماری معنی دار نبود ( $P < 0.32$ )

**نتیجه گیری:** ارائه اطلاعات به بیماران می تواند اضطراب بیماران را کاهش دهد و این اثر مستقل از نوع آموزش (شفاهی، کتبی یا تلفیقی از هر دو) است.

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Category: 19. ENDOSCOPY AND IMAGING

19.3 Endoscopy - ERCP

F-T-147

### N-Acetyl Cysteine for prevention of post ERCP pancreatitis : A prospective double blind randomized pilot study

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**Introduction:** Acute pancreatitis is the most common serious complication of ERCP which occasionally could be fatal. Multiple drugs have been examined for prevention of this side effect with generally uncertain results. This study is an effort for prevention of this complication with using oral N acetyl Cysteine.

**Method:** Overall 100 patients who were candidate for ERCP divided randomly to two groups. In the group N, 1200 mg N Acetyl Cysteine with 150cc water prescribed orally 2 hours before ERCP and in group P, 150cc water prescribed as placebo. Serum Amylase and Lipase have measured before and 24 hours after ERCP and prevalence of pancreatitis and duration of admission in each group were determined and compared together.

**Results:** In group N there was 5 cases (10%) of pancreatitis and in group P it was 14 cases (28%). With P value of 0.02 and risk reduction ratio of 2.8, the results were meaningful. Average admission time was 1.16 days (SD  $\pm 0.55$ ) in group N and 1.18 days (SD  $\pm 0.44$ ) in group P and this difference was not meaningful.

**Conclusion:** According to meaningful difference in

prevalence of acute pancreatitis between two groups with NNT 5 and safety profile of N Acetyl Cysteine, it could be used as a useful tool for prevention of post ERCP pancreatitis. It is recommended that results of this study be checked in additional clinical trials.

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Category: 19. ENDOSCOPY AND IMAGING

19.3 Endoscopy - ERCP

F-T -148

**Evaluation of guide wire cannulation  
in reduced risk of post-ERCP pancreatitis  
and facilitated bile duct cannulation**

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**Introduction:** Pancreatitis is most common complication of post-ERCP and needs to admission at least for one day.the purpose of this study was to assess the efficacy of guide wire for better common

bile duct (CBD) cannulation and reducing of post-ERCP pancreatitis.

**Method:** From 2010 through 2011, patients who need to ERCP and referred to shahid Beheshti and Rohany teaching hospital were entered into the study. standard cannulation (78cases) and guide wire cannulation (65cases) were performed on them randomly. data from these cases were collected and analyzed.

**Results:** on hundred eighteen (82.5%) patients were female and 28(17.5%) were male. the mean age of these patients was 56.5+-16.8 years. Post ERCP-pancreatitis rate in guide wire group was 6(9.2%) and in the standard group was 12(15.4%)(p=0.269). successful cannulation in these two groups was (67.7% and 67.9%,respectively(p=0.974).

**Conclusion:** The result show that post ERCP-pancreatitis rate in both groups are similar. other studies with large number of cases are required to confirm our results.

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**Author Index  
(English Abstracts)**

- A**
- Aarabi M..... 80  
 Abangah G ..... 52  
 Abbasimoghaddam M ..... 33  
 Abdolahi T..... 32,33  
 Abdolahi Shamsaiee S..... 10  
 Abdolalian M ..... 8  
 Abdolhosseini A .....9, 35, 75  
 Abdollahi MR .....54, 56, 71  
 Abdollahzadeh L..... 19  
 Abedini F .....32  
 Abnet C.....14, 15, 16  
 Adhamian P..... 43, 44  
 Adibi N..... 82  
 Adibi P .....11, 17, 18,  
 21,22, 28, 30, 31, 56, 81, 82, 83  
 Afghari P..... 30  
 Afshar H .....11, 83  
 Afzal Aghaei M..... 51, 61  
 Agah S..... 20  
 Aghajanian M.....41  
 Aghajany-Nasa M..... 53  
 Aghamohammadi H.....43  
 Aghcheli K.....16  
 Ahadi M .....51  
 Ahmadi E..... 37  
 Ajdarkosh H..... 12,13,47,48,58,73, 81  
 Akbari H .....27  
 Akhlaghpour S..... 19  
 Akhondi M..... 12, 40, 74  
 Alaei-Andabili H..... 67  
 Alavi Nejad P..... 86  
 Alavian M..... 7,63,64, 67,69,98,70  
 Alavian H..... 63, 64  
 Alavinejad P..... 78, 85  
 Alimohammadian M..... 37  
 Alipour A..... 73  
 Alizadeh Ghavidel AR..... 84  
 Alizadeh B..... 37  
 Alizadeh S .....47  
 Amani F .....42  
 Ameli M.....13, 47, 81  
 Amini E..... 17, 18  
 Aminian K.....79  
 Amirbeigi MK.....12, 40, 74  
 Amiriani T.....54, 65  
 Amirkalali B.....58  
 Anbari K.....8  
 Antikchi MH..... 12, 40  
 Arj A..... 27, 60  
 Arjmandpour A..... 81, 82  
 Asadi M.....10  
 Asadi R.....20, 61  
 Assali R.....61  
 Ataei B.....70
- Attarzade Hosseini R.....57  
 Ayatollahi H.....51  
 Azadegan M.....18  
 Azadmanesh K.....78  
 Azizi M.....77, 78
- B**
- Babaei M.....37  
 Baghbanian M.....12, 40, 74  
 Bagheri A.....42  
 Bagherian R.....11, 83  
 Bakhshandeh H.....84  
 Bakhshipour AR.....39, 61  
 Barari L.....61  
 Barzin M.....60  
 Bashari Z.....43, 45  
 Bashtar M.....19  
 Behnava B.....63,64,67,98,69,70  
 Besharat S.....54  
 Birkett N.....15  
 Boffetta P.....14, 15,16  
 Boreiri M.....37  
 Borhani N.....40  
 Boyce P.....11  
 Brennan P.....15
- C**
- Cornain S.....53
- D**
- Daghaghzadeh H.....11,17,45,56,83  
 Daneshpajouhnejad P.....11,18  
 Darvish Moghadam S..... 8,9,55,71,85  
 Dastgiri S.....29  
 Dawsey S.....14, 15, 16  
 De Bock GH.....37  
 Dehghani M.....63  
 Delavari AR.....37  
 Derakhshan MH.....37  
 Dowlatshahi S.....57
- E**
- Ebrahimzadeh S.....56  
 Ehsani Ardakani MJ.....41  
 Emadi A.....15  
 Emami MH.....43, 44, 45, 49  
 Esalatmanesh K..... 27  
 Esmacilzadeh A.....11, 32, 52  
 Esteghamati AR.....65  
 Etemadi A.....14, 15, 16, 37
- F**
- Fahimi S.....14  
 Fakhari S.....76  
 Fakhrieh S.....79
- Fallahzadeh E.....27, 62  
 Farhang M.....82  
 Farhangi E.....46  
 Faridan Esfahan M.....45  
 Farzanefer H.....51  
 Farzanefer M.....10, 33, 51  
 Farzinezhad MM.....49  
 Fatemi AM.....49  
 Fathi F.....76  
 Fauzi A.....53  
 Fazeli MS.....77, 78  
 Fazeltabar Malekshah A.....14  
 Fazlollahi N.....29, 30  
 Feinle-Bisset C.....11  
 Feizi A.....11, 17, 21, 22, 83  
 Firouzain H.....61  
 Firouzei M.....28, 30  
 Forghani MN.....75
- G**
- Ganji A.....45, 52  
 Geramizadeh B.....27, 62  
 Gadir MR.....7, 19, 49,77,78  
 Ghadirian L.....43  
 Ghadri S.....32  
 Ghafarzadegan K.....10, 32, 33, 52  
 Ghafori H.....76  
 Ghanadi K.....8  
 Ghanooi AH.....19  
 Ghasemi S.....12  
 Ghasemi Jangioo A .....29  
 Ghavamzadeh A.....19  
 Ghazvini K.....52  
 Gheidari F.....36  
 Ghofrani H.....74  
 Ghojazadeh M.....34, 35, 54, 56  
 Gholami Fesharaki M..... 63, 64, 67,  
 69, 70, 98  
 Gholamrezaei A.....43, 44, 45  
 Ghorbani K.....79  
 Golalipoor G..... 80  
 Golzar A.....14  
 Gorji N.....20  
 Granmaye G.....43
- H**
- Habibinejad H.....7  
 Habibzadeh S.....42  
 Haghazali M.....84  
 Haghazali S.....84  
 Haghdoost AA.....9, 55  
 Haghghat M.....27, 63  
 Hajiani E.....78, 85, 86  
 Hajmollarezaei E.....10, 32, 33  
 Hajrassuliha H.....65

- Hakami R.....15  
 Hakhamaneshi S.....76  
 Handjari Dr.....53  
 Hartoonian C.....45  
 Hashemi J.....45, 78, 85, 86  
 Hashemi S.....36  
 Hashemi Jazi M.....18, 56  
 Hashemijazi H.....49  
 Hassanzadeh Keshteli A..... 11,  
 17, 18, 21, 22, 56, 83  
 Hatami K.....12, 13, 73, 81  
 Hayat Bakhshe Abasi M..... 8, 9,  
 50, 55, 71  
 Heidari A.....7, 42  
 Hejazi Z.....52  
 Hekmatdoost A.....61  
 Hemassi GR.....12,47,48,73,81  
 Hoseini V.....50, 60  
 Hoshiar A.....42  
 Hossein Torabi B.....54  
 Hosseini Motlagh M.....70  
 Hosseinneshad H.....32, 33  
 Houshiar A.....37
- I**
- Imanieh MH.....27, 63  
 Iraj N.....18  
 Iranikhah A.....7, 19, 49  
 Islami F.....14, 15, 16  
 Isvand F.....83
- J**
- Jabbarpour Bonyadi M.....51  
 Jabini R.....51  
 Jafari N.....35  
 Jafari Z.....33  
 Jafari Naeimi M.....83  
 Jahangiri P.....17  
 Jalili A.....76  
 Jamali N.....43, 44, 45  
 Jamali R.....57  
 Jamshidian N.....85  
 Joukar F.....38, 40, 48, 74, 79
- K**
- Kaffash A.....84  
 Kalantari H.....70  
 Kamangar F.....14, 15, 16  
 Karamifar H.....63  
 Karimi P.....63,64, 67, 69, 98  
 Karimi Googheri E.....9  
 Kavosian E.....83  
 Kayvani H.....12, 13  
 Kazemizadeh A.....49  
 Keshvari M.....63, 64, 67, 69,  
 70, 98  
 Keyvani H.....58, 70  
 Khademi H.....15  
 Khademi M.....54
- Khaleghi Nia M.....71  
 Khalily Zade M.....71  
 Khanlegi H.....32  
 Khansari MR.....12, 13, 47, 48,  
 58, 81  
 Khashkhashi Moghaddam S..... 10  
 Khazaei S.....28, 31  
 Khazaeli P.....50  
 Khodabakhshi B.....65  
 Khoshbaten M.....45, 51  
 Khoshnood A.....12, 40  
 Khosravi Khorashad A..... 51, 61  
 Kiyvani H.....47  
 Kord Valeshabad A.....79
- L**
- Latifi-Navid S.....36  
 Lotfi Sadigh S.....54, 56, 71  
 Lzanlo A.....35
- M**
- Maadi M.....12, 58  
 Mahmoodi A.....55  
 Mahmoudi L.....29  
 Maleki I.....41, 60  
 Maleki M.....10  
 Maleki P.....36  
 Malekpour AR.....63  
 Malekzadeh R.....14, 15,  
 16, 19, 29, 36, 37, 45  
 Mansour-Ghanaei F.....38,40,48,74,79  
 Mansourian M.....62  
 Maoodi M.....42,59  
 Marjani HA.....14  
 Masjedizadeh AR.....78,85,86  
 Masnadi Shirazi K.....23  
 Masoum A.....10  
 Matin E.....42  
 Matin S.....42  
 Matinfar M.....81  
 Matini M.....27,60  
 Mehrabi N.....29,30  
 Mehrnoush L.....63,64, 67,69,70,98  
 Mehrtash AH.....77,78  
 Mehrvarz AR.....79  
 Meysamie AP.....65  
 Mikaeli J.....29,30  
 Minakari M.....61,70  
 Mir Najde Gerami S.....51  
 Mirab Samiee S.....53  
 Miri M.....63,64  
 Mirinezhad K.....23,29  
 Mirkarimi H.....80  
 Moaadi M.....13,73  
 Moeeni M.....62  
 Moghaddam Jafari A.....59  
 Moghaddami A.....80  
 Mohamadian M.....57  
 Mohamadkhani A.....32,65,66
- Mohamadnejad M.....19  
 Mohammadi M.....44,50  
 Mohammadi R.....80  
 Mohammadi S.....36  
 Mohammadi Bonehi S.....30  
 Mohammadzadeh M.....29  
 Mohammadzadeh Garebaghi MA.... 56  
 Mohebbi Moghaddam A.....33  
 Mohsenpour Mohammadi N.....39  
 Mohtadinia J.....15  
 Moini R.....20  
 Moradi AV.....65  
 Moradi Lakeh M.....12,13  
 Moraveji AR.....60  
 Moraveji S.....43,45  
 Movahedian A.....53  
 Movassagh A.....77,78  
 Mozafari N.....54
- N**
- Naderi E.....32  
 Naeimi Tabiei M.....80  
 Naghavi Behzad M.....34, 35,54  
 Najafi M.....81,20,42,59  
 Najafipoor H.....55  
 Najib K.....27  
 Naseri AR.....29  
 Nasiri AA.....41  
 Nasiri B.....29  
 Nasiri Toosi M.....65  
 Nasrollahzadeh D.....14,15,16  
 Nazari S.....72,73  
 Nazem M.....50  
 Nematy M.....57  
 Nezam K.....39,61  
 Nikandish M.....46  
 Nikeghbalian S.....62  
 Nikkhoo B.....46,76  
 Nikmanesh A.....37  
 Niknam R.....29  
 Nikpoor AR.....50  
 Nikpour S.....24,25,26,31,39,41  
 Nikroo H.....57  
 Nikyar HR.....81  
 Nikzaban M.....76
- P**
- Panahian M.....42  
 Panjehpour M.....53  
 Parizadeh M.....33  
 Parvizi Aghdam M.....56  
 Pawilta M.....16  
 Pezeshki M.....43,45  
 Pharoah D.....15  
 Pourdadash A.....65  
 Pourfarzai F.....37  
 Pouri AA.....34,35  
 Pourshams A.....15,16,45  
 Pouryasian A.....67,68,69

**R**

Rafiei AR.....	60
Rafiei R.....	81,82
Rahmani MR.....	76
Rajpout MY.....	38,79
Rakhshani N.....	81
Rani AA.....	53
Rasolian J.....	74
Rastegar A.....	60
Rasti A.....	85
Razavi M.....	9,75
Razavizadeh M.....	27,60
Raziee HR.....	32
Rezadost AM.....	42,59
Rezaei M.....	83
Riahinejad S.....	82
Roohafza HR.....	11
Roshandel GR.....	54,65,80
Rostami K.....	45
Rostaminejad M.....	45
Roushan N.....	65

**S**

Saadati H.....	83
Saadatnia H.....	51,61
Saber Firoozi M.....	15
Sadeghi A.....	47,48,58
Sadeghpour S.....	21,22
Sadr F.....	27
Safaie B.....	80
Safarpour AR.....	50
Safarpour M.....	50
Sajadi AR.....	37
Salahi R.....	15
Salak M.....	45
Salehi S.....	23
Salimi S.....	63,64,67,98,69,70
Salmanroghani H.....	12,40,74
Saneian H.....	43,45
Sarkeshikian S.....	7,19,49
Sastranegara F.....	53
Sastranegara F.....	53
Savabi G.....	31
Savabi O.....	28,30,31
Savadkoohi H.....	67
Savadkoohi S.....	67
Sayad K.....	40
Sayyed Mirzaii M.....	8,85
Sebghatolah V.....	86
Sedaghat M.....	80
Semnani S.....	15,65,80
Setareh A.....	47,48
Seyed Mirzaeei M.....	45,55
Seyednezhad F.....	29
Shabazkhani B.....	74
Shafaghi A.....	40,79
Shafie M.....	63,64

Shafiei Pour S.....	8,85
Shahnazari P.....	66
Shakeri R.....	14,16
Sharafi H.....	67,69,98
Shariati Moghaddam AM.....	84
Sharifi AH.....	37
Shavakhi A.....	61
Shayegan N.....	57
Shayesteh AA.....	78,86,85
Sheikesmaeili F.....	46,76
Sheikhian MR.....	38, 79
Shekarriz Foomani M.....	48
Shirani S.....	29,30
Shirmohammadi A.....	28,84
Shirmohammadi M.....	28
Shokri J.....	67
Shoostari Zadeh T.....	84
Siavoshi F.....	36
Sima HR.....	10,32,33,45,57
Soati F.....	38
Sobhani A.....	81,82
Sohrabi MR.....	12,13,47,48,58,73,81
Sokhanvar H.....	79
Soltanian N.....	11
Somi MH.....	28,29,34,35,51,54,56,71
Sotoudeh M.....	14,16, 37
Syam AF.....	53

**T**

Taghavai AR.....	50
Taghvaei T.....	60
Taheri A.....	46
Taherkhani E.....	60
Taherzadeh Z.....	79
Tahmasbi A.....	70
Taleb AM.....	20
Talley J.....	11
Tavakkoli H.....	62,70
Tavassoli AR.....	51
Tayebi S.....	9,35,75
Taylor P.....	14
Teimoori-Toolabi L.....	6,77,78
Toghiani A.....	81,82
Totonchi Saraf K.....	35

**U**

Utomo AR.....	53
---------------	----

**V**

Vakili M.....	12
Vedanthan R.....	15
Vojdanian M.....	59
Vossoughinia H.....	51,61

**W**

Wicaksono BD.....	53
-------------------	----

**Y**

Yaran M.....	70
Yazdanbod A.....	36
Yazdani S.....	49
Yazdanpanah K.....	62
Yousefi-Mashh M.....	79

**Z**

Zadhush A.....	45
Zahedi MJ.....	8,9, 50,55,71,85
Zahri S.....	36
Zali M.....	45
Zamani F.....	12,13,47,48,73,81,58
Zarhami T.....	78
Zeinali S.....	36
Zendedel A.....	8

### Author Index (Persian Abstracts)

الف	ادیبی پیمان.....	۷۵.۲۶.۲۴
اسماعیل زاده احمد.....	۷۵.۲۶.۲۴	
پ	پورشریفی حمید.....	۸۶
ح	حاجی شفیعی مریم.....	۷۵
حسن زاده عمار.....	۷۵.۲۶.۲۴	
حسینی نسب سید داوود.....	۸۶	
د	دشمن شکار مریم.....	۸۶
ز	زریباف فاطمه.....	۲۶.۲۴
ش	شکرانه فرهاد.....	۲۳
ص	صومی محمد حسین.....	۸۶.۲۳
ع	عبدالمهی محمد رضا.....	۲۳
عبدالهیان مجید.....	۱۳	
ف	فرهمند فاطمه.....	۷
فیضی آوات.....	۲۶.۲۴	
ق	قنادی کوروش.....	۱۳
قوجازاده مرتضی.....	۲۳	
ک	کاویانی مژگان.....	۱۳
م	کل نوری فائزه.....	۱۳
محمدزاده قره باغی محمد امین.....	۲۳	

## مجله گوارش در نمایه های زیر ایندکس می باشد:

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- IranMedex (Indexing Articles Published in Iran Biomedical Journals) (www.iranmedex.com)
- MagIran (Iranian Magazine Database)(www.magiran.com)

## راهنمای اشتراک

### فصلنامه علمی - پژوهشی «گوارش»

برای اشتراک مجله فرم را تکمیل نمایید (فتوکپی فرم قابل قبول است) و همراه با اصل فیش بانکی که به حساب جاری شماره ۷۵۱ بانک رفاه کارگران، شعبه بیماستان شریعتی (کد ۱۳۳) به نام آقای دکتر سید حسین میرمجلسی واریز شده است، به نشانی تهران، صندوق پستی ۱۶۳-۱۴۳۹۵ ارسال فرمایید.

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#### حق اشتراک سالانه

ریال ۲۰۰/۰۰۰

• داخل کشور:

• خارج کشور

ریال ۳۰۰/۰۰۰

کشورهای همجوار

ریال ۴۰۰/۰۰۰

اروپا

ریال ۵۰۰/۰۰۰

آمریکا، کانادا، استرالیا و ژاپن

#### درخواست اشتراک فصلنامه علمی-پژوهشی «گوارش»

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مبلغ پرداختی: ..... طی فیش شماره: .....

پرداخت شده در شعبه: ..... شماره های درخواست قبلی: .....

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# گوارش

نشریه علمی انجمن متخصصین گوارش و کبد ایران

دوره ۱۷، ویژه نامه، پاییز ۱۳۹۱ شماره پیاپی: ۸۰-۱ شاپا: ۷۱۸۶-۱۵۶۰ (چاپی)، ۷۵۶۸-۲۰۰۸ (آنلاین)، ۷۵۷۸-۲۰۰۸ (الکترونیک)

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