# **GOVARESH**<sub>Quarterly</sub>

Scientific Journal of the Iranian Association of Gastroenterology and Hepatology

pISSN: 1560-7186, oISSN: 2008-756x, eISSN: 2008-7578

# Vol. 15, Supplement, Autumn 2010, No. 72-1

# **Concessioner:**

Iranian Association of Gastroenterology and Hepatology

#### **Publisher:**

Iranian Association of Gastroenterology and Hepatology

# Editorial Board (In Alphabetic order)

Aghazadeh R, M.D., Professor, Gastroenterologist, Shahid Beheshti University of Medical Sciences Ebrahimi Daryani N, M.D., Professor, Gastroenterologist, Tehran University of Medical Sciences Emami NajafiDehkordi SMH, M.D., Associate Professor, Gastroenterologist, Isfahan University of Medical Sciences Malekzadeh R, M.D., Professor, Gastroenterologist, Tehran University of Medical Sciences Massarat S, M.D., Professor, Gastroenterologist, Tehran University of Medical Sciences Mikaeli J, M.D., Professor, Gastroenterologist, Tehran University of Medical Sciences NasiriToosi M, M.D., Associate Professor, Gastroenterologist, Tehran University of Medical Sciences

# **International Members of Editorial Board**

Adler G M.D. (Germany), Sobhani I M.D. (France), Keshavarzian A M.D. (USA), Schuppan D M.D. (USA)

# **Associate Editors**

Falahi GH, M.D., Mohammadnejad M, M.D., Montazeri GH, M.D., Pourshams A, M.D., Zendedel N, M.D.

# **Executive Editor**

Mir-Nasseri MM, M.D., MPH

#### Design & Layout

Ettehad F

#### **Office Staff**

Sayyad M, Valizadeh A

# **Address of Editorial Office**

Iranian Association of Gastroenterology and Hepatology, Unit 1, No. 13, Shahrivar Alley, Kargar-e-Shomali Ave., Tehran, Iran. Dr. Massarat S P. O. Box: 14395-163 Tehran, Iran. Telefax: +98 21 88 33 50 61-3

# **Scientific Editor**

Mohammadnejad M, M.D.

# **Persian Text Editors**

Sadjadieh AH, M.D., Namazi HR, M.D. Ansari E, M. D.

#### **English Text Editor**

Kim Vagharfard, M.S.

# **Publisher's Address**

Iranian Association of Gastroenterology and Hepatology, Unit 1, No. 13, Shahrivar Alley, Kargar-e-Shomali Ave., Tehran, Iran. Dr. Mirmadjlessi SH Telefax: +98 21 88 33 50 61-3 E-mail: info@iagh.org

This journal is sponsored by Iranian Association of Gastroenterology and Hepatology. Any reproduction or use of contents of articles of this journal is permitted only if the source is cited precisely. Web Site: www.iagh.org E-mail: govaresh@iagh.org

# Founder and Director:

Mirmadjlessi SH, M.D.

**Editor-in-Chief:** 

Massarrat S, M.D.

# In The name of God

# Abstract Submitted for Iranian Congress of Gastroenterology and Hepatology - ICGH 2010 9-12 November 2010

# Contents

# ICGH 2010 Committees

• Executive Committee	. 3
Scientific Committee	. 4
• Sponsor Societies	. 5
Abstracts Categories	. 6

Abstracts of the ICGH 2010	••••••	 	7-61

# **Organizing committees:**



**President, ICGH 2010** Reza Malekzadeh, MD Professor of Medicine and Gastroenterology Director, Digestive Disease Research Center, Tehran University of Medical Sciences



Secretary, ICGH 2010 Rasoul Sotoudehmanesh, MD Associated Professor of Medicine and Gastroenterology Gastroenterology Department Tehran University of Medical Sciences



Iranian Institute of Medicine

**President, Iranian Society of Gastroenterology and Hepatology** Seyed Hossein Mir-Madjlessi, MD Internist Gastroenterologist,



**Executive secretary, ICGH 2010** Seyed Mohammad Mehdi Mir- Nasseri,MD, MPH Research Fellow, Digestive Disease Research Center, Theran University of Medical Sciences

# **Executive Committee (Alphabetical):**

- Ansari E., MD
- Bohlouli S.
- Etehad F.
- Etehad H.
- Ganji A.
- Ghargozlou A.

- Letafatnejad M.
- Maroufi M.
- Mir-Nasseri MM., MD
- Mohsenifar F.
- Sayyad M.
- Valizadeh A.

# ICGH 2010 Committees

# Scientific Committee (Alphabetical):

Agah Shahram, MD Aghazadeh Rahim, MD Aghcheli Karim, MD Alavian Seyed Moayed, MD Alizadeh Amir Hooshang, MD Amini Mohsen, MD Ansari Reza, MD Azmi Mehrdad, MD Babaei Mehdi, MD Bagheri Lankarani Kamran, MD Bagheri Mohammad, MD Baharvand Hossein, MD Bakhshipour Alireza, MD Behnava Bita, MD Borhanmanesh Fathollah, MD Daghaghzadeh Hamed, MD Darvishmoghaddam Sodeif, MD Derakhshan Faramarz, MD Doghaei-moghaddam Masood, MD Dolatshahi Shahab, MD Douglas Mark, MD Ebrahimi Daryani Naser, MD Eghtesad Bijan, MD Ehsani Mohammad Javad, MD Emami Mohammad Hassan, MD Esmaeilzadeh Abbas, MD Fadaee Soheil, MD Faghihi Amir Hossein, MD Fallah Soltanali, MD Farahvash Mohammad Jafar, MD Forootan Hossein, MD Forootan Mojgan, MD Ganji Azita, MD George Jacob, MD Ghadimi Ramin, MD Ghadir Mohammad Reza, MD Ghamarchehreh Mohammadebrahim, MD Ghofrani Hadi, MD Haghazali Sepideh, MD Hajiani Eskandar, MD Hooshyar Afshin, MD Hosseini Seyed Vahid, MD Hugot Jean-Pierre, MD Iravani Masood, MD Iravani Shahrokh, MD Jabbari Hossein, MD Jalaei Khou Hassan, MD Jodeiri Behzad, MD Juergensen Christian, MD Kalani Mohammad, MD Kashifard Mehrdad, MD

Kaviani Mohammad Javad, MD Keshvari Maryam, MD Keyvani Hossein, MD Khatibian Morteza, MD Khorgami Jhamak, MD Khoshnia Masood, MD Maleki Iradi, MD Malekzadeh Reza, MD Mansoor-Ghanaei Fariborz, MD Massarrat Sadegh, MD Merat Shahin, MD Minakari Mohammad, MD Mirmajlesi Hossein, MD Mohammadnejad Mehdi, MD Mohebbi Seyed Reza, MD Montazeri Ghodratollah, MD Najafisani Mehri, MD Naseri-Moghadam Siavosh, MD Nassiri-Toosi Mohsen, MD Niknam Ramin, MD Nikshoar Mohammad Reza, MD Noorbakhsh Khosro, MD Noorinaier Babak, MD Nourozi Alireza, MD Pourshams Akram, MD Poustchi Hossein, MD Rahimian Ghorbanali, MD Saberifiroozi Mehdi, MD Sadatnia Hassan, MD Sadeghi Ali, MD Saeidi Reza, MD Salmanroghani Hassan, MD Shahbazkhani Bijan, MD Sheikhesmaeli Farshad, MD Shovakhi Ahmad, MD Sima Hamidreza, MD Somi Mohammad Hossein, MD Soroush Ahmad Reza, MD Sotoudeh Masood, MD Taheri Hassan, MD Talebipour Bahman, MD Tavakkoli Hamid, MD Tirgar Fakheri Hafez, MD Tozun Nurdan, MD Vahedi Homayoon, MD Vosooghinia Hassan, MD Zahedi Mohammad Javad, MD Zamani Farhad, MD Zandi Abdollah, MD Zojaji H omayoon, MD

▶ Pooyesh Darou Pharmaceutica







► Ferring Pharmaceutica





Aburaihan Pharmaceutica



► Arya Sun Co. (Fujinon) FILJINON FUJIFILM

**ARYA SUN** TEHRAN Co.

► Teb Dakheli Pishro Co. (Pentax)



► Jahan Behbood Co. (Janssen-Cilag)

Mesalazine

► Rossendarman Pharmaceutica (Tillotts)



► Mavaraye Fonoon Asr (Boston Scientific)



► Nikan Teb Sasan Co.



► Behestan Darou Co. (Solvay)



► ActoverCo



► Tehran Chemie Pharmaceutica



▶ Behestan Darou Co. (Scherring - Plough)



Govaresh\ Vol.15\ Supplement\ Autumn 2010

# Schedule of Abstracts Peresentation - ICGH 2010

Day 1: Wednesday, November 10/ Aban 19	
W-F-001 to W-F-035	
Day 2: Thursday, November 11/ Aban 20	
T-S-036 to T-S-070	
Day 3: Firday, November 12/ Aban 21	
F-T-071 to F-T-101	

# Abstract Categories

1- CLINICAL PRACTICE
1.1 Epidemiology
1.2 Management strategies
1.3 Evidence-based clinical practice
2- ESOPHAGEAL-GASTRIC AND DUODENAL DISORDERS
2.2 Dyspepsia
2.4 Reflux disease – pathogenesis
2.6 Reflux disease - treatment
2.8 Esophageal malignant diseas14-16
2.9 Other esophageal disorders
2.11 Acid peptic disease (includes NSAIDS - but NOT H.pylori)-
pathogenesis
2.13 Gastroduodenal malignancies19-22
3- H.PYLORI
3.3 Pathogenesis: host factors/histo-pathology23
3.4 Diagnosis
3.5 Management strategies24-25
4- INTESTINAL
4.1 Enterocyte biology/pathology and nutrient/water
transport/electrolyte transport
4.2 Coeliac disease/ malabsorption syndromes and
food enteropathies
5- IBD
5.1 Basic/pathogenesis/pathology28-29
5.2 Etiology/epidemiology
5.3 Genetics
5.4 Diagnosis and monitoring
5.5 Treatment
5.7 Management
6- COLONIC AND ANORECTAL DISORDERS
6.1 Malignant disease – pathogenesis
6.2 Malignant disease - diagnosis/histopathology
6.3 Malignant disease – management
6.4 Other colonic and anorectal disorders

# 7- LIVER

7.2 Nutrition - metabolism - pharmacology	37
7.3 Metabolic/genetic disorders	
7.5 Cirrhosis and complications: basic aspects	39
7.6 Cirrhosis and complications: clinical aspects	
7.7 Viral hepatitis: basic aspects	
7.8 Viral hepatitis B: clinical aspects	
7.9 Viral hepatitis C: clinical aspects	
7.12 Imaging - radiology (incl. interventional radiology) 4	47-48
7.13 Miscellaneous	
8- BILIARY	
8.3 Malignant hepato-biliary diseases	50
10- NUTRITION	
10.2 Nutrients and gut function	50-51
13- ONCOLOGY- BASIC	
13.1- Proliferation – carcinogenesis	51-52
13.2- Molecular biology/genetics/pathology	
14- ONCOLOGY- CLINICAL	
14.1- Malignant disease - epidemiology - screening prevention	
14.2- Diagnosis of malignant disease	56
15- NERVE GUT AND MOTILITY	
15.3- Upper GI motility	56
15.5- Functional gastrointestinal disorders (clinication)	al -
management)	57
16- ONCOLOGY-CLINICAL	
16.2 Diagnosis of malignant disease	
16.3 Gastrointestinal infections	58-59
19- ENDOSCOPY AND IMAGING	
19.1 Endoscopy - Upper GI	
19.4 Endoscopy - ERC	61

Category: 1.1 Epidemiology W-F-001

# Cloning and Expression of Helicobacter pylori Catalase for Vaccine Design

Hajieh Ghasemian safaei<sup>1</sup>, jamshid Faghri<sup>1</sup>, Hamid Tavakoli<sup>1</sup>, Sharareh Moghim<sup>1</sup>, Niloufar Rashidi<sup>1\*</sup>

<sup>1</sup>Microbiology department, Faculty of medicine, Isfahan university of medical sciences

*Introduction:* The H.Pylori infection has a high prevalence in developing countries .It causes gastritis, peptic ulcer and gastrocarcinoma. Catalase is highly conserved between Helicobacter species and is important for survival of the organism.

It is expressed in high level and is exposed on surface of bacteria; therefore it is a suitable antigen candidate for vaccine assays.

In this study, catalase enzyme of H. pylori, were selected to express for the vaccine design.

*Method:* The Catalase gene (1338 bp) of H. pylori 26695 was amplified by PCR, and were then cloned in pET-15b and transformed in E.coli DH5 $\alpha$ . Then expressed in E.coli BL21.

*Results:* The PCR product and pET-15b were digested by NdeI and BamHI enzymes. Then the Catalase gene was ligated (1338bp) in pET-15b(5708bp) and expressed in E.coli BL21 for purification

*Conclusion:* The Catalase cause the surviving of H.pylori in an environment, it is conserved and produced by H.pylori in high amounts.

So, by purifying it we can use it in studies related to vaccination against H.pylori.

It would be valuable for developing a new immuoprophylatic strategy against the H. pylori infection. Send Date: 2010/08/31

Category : 1.1 Epidemiology W-F-002

> بررسی یافته های کلینیکی و مشاهدات آندوسکوپیک در مسمومین با داروی موبر (Depilator) در بیمارستان لقمان حکیم

مجید آزادگان۱\*

بیمارستان لقمان حکیم، دانشگاه علوم پزشکی شهید بهشتی مقدمه : بلع داروی نظافت (واجبی) و اسید و قلیا (Corrosive Agents) می توانند موجب سوختگی شدید مری و معده و اثنی عشر شده و حتی در صورت زنده ماندن بیمار موجب عوارض جبران ناپذیری همچون تنگی مری و معده و ......گردد . معمولا آندوسکپی تشخیصی در این افراد توصیه می شود . هدف این مطالعه تعیین نقش پیش بینی کننده علایم بالینی و نوع و میزان ماده بلع شده و در عین

حال جنس و سن بیماران در تخمین شدت ضایعات مری و معدہ می باشد . روش کار : مطالعه بر روی ۷۷ بیمار که بطور عمدی از داروی نظافت استفاده کر ده و در بخش مسمومین بیمارستان لقمان بستری گردیدند انجام شد . علایم اولیه بیماران و سیر کلینیکی بیماران تا زمان انجام آندوسکیی ثبت گردید و یافته های آندوسکو پیک و نتایج و عوارض به شکل آینده نگر مورد ارزیابی و آنالیز قرار گرفتند. نتایج : از مجموع ۷۷ بیمار تعداد خانمها ۱۷ نفر و آقایان ۶۰ نفر و مرتالیته در بانوان ۲ مورد ( ۳۳/۳٪ ) و در آقایان ۴ مورد (۶۶/۷٪ ) بود . سن مرتالیته در ۳ مورد بیش از ۵۰ سالگی (۵۰٪ ) بود . میانگین سن افراد مسموم ۳۵ سال و مینیمم ۱۸ سال و ماکزیمم ۸۰ سال بود . اکثر مسمومیت ها بقصد خودکشی ۷۴ مورد (۹۶/۱٪ ) و ۲ مورد اتفاقی (۲/۶٪) بود . اکثر بیماران بیش از یک بسته از داروی نظافت را حل کرده و بین ساعت ۱۲ شب تا ۱۲ ظهر اقدام به خوردن نموده بودند . طبق آزمون دقيق فيشربين فاصله زمان مصرف تا زمان مراجعه ومرتاليته ارتباط معنى دارى وجود داشت. (P<٠/٠٠٠١) شايعترين يافته هاي كلينيكي دربيماراني كه با تهوع و استفراغ و دیسترس تنفسی مراجعه نموده بودند شامل سوختگی و زخم های ناحیه دهان و ادم و اریتم ته حلق بود واکثر بیماران از درد رتر واسترنال و ناحیه اپیگاستر شاکی و دچار دیسفاژی بودند . در معاینات بالینی علاوہ بر تب و تاکیکاردی در ۸ مورد ( ۱۰/۴٪ ) اسیدوز متابولیک دیده شد که با مرتالیتی ارتباط معنی داری داشت (P<+/++).

یافته های Upper Endoscopy در این بیماران : در ۲۸ مورد (۳۶/۴ ٪ ) ازوفاژیت G:1 و گاستریت G:2a . در ۲۰ مورد (۲۶٪ ) گاسترودودنیت G:2b و در ۲۰ مورد آندوسکپی نرمال بود. در ۱۰ مورد ازوفاژیت G:1 ، گاستریت G:2b، دودنیت G:2a تواماً دیده شد. بین نوع و میزان ماده مصرف شده و علایم اولیه بیماران با سوختگی GI و عوارض آن ارتباط و جود داشت (۲۰/۵).

نتیجه گیری: این مطالعه نشان می دهد که باید از استفاده داروی نظافت ( موبر ) که حاوی آرسنیک و زرنیخ می باشد در زندانها و اماکن عمومی تا حد امکان جلوگیری نموده و بامشاهده مسمومیت عمدی یا اتفاقی با این دارو هر چه سریعتر جهت اقدام تشخیصی از بیماران ازوفا گوگاسترودودنوسکپی به عمل آمده و در صورت لزوم مداخله جراحی صورت پذیرد.

صر فأعدم وجود علائم بالینی و پاراکلینیکی در بیماران در ساعات اولیه مراجعه نباید موجب ترخیص زودهنگام بیماران شود .

Send Date: 2010/09/03

# Category : 1.1 Epidemiology W-F-003

آیا آندوسکپی تشخیصی دستگاه گوارش فوقانی

در کلیه موارد بلع مواد سوزاننده در بالغین ضروری است؟ مجید آزادگان۱۰

بیمارستان لقمان حکیم، دانشگاه علوم پزشکی شهید بهشتی مقدمه : مواد سوزاننده (Caustic) شامل اسید و قلیا در دنیای صنعتی امروز که از این مواد جهت رفاه و آسایش جوامع بشری استفاده می شود و تماس روزمره با انواع آن در منازل اجتناب ناپذیر است موجب گردیده است که رشد روزافزون تعداد مسمومین با این مواد را شاهد باشیم . زمینه مطالعه ما بر روی بیمارانی است که یا به قصد Suicide یا سهواً با بلعیدن اسید و قلیا در منزل بلافاصله در بیمارستان لقمان حکیم بستری ودر کمترین زمان ممکنه تحت آندوسکپی قرار گرفته اند . هدف از این بررسی تعیین نقش آندوسکپی زود هنگام و تبیین اندیکاسیون های (UGI Endoscopy) با شدت علایم بالینی بیماران و میزان ماده شوینده و پاککننده بلع شده می باشد .

روش کار: در این مطالعه به بررسی و تحقیق بر روی بیماران مسموم با مواد شیمیایی اسید و باز شامل چنته و وایتکس و اسید باطری و... که از ۸۴/۱/۱ لغایت ۸۶/۱/۱ به بخش مسمومین مراجعه و از تعداد ۷۷ مورد بستری [ ۷۴ مورد (۹۶/۱) به علت خودکشی و ۲ مورد (۲/۶٪) اتفاقی و ۱ مورد ( ۳/۱٪) به علت نامعلوم ] با فاصله زمانی حد اقل ۶ ساعت و حداکثر ۱۵ ساعت پس از بلع ماده آندوسکپی تشخیصی اورژانس توسط نویسنده بعمل آمد و یافته های آندوسکو پیک و نتایج و عوارض به شکل آینده نگر مورد ارزیابی قرار گرفته اند .

**نتایج** : در معاینه بالینی از ۷۷ بیمار ، ۵۳ مورد (۶۶۸۸٪ ) ادم و اریتم مخاط اروفارنگس و ۲۲ مورد (۲۸/۶٪ ) علایمی دال بر ادم و اریتم ته حلق نداشته و در ۲ مورد (۲/۶٪) در بدو ورورد در پرونده نکته ای قید نشده بود .

یافته های آندوسکوپیک از ۷۷ بیمار : در ۲۸ مورد (۲۶/۴ ٪) آندوسکپی نرمال بود و در ۶ مورد (۲۸ ٪) ازو فاژیت G:A ( کلاسیفیکاسیون LA) داشتند و در ۸ مورد (۲۰/۴ ٪) گاستریت G:2a و در ۳ مورد (۲/۳ ٪) گاسترودودنیت G:2b و ۱۰ مورد (۲۱ ٪) ازوفا گوگاستریت G:2a و در ۱۰ مورد (۳۱ ٪) گاستریت G:2b و در ۲۱ مورد ازوفا گوگاسترودودنیت G:3a و در ۱۰ مورد (۳۱ ٪) گاستریت G:2b و در ۲۱ مورد و جهت کلیه بیماران با G: 2a به بالا مشاوره جراحی اورژانس انجام گردید که تعداد ۱۳ بیمار تحت لاپاراتومی قرار گرفتند . بین نوع و میزان ماده اسیدی یا قلیایی استفاده شده و علایم اولیه سوختگی Gi و عوارض آن ارتباط و جود داشت کاره علامت دار و بدون علامت و مرتالیتی ارتباط معنی داری دیده نشد .

رو یک نتیجه گیری: این مطالعه نشان داد که آندوسکپی تشخیصی در مسمومین با این مواد در فاصله زمانی ۶ تا ۱۵ ساعت پس از مصرف ماده سوزاننده جهت تخمین شدت ضایعات صرف نظر از وجود یا عدم و جود علائم بالینی و پاراکلینیکی ضروری است . جهت اقدام تشخیصی از بیماران ازوفاگوگاسترودودنوسکپی به عمل آمده و در صورت لزوم مداخله جراحی صورت پذیرد .

صر فاً عدم و جود علائم بالینی و پاراکلینیکی در بیماران در ساعات اولیه مراجعه نباید موجب ترخیص زودهنگام بیماران شود .

Send Date: 2010/09/03

Category : 1.1 Epidemiology W-F-004

# Clinical, Demographic, and Habit Characteristics of GERD Patients with and without Erosive Esophagitis

Hadi Razjouyan<sup>1</sup>, Mansooreh Mamarabadi<sup>1</sup>, Mehdi Nouraie<sup>2</sup>, Azadeh Mofid<sup>1</sup>, Masoud Sotoudeh<sup>1</sup>, Behnoush Abedi-Ardakani<sup>1</sup>, Mohammad-Hamed Ghotbi<sup>1</sup>, Shahnaz Tofangchiha<sup>1</sup>, Seyed Meysam

#### Alimohammadi<sup>1</sup>, Reza Malekzadeh<sup>1\*</sup>, Siavosh Nasseri-Moghaddam<sup>1</sup>

<sup>1</sup> Digestive Disease Research Center, Shariati Hospital, Tehran University of Medical Sciences

<sup>2</sup> Center for sickle cell disease, Howard University, Washington DC, WA, USA,

*Introduction:*Gastro-esophageal Reflux Disease (GERD) is a common, chronic, and relapsing disorder with increasing prevalence. GERD is classified as erosive (ERD) or non-erosive (NERD) according to endoscopic findings. We aimed to assess clinical, demographic, and habit differences between these two groups and assess risk factors for erosive esophagitis.

*Method:* Patients with clinical GERD underwent upper GI endoscopy. All had at least one of the following symptoms for at least 4 weeks over the past 3 months: acid regurgitation (AR), heartburn (HB), dysphagia (D), or non cardiac chest pain (NCCP). Minor symptoms were also sought. A composite symptom score (SS) was calculated for each, considering frequency and severity of the major and minor symptoms. Educational level (illiterate, elementary school, high school, and university degree), age, smoking, tea drinking, and symptom duration were asked. Helicobacter Pylori (HP) infection was sought by rapid urease test (RUT) histologic examination. Univariate and multivariable analyses were done when appropriate.

Results: Of the 700 cases (42% male, mean age: 39.2 yr), 374 (53%) had NERD. Mean age was similar between the 2 groups. Frequency of HB, AR, and D were not different between the 2 groups, however, NCCP (38.0% vs. 30.9%, p=0.05), epigastric pain (74.7% vs. 65.2%, p=0.008), and chronic interscapular pain (45.2% vs. 35.5, p=0.01) were more common among patients with NERD. Female gender, illiteracy, not smoking, absence of sliding hiatal hernia (SHH), HP positivity, no previous HP eradication, lower weight, and lower BMI were more prevalent among NERD patients (All P values < 0.05). Drinking tea was not different between the two groups. Although mean symptom duration was longer among patients with erosion but it did not reach statistical significance. No difference was found between the two groups regarding their symptom scores. Independent risk factors for erosive esophagitis were male gender (OR: 1.54, CI: 1.08-2.18, P=0.01), presence of sliding hiatal hernia (OR: 3.87, CI: 2.77-5.42, P < 0.001) and cigarette smoking (OR: 1.78, CI: 1.16-2.73, P: 0.008). Presence of HP protected against erosive esophagitis (OR: 0.61 CI: 0.44-0.85; P: 0.004).

*Conclusion:* In comparison to ERD patients, NERD subjects are more expected to be female, non smoker, have lower weight and BMI, less educated and less likely to have received HP eradication. Absence of sliding hiatal hernia and being infected with HP is more commonly seen with NERD patients. Male sex, presence of SHH, and cigarette smoking are independent risk factors for erosive esophagitis and presence of HP seems to be protective. Painful symptoms (NCCP, epigastric pain and chronic interscapular pain) were more common among NERD patients which may point to different pathophysiologic mechanisms for NERD. Send Date: 2010/09/06

Category : 1.1 Epidemiology W-F-005

# Demographic, Clinical Features and Treatment Outcomes in 700 Patients with Achalasia in Iran

Javad Mikaeili<sup>1\*</sup>, Abbas Hasanzadeh<sup>1</sup>,

Narges Mehrabi<sup>1</sup>, Elham Elahi<sup>1</sup>, Reza Malekzadeh<sup>1</sup> <sup>1</sup>DDRC, Tehran University of Medical Sciences

*Introduction:* Achalasia is the most recognized motor disorder of the esophagus . Because it is an uncommon disease, most studies have reviewed small numbers of patients .Here, we report demographic and clinical features besides treatment outcomes in 700 achalasic patients who were reffered and managed in our center from 1994-2009.

*Method:* In all patients the diagnosis was established based on clinical, radiological, endoscopic and manometric criteria. A questionnaire was fulfilled for each patient, that included patients age, sex, initial symptom, frequency of different symptoms, presence of positive family history for achalasia, other accompanying diseases and treatment outcomes.

**Results:** In our study men were affected more than women. (54.3% vs.45.7%). Mean age was about 38 years. Most frequent symptoms were: dysphagia to solids, dysphagia to liquids, active regurgitation, passive regurgitation, and weight loss respectively. Women complained of chest pain more than men (59% versus 47.1%, P value = 0.04). Vast majority of our patients were treated by pneumatic dilation (PD) of the LES and in long-term follow-up 67% of them were in responder group. Females responded better than males to PD.

*Conclusion:* Dysphagia to solids is the most common symptom in patients with achalasia. Chest pain was significantly higher among women. Pneumatic dilation is an effective treatment for achalasia with long-term efficacy in the majority of patients. Send Date: 2010/09/07

Category : 1.1 Epidemiology W-F-007

# Prevalence of Silent Celiac Disease in Iranian healthy school age children

Fatemeh Farahmand<sup>1</sup>, mohammad mehdi Mir-Naseri<sup>2\*</sup>, Vajiheh Modaresi Saryazdi<sup>1</sup>, F atemeh Yourdkhani<sup>1</sup>, Sayeh Ghotb<sup>1</sup>, Touran Shahraki<sup>3</sup>, Gholam Reza Khatami<sup>1</sup>

- <sup>1</sup> Pediatric unit of Digestive Disease Research Center, Tehran University of Medical Sciences
- <sup>2</sup>Digestive Disease Research Center, Tehran University of Medical Sciences
- <sup>3</sup>Pediatric gastroenterologist, Zahedan University of Medical Sciences

*Introduction:* Celiac disease (CD) is a chronic inflammatory disorder of the small intestine induced in genetically susceptible people by the irritant gluten and possibly other environmental cofactors, the disorders characterized by a diverse clinical heterogeneity that ranges from asymptomatic to severely symptomatic. However clinical features of Iranian children with CD are still unknown and there is scant information about atypical presentation of celiac disease (CD) from Iran. The aim of this study was to determine prevalence of silent CD in Iranian healthy children.

*Method:* In this cross-sectional study, 634 school age healthy children) were screened for CD by anti-tissue transglutaminase antibody ( tTG IgA). Diagnosis of CD was confirmed by duodenal biopsy that was scored according to the Marsh classification in cases that were positive for serum tTG antibody.

**Results:** A total of 634 children (314 (49.5%) male, 320 (50.5%) female) were studied. Routine investigations including questionnaire and initial physical examination had shown no specific condition any subject. Weight and IgA tTG antibodies were evaluated in this study group. These antibodies were measured by enzyme linked immunosorbent assay. Endoscopic duodenal biopsy was taken for patients with positive tTG test. The biopsy samples were scored according to the Marsh classification by an experienced pathologist. 3out of 634 patients had abnormal serum tTG titer. CD was diagnosed in these 3 subjects according to Marsh classification.(0.5%) The mean age of patients with CD was14/3 (range 12-17). The female to male ratio was 2/1

*Conclusion:* we concluded that the prevalence of silent celiac disease in children is high 0.5% (same to normal adult population in Iran 0.6%). Send Date: 2010/09/25

Category: 1.2 Management strategies W-F-008

Comparison of life style modification, Vitamin E, Metformin and Ursodeoxycholic acid (UDCA) in management of patients with Non Alcoholic fatty liver diseases (NAFLD)

Mohammad Hossein Antikchi<sup>1\*</sup>, Hassan Salmanroghani<sup>1</sup>, Mohammad Kazem Amirbeyki<sup>1</sup>, Mohssen Akhondi<sup>1</sup>, Asghar khoshnud<sup>1</sup>

<sup>1</sup>Shahid sadughi, Shahid sadughi

*Introduction:*Non Alcoholic Fatty liver Diseases (NAFLD) is related to metabolic syndrome. Asymptomatic patients with elevated aminotransferase level and in most cases of cryptogenic cirrhosis, NAFLD is considered as the most common causative factor. Life style modification can be used in management of patients with NAFLD. Present study was designed for comparison of life style modifications, vitamin E, Metformin and Ursodeoxycholic acid (UDCA) in management of NAFLD.

*Method:* In present randomized controlled trial 100 patients with NAFLD of gastrointestinal clinic or department of Shahid Sadoughi hospital or private office were included since May 2007. After primary clinical assessment, included patients randomly allocated to four separated group which received life style modification (A), Metformin (B), vitamin E (C) and UDCA (D). Patients were followed six months after begging the trial. Endpoint measurements including liver enzymes and weight of patients were measured every two months during six months follow up period.

**Results:** In the overall Mean of body weight, BMI, AST, ALT and ALK of included patients significantly decrease after intervention. Highest weight loss (3.9 Kg) was seen in group (A), highest decrease in mean of AST (27.3 U/L), ALT (42.7 U/L) and ALK (42.7 U/L) were seen in group B, C and D respectively **Conclusion:** Body weight reduction is as first treatment in patients with NAFLD. Drugs therapy such as Vitamin E, Metformin and UDCA can improve liver enzymes accompanying with weight reduction of body weight in patients with NAFLD in comparison without expensive drug such as UDAC must be used as first modality choice Send Date: 2010/08/16

Category : 1.2 Management strategies W-F-009

# بررسی نتایج حاصل از شروع پنتوپرازول وریدی قبل از آندوسکپی نزد بیماران مبتلا به خونریزی حاد غیرواریسی از دستگاه گوارش فوقانی مجید آزادگان۱۹

بیمارستان لقمان حکیم، دانشگاه علوم پزشکی شهید بهشتی مقدمه : آندوسکپی تشخیصی و نیاز کمتر خونریزی های حاد از دستگاه گوارش فوقانی در هر سنی نیاز به تشخیص سریع و درمان به موقع دارند . با توجه به پیشرفت تکنولوژی امروزه از آندوسکپی تشخیصی و همزمان درمانی ( Therapeutic ) نه تنها میتوان در تشخیص ضایعات خونریزی دهنده بلکه در امر درمان و کنترل محل خونریزی نیز کمک گرفت و لذا از انجام جراحی های بی مورد اجتناب نمود . هدف از این مطالعه بررسی تاثیر انفوزیون وریدی پنتو پرازول بر ترمیم ضایعات و کنترل خونریزی قبل از انجام بیماران به آندوسکپی درمانی (تزریق در محل ضایعه ) می باشد .

روش کار : درطی این مطالعه که یکسال بطول انجامید بیمارانی که تاقبل از انجام آندوسکپی ، پنتو پرازول 80 mg/ IV/Bolus و سپس mg ۸ در ساعت گرفته بودند با گروهی که درمان اختصاصی با PPI نشده بودند مقایسه گردیده و شدت خونریزی و عود مجدد خونریزی از اولسر (Rebleeding) و نیاز به جراحی و طول اقامت در بیمارستان در آنها با هم مقایسه گردید.

#### نتايج:

از مجموع ۳۳۰ بیمار، صرف نظر از سن و جنس که با تابلوی هماتمز ماسیوبستری گردیدند، ۱۱۰ نفر پنتوپرازول وریدی قبل از آندوسکپی و به ۲۲۰ نفر از بیماران H2 بلوکرداده شد و صبح روز بعد تحت آندوسکپی قرار گرفتند. بیمارانی که پنتوپرازول وریدی گرفته بودند به طور چشم گیری پیش آگهی بیماری در آنها بهتر بود ( ۲۵٪ در مقابل ۱۳٪ ه۰۰/۰۰۹)

شانسRebleeding ، اقدام به جراحی ، مرتالیتی و طول اقامت در بیمار ستان نیز در گروه PPI کمتر بود .

#### نتیجه گیری:

استفاده از پنتوپرازول وریدی قبل از آندوسکپی اگر چه هزینه بالایی برای بیمار در بردارد اما در کنترل محل خونریزی از اولسر و نیاز کمتر به آندوسکپی درمانی(Hr ) موثرتر از Hیلوکرهامی باشد . Send Date: 2010/09/03

# Category : 1.2 Management strategies W-F-010

# Common Gastrointestinal And Liver Diseases (GI & LD) Hospitalized In GI Ward Of Shariati Hospital During 2000 - 2010 Shifteh Abedian<sup>1\*</sup>, Mehdi Saberfiroozi<sup>1</sup>,

Reza Malekzadeh<sup>1</sup>

#### <sup>1</sup> DDRC, TUMS

*Introduction:* Gastrointestinal and Liver Diseases (GILD) are a major cause of referral to public and private health system. GI cancers comprise 40 percent of the all cancers in Iran. The prevalence of GI cancers, GERD, and IBD has increased during the last decade. In order to define a picture regarding the most common gastrointestinal and liver disease which needs admission in hospital, we reviewed the discharge notes of all patients whom been admitted in a period of 10 years. We choose the Shariati's hospital because it is one of three major referral center the Tehran the capital of Islamic Republic of Iran.

Method: In this study we reviewed the patient's discharge notes of all patients who have been admitted in gastroenterology ward of Shariati's hospital between 2000 and 2010. The data of age, gender, hospital stay days, the patient's outcome defined as discharge, death and discharge by release sheet. the diagnosis defined according to International Classification of Disease (ICD-10). The data were entered in the SPSS software and analyzed. *Results:* The discharge notes of 5898 patients [Male: 3813(64.7%)-Female: 2082(35.3%)] were reviewed. The age of hospitalized patients was 10 to 95 years old. The most prevalence range of age was 61-70y [1129 patients(19.14%)] and then 51-60y [1089 patients(18.46%)]. The first 5 leading Gastrointestinal causes of hospitalization in GI ward of this referral hospital were: Chronic liver diseases[1600p (27.14%)], Peptic ulcer diseases[1000p (16.96%)], GI cancers[955p (16.20%)],Hepatobiliary diseases[650p (11.20%)], and inflammatory bowel disease [275p (4.66%)].The most Gastrointestinal causes of death in this study was GI cancers followed by Cirrhosis of liver. The patient's outcome was [discharge: 5558 (94.23%)-death: 225(3.81%)-discharge by release sheet: 115(1.94%)].

*Conclusion:* GI cancers along with Chronic liver diseases constitute the main GI and Liver etiology for hospitalization and death in our country. Appropriate strategies for the education of health care providers and management of these diseases should be considered for lowering their burden in the community. Send Date: 2010/09/29

Category : 1.2 Management strategies W-F-011

# Etiology Of Chronic Liver Diseases In Hospitalized Patients In Shariati Hospital During A Ten Years Period (2000-2010) Shifteh Abedian<sup>1\*</sup>, Mehdi Saberifiroozi<sup>1</sup>, Reza Malekzadeh<sup>1</sup>

### <sup>1</sup>DDRC, TUMS

*Introduction:* Chronic liver diseases, especially liver cirrhosis and its complications are a major cause of mortality and morbidity in our country. Most of these patients need liver transplantation as the definitive treatment. The aim of this study was to evaluate the etiology in the patients who have been hospitalized in a large referral center during a 10 years period.

*Method:* In this study we reviewed the patient's discharge notes of chronic liver disease patients who have been admitted in gastroenterology ward of Shariati's hospital between 2000 and 2010. The data of age, gender, etiology of chronic liver diseases defined according to International Classification of Disease (ICD-10) were retrieved and analyzed by the SPSS software.

**Results:** The discharge notes of 5898 patients [Male: 3813 (64.7%)-Female: 2082(35.3%)] were reviewed. Among them 1902 (32%) patients [Male: 1322 (69.51%)-Female: 580(30.49%)] diagnosed as chronic liver disease. Of 1902 patients with liver disease 1372 (72.1%) patients diagnosed as Liver cirrhosis. The most common causes of liver cirrhosis were: 1.Chronic Viral Hepatitis B, 2.Autoimmune Hepatitis, 3.Primary Biliary Cirrhosis, 4.Chronic Viral Hepatitis C, 5. Wilson's disease, 7.Budd-Chiari Syndrome, 8.Alcoholic Liver Disease. The most Abstracts of Iranian Congress of Gastroenterology and Hepatology- 2010

prevalence of complications of patients with cirrhosis which resulted to hospitalization were hepatic encephalopathy: 325 (23.68%), variceal bleeding: 202 (14.72%) and Spontaneous Bacterial Peritonitis: 171 (12.46%).

*Conclusion:* Chronic liver diseases constitute the main GI and Liver etiology for hospitalization and death in our gastroenterology wards. Hepatic encephalopathy is the most common complication needs hospitalization in patients with liver cirrhosis. Send Date: 2010/10/01

Category : 1.4 Outcome studies W-F-012

> Significant Sampling Error in Histopathology Findings of Nonalcoholic Fatty Liver Disease:

A Post Mortem Liver Histology Study Shahin Merat<sup>1</sup>, Rasoul Sotoudehmanesh<sup>1</sup>, Mehdi Nouraie<sup>1</sup>, Masoumeh Peikan-Heirati<sup>1</sup>, Sadaf Ghajarieh-Sepanlou<sup>1</sup>, Reza Malekzadeh<sup>1\*</sup>, Masoud Sotoudeh<sup>1</sup>

<sup>1</sup> Digestive Disease Research Center, Shariati Hospital, Tehran University of Medical Sciences

*Introduction:* Many clinical trials and natural history studies on nonalcoholic fatty liver disease (NAFLD) and nonalcoholic steatohepatitis (NASH) rely heavily on liver histology to define their endpoints. But the reliability of liver biopsies in providing an accurate estimation of the whole liver is in doubt. There are many indications that the liver is not uniformly involved in NAFLD thus sampling error is a major concern. We studied the agreement of histology findings from three different parts of the same liver in subjects with NAFLD

*Method:* Samples from a forensic autopsy series were studied and subjects with NAFLD were identified. Specimens were taken from three different parts of each liver. Degree of steatosis, hepatocyte ballooning, lobular inflammation, portal inflammation, and fibrosis was recorded. A NASH activity index (NAI) was also calculated. The agreement between the three samples from each liver was studied using the multi-rater kappa and intra-class correlation (ICC).

*Results:*438 samples from 146 livers were studied. Fibrosis (ICC=0.87), lobular inflammation (kappa=0.83), and portal inflammation (kappa=0.83) were fairly uniformly distributed in the damaged liver. Steatosis was less uniform (kappa=0.64), and hepatocyte ballooning was least uniformly distributed (kappa=0.57). The ICC for NAI was 0.86 indicating good agreement.

*Conclusion:* There is considerable sampling error in individual histologic features of NAFLD and NASH. A summary score such as NAI is less affected by sampling error. The most inconsistent variable is hepatocyte ballooning and in spite of its importance in the diagnosis of NASH a scoring system excluding this variable might be better suited for following progress of disease.

Send Date: 2010/09/06

Category : 2.2 Dyspepsia W-F-013

# Relation between serum leptin levels and helicobacter pylori infection in patients with dyspepsia

Nafiseh Abdolahi<sup>1\*</sup>, Farhad Zamani<sup>1</sup>,

Gholamreza Roshandel<sup>2</sup>, Hosein Agdarkosh<sup>1</sup>, Mitra Ameli<sup>1</sup>, AbolReza Fazel<sup>3</sup>

<sup>1</sup> Gastrointestinal and Liver Disease Research Center, Firouzgar Hospital, Iran University of Medical Sciences.

<sup>2</sup> Golestan Research Center of Gastroenterology and Hepatology. Golestan University of Medical Sciences

<sup>3</sup> Sina Hospital, Tehran University of Medical Sciences, Tehran University of Medical Sciences

*Introduction:* Relationship between leptin and some gastrointestinal (GI) diseases have been approved during recent years. This study was conducted to assess the relationship between serum leptin level and Helicobacter pylori (HP) infection in patients with dyspepsia.

*Method:* The study population included patients with dyspepsia that fulfilled the ROM II criteria and did not have pathologic findings in endoscopy. After recording demographic data, a biopsy of the stomach was taken for HP assessment and blood sample was drown for leptin measurement. Serum leptin was measured by ELISA method.

**Results:** Totally, 153 patiens were recruited. Mean age of participants was 43.12 years. There was a significant positive relationship between serum leptin level and age (P=0.03). The mean of serum leptin was higher in females than males (0.03). The results of

univariate and multivariate analysis showed that serum leptin level was significantly lower in HP positive than HP negative patients (P < 0.001).

*Conclusion:* Our findings were in line with some previous ones suggesting that HP infection may reduce serum leptin level. Reducing body fat mass our releasing cytokines due to gastric epithelium injures are possible explanations of this effect. Determination of the exact relationship between these variables in future studies may reveal newer aspects of their roles in physiology and pathogenesis of GI diseases.

Send Date: 2010/09/27

Category: 2.4 Reflux disease - pathogenesis W-F-014

# Evaluation of ABO and Rh blood group in patients with gastro esophageal reflux disease and comparing with distribution of West Azarbaijan blood groups in IRAN

Masoud Sadreddini<sup>1\*</sup>, Yoosef Rasmi<sup>2</sup>, Tooraj Maleki<sup>3</sup> <sup>1</sup>Internal department, Urmia university of medical sciences <sup>2</sup> Biochemical department, Urmia university of medical sciences

<sup>3</sup>General practitioner, Urmia university of medical sciences *Introduction:* GRED is a one of the most common digestive system disorders. Community surveys show the 15% of heart burn or regurgitation weekly and 7% of daily symptoms in people. The symptoms occur due to the acid and other stomach contents reflux to esophagus. This is due to the stomach-esophagus barriers (cardiac valve) insufficiency. Some factors relevant to the stomach-esophagus reflux such as age, sex, smoking habits, alcohol abuse, pregnancy, drugs interactions have been studied. One of the factors that ignored or less studied are the blood groups and there is no considerable information about this factor in the text books and scientific databases.

*Method:* Patients that attended Urmia Imam University hospital digestive clinic after verifying the reflux enrolled in study and with determining the risk factors referred to the laboratory for specifying the ABO blood group and Rh factor. Specified blood groups and Rh's aggregated into the study standard checklist. Collected data from the blood groups, Rh, age, sex, smoking habits convert to the numerical codes and then import in the SPSS statistical analysis software.

*Results:* In this paper 175 patients, 92 male (52.6%) and 83 female (47.4%) with mean age 39.14 with gastro

esophageal reflux have been studied. 72 patients (41.1%) was A+, 2 (1.1%) patients were A-, 27 (15.4%) were B+, 3 (1.7%) were B-, 12 (6.9%) patients were AB+, 1 patient (0.6%) was AB with negative Rh and 49 patients (28%) were O+ and 9 patients (5.1%) were O- blood group. *Conclusion:* According to the attained results, there are

a high frequency of reflux in patients with A blood group with positive Rh. Analysis of the enrolled patients' blood group and the normal people blood indices in West Azerbaijan using the CHI-SQUARE statistical method, shows no significant difference between the patients with reflux disease and normal people(P=0.20). Send Date: 2010/06/30

Category 2.6 Reflux disease – treatment W-F-015

# Survey of post cradiomyotomy outcome after heller technique surgery for achalasia in Razi and

# Aria hospital in Rasht during years1376-1385

manouchehr aghajanzadeh<sup>1</sup>, keyvan Aminian<sup>1\*</sup>, Farahnaz Joukar<sup>1</sup>, Mmohammad masoud Niaragh<sup>1</sup>

<sup>1</sup>gastrointestinal and liver diseases research center of guilan, guilan university of medical sciences

*Introduction:* Achalasia is a disease of esophagus movement.dysphagia,chest pain and regurgitation is major symptoms.standard treatment of achalasia is heller myotomy. Objective: the aim of this study was to Survey of post cradiomyotomy outcome after heller technique surgery for achalasia in Razi and Aria hospital in Rasht during years1375-1387

*Method:* our study was retrospective study. papulations of our study were the all patients with achalasia in Razi and Aria hospitals that candidated for heller myotomy. The data including age ,gender ,primary symptoms ,surgery complications, funduplication, symptoms relief after surgery and surgery type obtained from patients history.and finally with spss16 analysed.

*Results:* from 35 patients,19 patients were men and 16 patients were women from 16-68years old.Diagnosis was upon barium esophagogram and endoscopy.

in 15 patients ballon performed and in 1 patient botox was used.Esophagial dillatation was 4/5-8/5cm.Surgery in 18 patients was laparatomy and in 17 patients was thoracotomy.Fundoplication in 28 patients was performed.In men patients complication was 1 performation,4 reflux,1 dysphagy.In women surgery complications was 2 perforation and 2 reflux. Reflux alter surgery had seen in 6 patients that in 5 cases fundaplication was not performed, and in 1 case complication was performed. In laparatomy surgery complications was include : 0 perforation, 5 reflux,1 dysphagia. Complication in thoracotomy surgery was include: 3 perforation,1 reflux.In laparatomy surgery in 17 patients, symptoms completely relief and in one case dysphagy remained. in thoracotomy surgery in 14 patients symptoms completely reliefed and in 2 cases dysphagy and in 1 case regurgitation remained. Quality of life in all patients was desirable. Conclusion: dysphagia and regurgitation was the most primary symptoms. The most frequent complication after surgery was reflux. dysphagia after fundaplication was higher. Reflux after fundoplication falling down.perforation in thoracotomy and reflux in laparatomy was main complication. Send Date: 2010/08/22

Send Date: 2010/00/22

Category : 2.6 Reflux disease – treatment W-F-016

# The Association Between Chronic Otitis Media And Gastro-Esophageal Reflux Disease

Alireza Karimi Yazdi<sup>1</sup>, Ardavan Tajdini<sup>2</sup>, Reza Malekzadeh <sup>3\*</sup>, Siavosh Nasseri-Moghadam<sup>4</sup>, Parastoo Biazar<sup>2</sup>, Mandana Amiri<sup>2</sup>

<sup>1</sup> Imam Khomeini Medical Complex, Tehran University of medical sciences

<sup>2</sup> Tehran University of medical sciences, Tehran University of medical sciences

<sup>3</sup> Digestive Disease Research Center, Shariati Hospital, Tehran University of Medical Sciences

<sup>4</sup> Digestive Disease Research Cente,rShariati Hospital, Tehran University of Medical Sciences

*Introduction:* This study has been designed to investigate the clinical association between gastro esophageal reflux disease (GERD) and chronic otitis media (COM) in adults and also the role of GERD treatment on the outcome of COM surgery

*Method:* In a clinical trial, patients with COM who were candidates for surgery were evaluated and put in one of two groups; GERD positive (case) and GERD negative (control) patients. Further, the GERD positive patients were randomly assigned to either receive or not receive Omeprazole prior to surgery. The outcome was compared 3 months and 6 months

after COM surgery.

Results: Fifty-eight patients (26 males) were enrolled. Forty-two (72.4%) had GERD. Three months after surgery recovery in GERD negative patients, was significantly higher (16/16, 100 %) than GERD positive patients 28 of 42, 66.7%) (P=0.008). Six months follow up of the GERD negative patients showed significantly higher recovery (16/16, 100%)than GERD positive patients (29 of 40, 72.5%) (P=0.002). In comparison, 8 of 18 (44.4%) GERD positive patients who did not receive Omeprazole before tympanomastoidectomy recovered after three months whereas, 20 of 24 (83.3%) patients who received Omeprazole recovered during this time (P<0.001). Six months follow up showed recovery of 8 of 18 (44.4%) cases without GERD treatment and 21 of 22 (95.5 %) who received the treatment (P value < 0.01). Conclusion: Our data show that presence of GERD significantly affects outcome of tympanomastoidectomy in COM patients. In addition, treating GERD before COM surgery can positively affect the outcomes of tympanomastoidectomy in these patients. Therefore, we suggest that GERD be sought in all patients who are planned to undergo tympanomastoidectomy for COM, and if present be treated prior to surgery. Further larger scale studies are warranted. Send Date: 2010/09/06

Category : 2.8 Esophageal malignant disease W-F-017

Mutations In Fanconi Anemia Genes And The Risk Of Esophageal Cancer Mohammad Reza Akbari<sup>1</sup>, Reza Malekzadeh<sup>2\*</sup>,

Pierre Lepage<sup>3</sup>, David Roquis<sup>3</sup>, Ramin Shakeri<sup>4</sup>,

Ali Reza Sadjadi<sup>4</sup>, Jafar Bashiri<sup>4</sup>, Masoud Sotoudeh<sup>4</sup>, Parviz Ghadirian<sup>5</sup>, Narod SA<sup>6</sup>

<sup>1</sup>Digestive Disease Research Center, Women's College Research Institute, Tehran University of Medical Sciences, Tehran, University of Toronto

<sup>2</sup> Digestive Disease Research Center, Tehran University of Medical Sciences

<sup>3</sup> Genome Quebec Innovation Centre, McGill University, Montreal, Canada

<sup>4</sup> Digestive Disease Research Center, Tehran University of Medical Sciences

<sup>5</sup> Epidemiology Research Unit Research Centre, CHUM-Hôtel-Dieu, University of Montreal, Montreal, Canada

<sup>6</sup> Women's College Research Institute, University of

#### Toronto, Toronto, Canada

*Introduction:* The incidence of esophageal squamous cell carcinoma (ESCC) is very high in northeastern Iran. Previously, we reported a strong familial component of ESCC among Turkmens, who constitute approximately one-half of the population of this region. We hypothesized that the genes for Fanconi anemia may be candidate genes for ESCC

*Method:* We sequenced the entire coding regions of 12 Fanconi anemia genes in the germline DNA of 190 Turkmen ESCC cases

Results: We identified three heterozygote insertion/deletions; one in FANCD2 (p.Val1233del), one in FANCE (p.Val311SerfsX2) and one in FANCL (p.Thr367AsnfsX13). All three patients had a strong family history of ESCC. None of 811 Turkmen controls carried any of these three insertion/deletions. In addition, we found four homozygote carriers of the deleterious FANCA p.858Ser>Arg mutation in 746 ESCC patients, but in none of 1373 matched controls (P = 0.01). The p.3326Lys>X mutation in BRCA2 (Fanconi anemia gene FANCD1) was present in 27 of 746 ESCC cases and 16 of 1373 controls (OR=3.38; 95% CI: 1.97 - 6.91; P=0.0002).

*Conclusion:* In summary, both heterozygote and homozygote mutations in a number of Fanconi anemia genes are associated with an increased risk of ESCC.

Send Date: 2010/09/06

Category: 2.8 Esophageal malignant disease W-F-018

# Esophageal Cancer Risk Among Immigrants In Sweden

Seyed Mohsen Mousavi<sup>1\*</sup>, Andreas Brant<sup>1</sup>, Jan Sundquist<sup>2</sup>, Kari Hemminki<sup>1</sup>

<sup>1</sup>Division of Molecular Genetic Epidemiology, German Cancer Research Center (DKFZ), Heidelberg, Germany

<sup>2</sup> Centers for Primary Care Research, Lund University, Malmö, Sweden

*Introduction:* The incidence of esophageal adenocarcinoma has increased among the white Americans and some Europeans, while the rate of squamous-cell carcinoma in high-risk populations, such as Asians, Africans, Latin and black Americans, appears to decrease. We wanted to define the risk of esophageal cancer by histology and length of stay

among immigrants in Sweden.

*Method:* The nationwide Swedish Family-Cancer Database (2010 version) was used to calculate standardized incidence ratios (SIRs) for esophageal cancer among the first-generation immigrants compared to the native Swedes. SIRs for lung cancer were also calculated as a proxy for smoking prevalence. The patient series covered 5930 male and 1998 female Swedes, and 410 and 198 immigrants.

**Results:** The risk of esophageal cancer was significantly increased in female Finns (SIR=1.66), Britons (3.73) and Southeast Africans (5.26), while Baltic (0.44), former Yugoslavian (0.47), other European (0.58) and other Asian (0.52) men showed a decreased risk. The risk of squamous-cell carcinoma was increased among Finnish (men=1.32, women=1.90) and Iranian women (3.80), while Danish men (1.66) had an increased risk for adenocarcinoma. No trend was observed for the risks in immigrants according to the length of stay. We found no co-variation between the birth regions specific SIRs for squamous-cell carcinoma and lung cancer except for Finnish men.

*Conclusion:* Early-childhood exposures or preservation of original habits (smoking, alcohol and nutritional deficiencies) might be the main environmental exposures influencing squamous-cell carcinoma risks in some immigrants. The higher risk of adenocarcinoma among Danish men may confirm the role of obesity on adenocarcinoma risk.

Send Date: 2010/08/10

Category : 2.8 Esophageal malignant disease W-F-019

# Epidermal Growth Factor Receptor (EGFR) Mutations And Expression In Squamous Cell Carcinoma Of The Esophagus

Behnoush Abedi-Ardekani<sup>1</sup>, Nazir Ahmad Dar<sup>2</sup>,

Mohammad Muzaffar Mir<sup>3</sup>, Showkat Ahmad Zargar<sup>4</sup>, M. Muqbool Lone<sup>5</sup>, Ghislaine Martel-Planche<sup>2</sup>,

Mounia Mounawar<sup>2</sup>, Stéphanie Villar<sup>2</sup>,

Reza Malekzadeh<sup>1\*</sup>, Farrokh Saidi<sup>1</sup>, Pierre Hainaut<sup>2</sup> <sup>1</sup> Digestive Disease Research Center, Shariati Hospital, Tehran University of Medical Sciences, Tehran Iran <sup>2</sup> International Agency for Research on Cancer, Lyon, France, International Agency for Research on Cancer, Lyon, France

<sup>3</sup> Clinical Biochemistry, Clinical Biochemistry

<sup>4</sup> Gastroenteriology, Gastroenteriology

<sup>5</sup> Radiation Oncology, SK-Institute of Medical Sciences, Soura Srinagar, JK, India,

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

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

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

*Conclusion:* The study suggests that ESCC patients with EGFR mutations may benefit from EGFR-targeted therapies Send Date: 2010/09/07

Category : 2.8 Esophageal malignant disease W-F-020

# Hospital Or Neighborhood Control: Which One Could Have More Influence On The Assessment Of Esophageal Cancer Risk Factors?

Ramin Shakeri<sup>1</sup>, Farin Kamangar<sup>1</sup>, Reza Malekzadeh<sup>1\*</sup>, Dariush Nasrollahzadeh<sup>1</sup>, Hooman Khademi<sup>1</sup>,

Farhad Islami<sup>1</sup>, Mehdi Nouraie<sup>1</sup>, Hajiamin Marjani<sup>1</sup>, Saman Fahimi<sup>1</sup>, Alireza Sepehr<sup>1</sup>, Christian Abnet<sup>2</sup>, Sanford Dawsey<sup>3</sup>, Paolo boffetta<sup>4</sup>, Reza Majdzadeh<sup>5</sup>

<sup>1</sup>Digestive Disease Research center, Shariati Hospital, Tehran University of Medical Sciences Tehran, Iran <sup>2</sup> Division of Cancer Epidemiology and Genetics, National

Cancer Institute, Bethesda, MD, USA. <sup>3</sup> Division of Cancer Epidemiology and Genetics, National Cancer Institute, Bethesda, MD, USA

<sup>4</sup> Internation Prevention Research Institute, Lyon, France

<sup>5</sup> School of Public health Tehran University of Medical sciences

*Introduction:* Case-Control studies are commonly used in studying less common cancers. While case definition is usually straightforward, appropriate control selection can be difficult. The aim of our study was to compare the results of using Hospital or Neighborhood control groups.

Method: We compared the results of two different

case-control studies of esophageal squamous cell carcinoma (ESCC) conducted in the same region by a single research group for several known or suspected risk factors. Case definition and enrollment was the same, but control selection differed. For the first, we selected two age- and sex-matched controls from inpatient subjects in hospitals, while for the second we selected two age- and sex-matched controls from each subject's neighborhood of residence. We used the test of heterogeneity to compare the results of the two studies.

**Results:** We found no significant differences in exposure data for tobacco-related variables such as cigarette smoking, chewing nass and hookah usage, but the frequency of opium usage was significantly different between hospital and neighborhood controls. Consequently, the inference drawn for the association between ESCC and tobacco use did not differ between studies, but it did for opium use. Comparing the prevalence of opium consumption in the two control groups and a cohort enrolled from the same geographic area suggested that the neighborhood controls were more representative of the study base population for this exposure.

*Conclusion:* In our two studies, we found that hospital and neighborhood controls did not lead us to the same conclusions for a major hypothesized risk factor for ESCC in this population. Our results show that control group selection is critical in drawing appropriate conclusions in observational studies. Send Date: 2010/09/08

Category : 2.8 Esophageal malignant disease W-F-021

# Helicobacter Pylori As A Protective Factor For Esophageal Squamous Cell Carcinoma

Massod Sadradini<sup>1</sup>, Ezat Rahimi<sup>2\*</sup>

<sup>1</sup> Urmia university of Medicine, Urmia

<sup>2</sup> Kurdistan Digestive Research center, Kurdistan

*Introduction:* A wide variety of epidemiological studies suggest the increase in incidence of esophageal adenocarcinoma which, in turn, might be related to decrease in Helicobacter pylori prevalence. The aim of this study was therefore to evaluate relationship between H.pylori and esophageal squamous-cell carcinoma.

Method: In this case-control study 161 patients with

pathologically proven esophageal squamous-cell carcinoma were enrolled. Subjects were cancer cases, pathologically proven to have esophageal squamous-cell carcinoma, in medical centres in Urmia in the west of Iran during a 30-month period in 2006-2007. Control cases (168 patients) were selected from the patients who was admitted to the ophthalmology department and were matched for sex, age and history of smoking H. pylori seropositivity was determined by ELISA, using Trinity Biptech capitato measuring IgG. Data were analyzed using Chi square and Mantel Hanzel tests.

**Results:** The mean age of patients with esophageal cancer was 61.8)SD=13.4 (years. 68)42.2 percent) of patients were male and 93 (57.8 percent) were female. In 31 (19.2 percent) cases tumor ware located in the upper, 73 )45.3 percent) cases in middle and in remaining 57 (35.4 percent) cases in the lower portion of the esophagus. A total of 69 (42.8 percent) and 105 (62.5 percent) out of 161 cases and 168 controls, respectively, had positive H. pylori infection. Subjects with positive H. pylori infections had a significantly reduced risk) OR= 0.45; 95% CI=0.28-0.72; P= 0.0001 (of developing esophageal SCC than those without SCC.

*Conclusion:* Our findings suggest that H. pylori infection may have protective role against development of esophageal SCC in our area. Additional studies are needed to confirm these findings.

Send Date: 2010/09/25

Category: 2.9 Other esophageal disorders W-F-022

# A Study Of Patient's Condition With Corrosive Ingestion Admitted To Hospitals In Rasht

Morteza Rahbar Taromsari<sup>1</sup>, Alireza Badsar<sup>1</sup>, Keyvan Aminian<sup>1\*</sup>, Farahnaz Joukar<sup>1</sup>, Habib Allah Abiar<sup>1</sup>

<sup>1</sup> gastrointestinal and liver diseases research center of guilan, guilan university of medical sciences

*Introduction:* Caustic products are responsible for the most serious cases of poisoning which result in destructive and progressive damage to esophagus and stomach. This research was done with the purpose of studying demographical, clinical and Endoscopic findings of ingesting these agents.

*Method:* In a retrospective survey, all files of the patients who during the 2002-2009 period due to the ingestion of caustic agents had been admitted to Razi Hospital and 17th Shahrivar pediatric hospital in

Rasht and had done Endoscopy in the first 24 hours after ingestion were studied. Then, obtained information including their age, sex, locality, type of manifestations and Endoscopic findings were analyzed by spss(ver. 11.5) software.

**Results:** Among 258 patients who were studied in Razi Hospital, 174 (67.4%) were female and 84(32.6%) were male with average age being 29.33 year ranging from 14 to 75 years old. 127 patients (61.1%) had intentional and 81 patients (38.9%) had accidental ingestion. Of all the patients, 50 patient is missed and 208 patients were studied that 175 of them were hospitalized for 2 days and 33 patients had more than 3 days of hospitalization which gave an average of 1.73 days for hospitalization. Among 45 patients who were studied in 17th Shahrivar hospital, 21 (46.7%) were male and 24 (53.3%) female. All the patients had accidental ingestion with average age being 2.96 years ranging from 2 months to 9 years old. The most frequent damaged location in adults was esophagus (37.2%) and in pediatric was mouth (66.6%). Of all pediatric patients, one case had grade IIb endscopic injury.Among Endoscopy cases(in adults),20.8%, 16.7%, 41.6%, 16.7%, 4.2% were zero, I, IIa, IIb and III degrees, respectively. In all cases, bleaching liquid (whitex) was the most frequent consumed material while antiacids and antinauseants were the taken druges.

*Conclusion:* Results indicated that in both studied groups, female patients are more affected by this agents and in adults, intentional ingestion was approximately 1.5 time more than the accidental cases while all of pediatric patients had accidental poisoning. Most of the lesions required medical treatment without any surgery. since there had been minimum levels of mucosal lesions in ingesting bleaching liquid (whitex) cases, it seemed that at low to average levels of the ingestion of this liquid, patients had mild manifestations and could be medically treated without doing Endoscopy. Send Date: 2010/08/11

Category: 2.9 Other esophageal disorders W-F-023

Investigate Relationship Between Helicobacterpylori And Hyperemesis gravidarum

Ahmad Sobhani<sup>1\*</sup>, Maryam Sharifzadeh<sup>2</sup>, Soheyla Riyahi nezhad<sup>3</sup>

<sup>1</sup>Department of internal medicine, Medical school, Islamic Azad University, Najafaband Branch, Isfahan, IRAN. Abstracts of Iranian Congress of Gastroenterology and Hepatology- 2010

<sup>2</sup> Medical school, Islamic Azad University, Najafaband Branch, Isfahan, IRAN.

<sup>3</sup> Department of obstetric and gynecology, Medical school, Islamic Azad University, Najafaband Branch, Isfahan, IRAN.

*Introduction:* Nausea and vomiting is a major complaint in 70-80% of pregnancies. The typical onset is between 4 and 8 weeks and continues until 16-18 weeks of pregnancy. Hyperemesis gravidarum (HG) is a severe form of morning sickness that is associated with weight loss, ketonemia, electrolyte imbalance and profound volume depletion. It occurs in 0/5-10/1000 pregnancies. Its cause is unknown but there are some hypotheses like hormonal mechanisms, sauh as elevated HCG and Estrogen. The aim of this study was to find an association between (HG) and H. pylori infection.

Method: In a case control study 20 pregnant women with hyperemesis gravidarum and 20 women without hyperemesis gravidarum were selected in 2009–2010 . For this purpose all pregnant women were tested for HP. The serum antibodies against H. pylori in 20 patients with HG was compared with IgG titers of 20 asymptomatic pregnant women at the same gestational age as controls. Specific serum antibodies (IgG) directed against H. pylori was measured by less ELYZA. IgG titers than 15 was considered negative, IgG titers more than 20 were regarded positive and IgG titers between 15-20 were considered as suspicious and required repeating the test after 2-4 weeks.

**Results:** Positive serum IgG concentrations were found in 12 of the 20 hyperemesis patients compared with 4 of 20 controls. The difference was statistically significant (P=0.01).

*Conclusion:* it seems that helicobacterpylori infection is significantly associate with hyperemesis gravidarum.but we should regard other effective factors suchas age of mother socioeconomic status. Send Date: 2010/08/21

Category : 2.9 Other esophageal disorders W-F-024

Massive Upper Gastrointestinal Bleeding Due To Esophago- Aort Fistula Following Foreign Body Ingestion: A Case Report Ali Ghavidel<sup>1\*</sup>, MohammadHossien Somi<sup>1</sup> <sup>1</sup> Liver and Gastrointestinal Diseaases Research Center, Tabriz University of Medical Sciences

*Introduction:* Immediate treatment when an esophageal foreign body is suspected is critical because of the possibility of serious complications. The presence of foreign bodies in the esophagus usually occurs accidentally in children and mentally retarded adults. A greater risk of perforation of the esophagus, development of a mediastinal, as well as airway compromise is present when a foreign body is lodged longer than 24 hours. Furthermore, this condition results in complications, such as hemorrhage or esophagea-aort fistula, when treatment is delayed. We herein report a case of esophageo-aort fistula, a rare complication resulting from the delayed removal of an esophageal foreign body

*Method:* Patient presentation: A 34 year-old female who had swallowed chicken bone one week previously was referred for severe gastrointestinal bleeding. Surgery to remove the foreign body was not performed.

**Results:** To determine the cause of continued bleeding after the endoscopy , we performed secondlook endoscopy, which revealed hemorrhage from a fistula between aort and the esophagus. Despite of resuscitative worts the patient had cardio-respiratory arrest and cardio pulmonary resuscitation (CPR) was unsuccessful and patient was expired

*Conclusion:* Considering the complications resulting from the delay of the removal of foreign bodies from the esophagus, these objects should be removed as soon as possible.

Send Date: 2010/09/06

Category : 2.11 Acid peptic disease (includes NSAIDS - but NOT H.pylori)- pathogenesis/ W-F-025

# Accuracy Of Pepsinogens I, II And Gastrin 17 For Diagnosis Of Gastric Fundic Atrophy: The Possible Influence Of Gastritis

Dariush Nasrollahzadeh<sup>1</sup>, Karim Aghcheli<sup>2</sup>,

- Masoud Sotoudeh<sup>3</sup>, Ramin Shakeri<sup>3</sup>, Christina Persson 4, Farhad Islami<sup>5</sup>, Farin Kamangar <sup>5</sup>, Christain Abnet<sup>6</sup>,
- Paolo Boffetta<sup>7</sup>, Lars Engstrand<sup>4</sup>, Weimin Ye<sup>4</sup>, Sandy Dawsey<sup>6</sup>, Reza Malekzadeh<sup>8\*</sup>

<sup>1</sup> Digestive Diseases Research Center, Tehran University of Medical Sciences.Tehran,Iran

Abstracts of Iranian Congress of Gastroenterology and Hepatology- 2010

<sup>2</sup> Digestive Diseases Research Center, Tehran University of Medical Sciences, Tehran, Iran

<sup>3</sup> Digestive Diseases Research Center, Tehran University of Medical Sciences Tehran,Iran

<sup>4</sup> Department of Medical Epidemiology and Biostatistics, Karolinska Institute,

<sup>5</sup> Digestive Diseases Research Center, Tehran University of Medical Sciences

<sup>6</sup> Division of Cancer Epidemiology and Genetics, National Cancer Institute, Bethesda, MD, USA

<sup>7</sup> Internation Prevention Research Institute, Lyon, France

<sup>8</sup> Digestive Diseases Research Center, Tehran University of Medical Sciences, Tehran. Iran

*Introduction:* Fundic atrophy is suggested as a risk factor for gastric adenocarcinoma and esophageal squamous cell carcinoma. Serology methods for fundic atrophy diagnosis are not in agreement due to using different cutoff values which may lead to inconsistent estimates of atrophy and cancer risk association. We assessed the accuracy of serology markers and corresponding cutoff values for fundic atrophy diagnosis.

*Method:* We measured serum pepsinogens I (PGI) and II (PGII), gastrin 17 (G-17), and H. pylori by ELISA and cytotoxin-associated gene A (cagA) status by Western blot assays in 309 endoscopy patients in Golestan province, Iran. Data about using tobacco, opium, and proton pump inhibitors (PPIs) were recorded. Diagnostic accuracy of the serum markers was compared with histology data. Areas under curves (AUCs) were calculated and best cutoff values were determined.

Results: Fundic atrophy was observed in 21 (6.8%). 261 (85.3%) were H. pylori positive. CagA was positive in 100%, 82% and 50% among mild, moderate and marked fundic atrophy, respectively (p=0.001). The AUCs (95%CI) for PGI, PGI/PGII ratio, and G-17 to distinguish fundic atrophy were 80.7% (68.1-93.4), 84.0% (71.7-96.1), and 60.1% (42.9-77.3), respectively. PGI <56 µg/dl and PGI/PGII ratio <5 were the optimal cutoff values to distinguish fundic atrophy. Current use of PPI increased PGI (coeff: 38.9, 95% CI: 19.2 - 58.7) and G-17 (coeff: 6.7, 95% CI: 0.6-12.8). Tobacco use did not change the level of PGI, PGII, and G-17 among male patients. There was no effect of opium use on the level of the serum markers. Exclusion of patients who were diagnosed as gastritis without fundic atrophy increased AUC of the PGI/PGII ratio (0.91%).

*Conclusion:* At low level of false positive fraction the PGI/PGII ratio had no superiority over PGI alone

in diagnosis of fundic atrophy. Diagnostic value of PGII is partially determined by the proportion of gastritis among study population. Send Date: 2010/09/08

Category: 2.13 Gastroduodenal malignancies W-F-026

Gastric Histopathologic Changes In Patients With Intestinal Metaplasia At Least One Year After H.Pylori Therapy

Fariborz Mansour-Ghanaei<sup>1\*</sup>, keyvan Aminian<sup>1</sup>, Mohammad Reza Labani Motlagh<sup>1</sup>

<sup>1</sup> Gastrointestinal and liver diseases research center of guilan, guilan university of medical sciences

*Introduction:* Intestinal metaplasia is a potential reversible change of one type of well differentiated cell to another type which effected by environmental factors that was seen in gastrointestinal tract especially esophagus and stomach frequently. Aim of this study was to determine Gastric histopathologic changes in patients with intestinal metaplasia at least one year after H.Pylori therapy in Guilan province.

*Method:* This cross sectional was conducted in Gastrointestinal and Liver Disease Research Center (GLDRC) during 2009 to 2010.Gastric biopsies were performed from 5 sites (1 for RUT from antrum, 2 from antrum, 1 from Body, 1 from Fundus) for all 71 known case of intestinal metaplasia with H.Pylori infection who were treated for infection at least 1 year ago. Of this group, H.Pylori infection, presence of precanceric lesions including gastric mucosal atrophy, intestinal metaplasia (complete, incomplete) and dysplasia were determined. Then the relationship between these changes with other variables was analyzed with  $\chi$ 2 test by SPSS version 18.

**Results:** Secondary pathology of intestinal metaplasia patients were Intestinal metaplasia (71.8%),dysplasia (23.9%) and other precanceric lesions (4.2%) .There is significant difference between type of intestinal metaplasia in patients without use of HP drugs and also between HP infection in patients have diagnostic interval more than 3 years. ( p value<0.05(.There is no significant differences between primary and secondary pathology according age groups, genders, having family history of gastric cancer; smoking; NSAIDs use, HP infection and eradication of it in intestinal metaplasia patients.(p value>0.05)

*Conclusion:* We found significant difference between HP infection and long diagnostic interval and also between type of intestinal metaplasia and not using HP therapy drugs.

Send Date: 2010/08/15

Category: 2.13 Gastroduodenal malignancies W-F-027

# Gastric Changes In Iranian Patients With Dyspepsia With Two Different Ethnic Backgrounds

Mohammad Hossein Somi<sup>1\*</sup>, Amir Taher Eftekharsadat<sup>2</sup>, Mohsen Masoodi<sup>3</sup>,

Masood Shirmohamadi<sup>1</sup>, Shahnaz Naghashi<sup>1</sup> <sup>1</sup> Liver and Gastrointestinal Diseases Research Centre, University of Medical Sciences, Tabriz

<sup>2</sup> Department of Pathology of Imam Reza Hospital, University of Medical Sciences, Tabriz

<sup>3</sup> University of Medical Sciences, Hormozgan, University of Medical Sciences, Hormozgan

*Introduction:* Symptoms of recurrent upper abdominal pain or dyspepsia are experienced by approximately 25–40% of the general population which is of more importance in a community with high rates of gastric cancer. Gastric cancer is a common cancer in East-Azerbaijan (Northwest of Iran). The aims of this study is evaluating the gastric mucosal changes in dyspeptic Azeri patients and compare it with patient from Bandar-Abbas (South of Iran) to evaluate effect of ethnic backgrounds.

*Method:* In an analytic-descriptive setting, 191 patients with dyspepsia were evaluated in Tabriz Liver and Gastrointestinal diseases Research Center. Upper endoscopy was done in all patients and biopsies were obtained from 5 different points of stomach and hystopathological assessments were performed. Helicobacter pylori infection was assessed by histology and Rapid Urea's Tests.

**Results:** In this study 101patients in the azari group (52 males, 49 females) and 90 patients in the Babdari group (28 males, 62 females) were enrolled. The two groups were matched for age. Endoscopically determinable lesion was significantly more frequent in the Bandari group (68.3% case vs. 81.1% control x<sup>2</sup>test; P=0.03). HP infection was determined in 69.3 and 84.1 percent of patients in the Azari and Bandari groups, respectively (x<sup>2</sup> test P=0.01). Chronic and active chronic gastritis was found in 93.2% and 52.4% of Azari and 94.7% and 53.4% of Bandari

group. In those patients with gastritis, corpus predominant or pangastritis was commoner in the Azari group (64.1% Azari v 83.3% in the Bandari ( $x^2$ test, p = 0.01). Chronic gastritis (Median scores 10.96±2.8 Bandari v 8.5±3.2 Azari, P<0.001,OR=1.49 95%CI[1.26-1.77]) and active chronic gastritis (Median scores 7.6±5.7 Bandari v 3.4±3 Azari, P<0.001,OR=1.49,95%CI[1.27-1.75]) were severe in Bandari group. No case of displasia and adenocarcinoma was detected at all.

*Conclusion:* This study showed that endoscopically determinable lesion, HP infection, precancerous lesions (atrophy or intestinal metaplasia) of gastric mucosa and the corpus (predominant or pangastritis) were more common in patients from Banda Abbas compared to patients from Tabriz. Send Date: 2010/08/18

Category: 2.13 Gastroduodenal malignancies W-F-028

# **Case-Control Study Of Gastric Changes In Dyspeptic First Degree Relatives Of Patients With Gastric Adenocarcinoma**

Mohammad Hossein Somi<sup>1\*</sup>, Amir Taher Eftekharsadat<sup>2</sup>, Naser Hajavi<sup>1</sup>, Shahnaz Naghashi<sup>1</sup>

<sup>1</sup> Liver and Gastrointestinal Diseases Research Centre, University of Medical Sciences, Tabriz

<sup>2</sup> Department of Pathology of Imam Reza Hospital, University of Medical Sciences, Tabriz

*Introduction:* Symptoms of recurrent upper abdominal pain or dyspepsia are experienced by approximately 25–40% of the general population. In a community with high rates of gastric cancer, dyspepsia may be a symptom of a serious problem. This is in particular of greater importance among first-degree relatives of patients with gastric cancer. The aim of this study is evaluating the gastric mucosal changes in dyspeptic first-degree relatives of patients with gastric malignancy and comparing it with a control group

*Method:* In an analytic-descriptive setting, 200 dyspeptic patients were recruited in Tabriz at Liver and Gastroenterology diseases Research Center. Upper endoscopy was done in all patients and biopsy was performed in 5 different points of stomach and hystopathological assessments were performed. Helicobacter pylori infection was assessed by histology and Rapid Urea's Tests. The results were compared

between the first-degree relatives of patients with and without gastric cancer.

**Results:** Ninety nine patients in the A group (50 males, 49 females) and 101patients in the B group (48 males, 53 females) were enrolled. The two groups were matched for age and sex. Endoscopically determinable lesion was significantly more frequent in the B group (38.9% A vs. 69.3% B x<sup>2</sup>test; P=0.001). HP infection was determined in 76.8 and 69.1 percent of patients in the A and B groups, respectively (x<sup>2</sup> test P=0.26).Chronic gastritis (median score 9.7±4.3 A vs. 8.5±3.2 B, P<0.001, OR=0.75, 95%CI [0.65-0.87]) and active chronic gastritis (median score 6.9±5.8 A vs.3.4±3 B P<0.001, OR=0.65,95%CI[0.54-0.74]) was sever in A group. In those patients with gastritis, corpus predominant or pangastritis was commoner in the A group (77.8% A vs. 63.4% in the B (x<sup>2</sup> test, p < 0.001). No case of adenocarcinoma was detected at all.

*Conclusion:* This study showed that the precancerous lesions of gastric mucosa are more prevalent in dyspeptic patients with positive family history for gastric cancer; who may benefit from early interventions Send Date: 2010/08/18

Category : 2.13 Gastroduodenal malignancies W-F-029

# Childhood Obesity And Risk Of Adult Squamous-Cell Carcinoma Of The Esophagus In A High Risk Area

Arash Etemadi<sup>1</sup>, Asieh Golozar<sup>1</sup>, Stan Ford Dawsey<sup>2</sup>, Christian Abnet <sup>3</sup>, farin kamangar<sup>3</sup>, karim aghcheli<sup>1</sup>, reza malekzadeh<sup>1\*</sup>

<sup>1</sup> Digestive Disease Research center, Tehran University of Medical Sciences Tehran, Iran.

<sup>2</sup> Division of Cancer Epidemiology and Genetics, National Cancer Institute, Bethesda, MD, USA.

<sup>3</sup> Division of Cancer Epidemiology and Genetics, National Cancer Institute, Bethesda, MD, USA

*Introduction:* Squamous cell carcinoma of the esophagus is the most common type of cancer and has unique epidemiologic features in parts of the world, including North-east Iran. While obesity has been shown to be a risk factor for esophageal adenocarcinoma, little is known about the association between childhood obesity and esophageal squamous cell carcinoma (ESCC).

*Method:* Gastroesophageal Malignancies in Northern Iran (GEMINI) is a project consisting of case-control and

cohort studies. In the case-control study reported here, between December 2003 and March 2007, cases were recruited in the only GI specialty clinic in the region. Esophageal squamous cell carcinoma was disgnosed on the basis of endoscopy and histology. Only new cases with histologically-proven diagnosis were included. For each case, we tried to recruit two neighborhood controls, matched by age and sex. Using a structured questionnaire, data were collected about present and past personal and health-related variables. Each individual was shown a standard pictogram validated for this population to report the body size at present and at ages 30 and 15, starting with picture 1 (very slim) to 7 in men and 9 in women (very obese). We used conditional logistic regression to analyze the association between cancer and body size at 15. The model was adjusted for ethnicity, education, number of siblings, smoking, and childhood factors such as place of residence, use of piped water, physical activity, therapeutic opium use, early smoking age, and oral health. These childhood factors were the defined as the reported situation of each variable at or before 18 years of age.

**Results:** There were 300 cases and 571 age and sex-matched controls. 27% percent of cases and 26% controls were urban residents, and 57% versus 55% were Turkmens, respectively. 10.4% of cases and 4.4% of controls had been very obese at the age of 15 (p<0.001). Women reporting the highest level of obesity at age 15 had an OR of 3.16 (95%CI: 1.52-6.57) for developing ESCC. Overall, body size at 15 showed a positive association with the risk of ESCC ( $\beta$ = 0.13, p for trend<0.001). Childhood physical activity was inversely associated with ESCC risk ( $\beta$  =-0.25, p<0.001). Education level was another variable inversely associated with ESCC risk ( $\beta$ =-0.74, p<001).

*Conclusion:* Children, especially girls, with higher weight and low physical activity may be at increased risk of developing squamous cell carcinoma as adults. Send Date: 2010/09/05

Category : 2.13 Gastroduodenal malignancies W-F-030

Serum Hyaluronic Acid And Laminin As Potential Tumor Markers For Upper Gastrointestinal Cancers Karim Aghcheli<sup>1\*</sup>, Hadi Parsian<sup>2</sup>, Durdi Qujeq<sup>3</sup>, Mohammad Talebi<sup>4</sup>, Abstracts of Iranian Congress of Gastroenterology and Hepatology- 2010

Elias Khalili Pour<sup>1</sup>, Farhad Islami<sup>1</sup>

<sup>1</sup> Digestive Disease Research Center, Tehran University of Medical Sciences

<sup>2</sup> Department of Biochemistry and Biophysics, Babol University of Medical Sciences, Babol, Iran

<sup>3</sup> Department of Biochemistry and Biophysics, Babol University of Medical Sciences, Babol, Iran

<sup>4</sup> Department of laboratory Sciences, Mazandaran University of Medical Sciences, Sari, Iran

**Introduction:** Early diagnosis of patients with upper gastrointestinal cancer is important because many cases are diagnosed in advanced stages and have poor prognosis. Several studies have reported increased serum levels of hyaluronic acid (HA) and laminin (LN) in various cancers and the correlation of the levels with poor prognosis. However, little data on the use of serum HA and LN levels for early detection of esophageal and gastric cancers are available

*Method:* We assessed serum HA and LN levels using enzyme-linked immunosorbent assay in 20 gastric cardia cancer (GCA), 23 gastric noncardia cancer (GNCA) and 20 and esophageal squamous cell carcinoma (ESCC) incident cases and 25 controls in Golestan Province, northern Iran, a high risk area for upper gastrointestinal cancers.

Results: Mean serum HA and LN concentrations in cancer cases were higher than in controls in crude analyses. Significant correlations were observed between HA levels and GNCA (Betacoefficient=0.390; P=0.01) and ESCC (Betacoefficient=0.332; P=0.05) and between LN levels and GCA (Beta-coefficient=0.454; P=0.003) in multivariate models. For ESCC, GCA, and GNCA, area under ROC curve (AUC) of HA was 0.708, 0.694, and 0.770, and of LN was 0.706, 0.828, and 0.671, respectively

*Conclusion:* Our study suggests that HA and LN may be used to identify potentially high-risk groups of upper gastrointestinal cancers for further diagnostic work-ups, particularly in high incidence areas. Nevertheless, further studies with larger sample size and tumor staging information are warranted to clarify the clinical significance of HA and LN in those cancers.

Send Date: 2010/09/06

Category : 2.13 Gastroduodenal malignancies

W-F-031

# Relationship Between Serum 25 Hydroxy Vitamin D3 Level And Occurance Of Apoptosis In Gastric Mucosa

Jabiz Modaresi Esfeh<sup>1\*</sup>, Alireza Ostadrahimi<sup>2</sup>,

Mohammad hosein Somi<sup>3</sup>, Leila Roshangar<sup>4</sup>, Babak Seddigh Tonekaboni<sup>5</sup>, Bahram Pourgsassem Gargari<sup>1</sup>

<sup>1</sup> Tabriz Faculty of Health and Nutrition

<sup>2</sup> Tabriz Nutritional research Center, Tabriz Faculty of

Health and Nutrition

<sup>3</sup> Tabriz Liver and Gastrointestinal research Center, Tabriz Faculty of Medicine

<sup>4</sup> Tabriz Faculty of Medicine

<sup>5</sup> Mazandaran University of Medical Sciences

Introduction: Iran has the highest rate of stomach cancer among the countries of the Middle East that report population-based cancer registry data. Malignancies are the third most common cause of mortality in our country and stomach cancer accounts for nearly 50% of all GI cancers in Iran. Vitamin D deficiency on the other hand, is very common all around the world. "UVB-vitamin D-cancer hypothesis" has been suggested by epidemiologic and some experimental studies, especially for some cancer sites such as colon, prostate and breast. Although epidemiologic data is in favor of a reverse association between gastric cancer and sun exposure, few researches have been performed to test this hypothesis. Method: This study was designed to assess the relationship between serum vitamin D level and occurrence of apoptosis in human gastric mucosa as an early indicator of stomach cancer. It was a cross sectional study carried out in Tabriz. Patients referred to 2 main hospitals in Tabriz to undergo an upper gastrointestinal endoscopy were asked to participate in this research. A demographic and a previously validated FFQ questionnaire were filled out for each patient. Serum 25(OH) & 1,25(OH)2D levels were checked & apoptosis was detected by TUNEL technique.Data were analyzed by SPSS version 16.00.

**Results:** Mean number of apoptotic cells was  $2.03\pm1.85$  in gastric mucosa. Serum 25(OH)D and 1,25(OH)2D levels were  $18.76\pm21.74$  ng/ml and  $61.23\pm24.14$  pg/ml respectively. ANOVA showed no relationship between apoptosis in gastric mucosa and serum 25(OH)D and/or 1,25(OH)2D levels.

**Conclusion:** We found no relationship between serum vitamin D level and apoptosis in gastric mucosa. This may indicate that the positive association detected by epidemiologic studies between gastric cancer and UVB exposure is probably not due to apoptosis - inducing effects of vitamin D and other ani-tumor aspects of this vitamin may be of greater importance in this organ. However more elaborate studies, under strictly controlled conditions are required before our results can be considered definite. Send Date: 2010/09/18

Category: 3.3 Pathogenesis: host factors/histo-pathology W-F-032

# Does Eradication Of Helicobacter Pylori Affect Food Habit And Body Composition Of Infected Patients?

MohammadHossein Somi<sup>1</sup>, Elnaz Faramarzi<sup>2\*</sup>, Jalil Amirifar<sup>1</sup>, Shahnaz Naghashi<sup>1</sup>, Amir Ghorbani Haghjo<sup>3</sup>

<sup>1</sup> liver,Gastrointestinal disease research center, Tabriz University of Medical Sciences

<sup>2</sup> Nutritional Research center, Facualty of Health and Nutrition, Tabriz University of Medical Sciences

<sup>3</sup> Biochemistry department, Tabriz University of Medical Sciences

*Introduction:* Helicobacter pylori infection is extremely common worldwide. Helicobacter pylori infection may decrease serum ghrelin and increase gastric leptin levels which may, in turn, change body weight .These hormones regulate appetite, food intake, and body composition .Therefore eradication may increased risk of overweight and obesity .Taking in to account the relationship between obesity and many diseases such as gastro-oesophageal reflux disease and cancer, the present study was conducted to determine the effect of eradication on food habit and body composition of infected patients

*Method:* The study was carried out in 2009-2010 in a group of patients from the Gastroenterological Clinic of the Emam Reza Hospital who had been referred for endoscopic examination of the upper digestive tract.Gastroscopy was performed and multiple biopsies were obtained from the antrum and corpus. Active infection with Helicobacter pylori was determined by rapid urease test or histopatholgy. Infected patients were given a quadruple therapy for eradication. Eradication was confirmed by the urea breath test at 3 months. The body weight ,body composition(fat mass,free fat mass ,body cell mass,total body water and resting metabolic rate ) and food habit of one-hundred patients were determined by Seca scale,Maltron Bioscan 916 and valid food frequency questionnaire respectively before and after eradication. Data were analyzed by Paired-t-test.

**Results:** The mean body weight ,fat mass and body cell mass of patients increased after eradication but only the changes of body weight( $68.07\pm1.8 \text{ vs} 69.38\pm1.9 \text{ kilogram}$ ) was statically significant (P=0.01). After eradication the mean free fat mass ,resting metabolic rate and total body water of subjects decreased insignificantly. Also food habit of patients did not change remarkably after treatment. However the consumption of some vegetables such as raw onion,tomato and sabzi khordan increased insignificantly after treatment.

*Conclusion:* The results of this study showed that eradication of H. pylori lead to a significant net increase of body weight in patients while food habit and dietary intake (data are not presented) of subjects did not change after treatment. It seems that enhanced incidence of gastro-oesophageal reflux after eradication may be due to increased body weight of these patients. Therefore dietary consulting before and after eradication can be helpful in H.pylori infected patients for preventing of weight gain. Send Date: 2010/08/22

Category : 3.3 Pathogenesis: host factors/histopathology

# W-F-033

# Evaluation Of Antibiotic-Resistance Patterns Of Helicobacter Pylori Isolates From Endoscopy

Samples Of Afzalipour Hospital In Kerman-2009 mohammad savari<sup>1</sup>, hamid Abdollahi<sup>2</sup>,

mohammad savari , hannd Abdoham , mohammadjavad Zahedi<sup>3</sup>, sodaif Darvish Moghadam<sup>3\*</sup>, mehdi Hayat Bakhsh Abasi<sup>3</sup>

<sup>1</sup> M.sc student of medical microbiology, Kerman university of medical siences

<sup>2</sup> Associate professor of microbiology, Kerman university of medical siences

<sup>3</sup> Associate professor of gastroenterology, Kerman university of medical siences

Introduction: Helicobacter pylori is a gram negative,

microaerophilic and helical bacilli that colonizes half of the world population's stomachs. Based on serological studies the prevalence of this infection in Iranian adults is up to 80%. Clinical outcomes of this infection includes: gastritis, peptic ulcer and gastric adenocarcinoma that are common in iran. Antibiotics resistance patterns of Helicobacter pylori are different geographically. Therefore a need for local studies is felt. Method: From April-to-December 2009, 63 isolates of Helicobacter pylori were obtained From 191 patient refered to endoscopy unit of Afzalipour hospital in kerman. Patients demographic features including: (age, gender, symptoms, ...) were recorded before the sampling. We have used modified disk diffusion test to evaluate antibiotics resistance of H.pylori. The statistical analysis were carried out by spss16. To evaluate the significancy Pearson chi-square test was used.

**Results:** The patterns of antibiotics resistance were as below: metronidazole 55.5%, clarithromycin 30.1%, tetracycline 3.1%, amoxicillin 26.9%, ciprofloxacin 7.9% and no resistance to furazolidone was detected. 12.7% of the isolates were susceptible to all the six antibiotics. 55.6% of the isolates were resistance to one antibiotic, 25.4% to two antibiotics, 6.3% to three antibiotics and there was no resistance to more than three antibiotics at the same time. We also determine the genetic resistance of H pylori strains to this antibiotics.

*Conclusion:* There was no significant relation between gender and clarithromycin or metronidazole resistance, but there was a significant relation between age and metronidazole resistance, though this not true about clarithromycin. According to antibiotic resistance rates in this sudy it seems necessary to carry out antibiogram tests, before starting the treatment. Send Date: 2010/09/08

Category : 3.4 Diagnosis W-F-034

# Diagnosis Of Helicobacter Pylori Infection In Patients With Atrophic Gastritis : Comparison Of Histology majid azadegan<sup>1</sup>

<sup>1</sup> loghman hakim hospital, shahid beheshti medical siences *Introduction:* Atrophic gastritis, a risk factor for gas-

tric cancer, is a late consequence of Helicobacter pylori infection in approximately one-third of the infected patients. It has been suggested that gastric cancer would develop less frequently in H. pylori were eradicated. However, the prevalence of H. pylori infection may be underestimated in patients with atrophic gastritis and intestinal metaplasia if only biopsy-based diagnostic methods are used.

*Method:* We select 110 female patients, between age 50-55 years from south west of Tehran from 300 patients that referred for Endoscopy and Biopsy & Serology. All of 110 patients have a diagnosis of Atrophic gastritis by Expert Gastroentrologist & Tissue Biopsy.We compared histology, and serology in H. pylori diagnostics in 110 female patients with atrophic gastritis.

**Results:** H. pylori was detected in 60 (55%) patients by histology and increased serum antibody levels indicating H. pylori infection were found in 82 (75%) patients?! between serology and histology, H. pylori infection was associated with atrophic corpus gastritis in 84% of the present patients ( in one patient with normal antibody titers H. pylori was defined histologically).

*Conclusion:* H. pylori infection would have been missed in most patients with atrophic gastritis without the analysis of H. pylori antibodies. Therefore, in patients with atrophic gastritis, the use of serology is encouraged in diagnosing H. pylori infection. Send Date: 2010/09/03

Category: 3.5 Management strategies W-F-035

# Effect Of Furazolidone, Metronidazol, Amoxicillin,Bismute And Omeprazol On Eradication Of H.Pylori Gastritis In Patients With Peptic Disease

Mohammad Hossein Antikchi<sup>1\*</sup>,

Mohammad kazem Amirbeyki<sup>1</sup>, Hassan salmanroghani<sup>1</sup>, Asghar Khoshnoud<sup>1</sup>, Mohssen Akhondi<sup>1</sup>

<sup>1</sup> Shahid Sadughi, Shahid Sadughi

*Introduction:* The eradication of Helicobacter pylori plays a pivotal role in the treatment of peptic ulcer disease. Metronidazole resistance, common in Iran, is claimed to be a major reason for the failure of metronidazolecontaining regimens. Both clarithromycin and furazolidone are potential alternatives for metronidazole

*Method:* Patients with proven duodenal ulcer and H. pylori infection were assigned to received Furazolidone 200 mg b.d for one week and Metronidazol 500 mg b.d for one week with omeprazole 20 mg b.d., amoxicillin 1000 mg b.d, bismuth subcitrate 240 mg b.d. ).

**Results:** A total of 53 patients enter the study. Three patients had sever complication and incooperation that delet. From 50 patients, 96% good response to treat and 4% failure to response. The eradication rates was 96%.

*Conclusion:* This study show that furazolidone is a good drug for eradication of H.Pylori infection and because of complication after one week it can use Metronidazole for one week in continue of treatment for H.pylori eradication.

Send Date: 2010/08/16

Category : 3.5 Management strategies T-S-036

Metronidazole-Furazolidone, Clarithromycin-Furazolidone, Or Clarithromycin Based Regimens For The Eradication Of Helicobacter Pylori (HP) In Peptic Ulcer Disease: A Double Blind Randomized Controlled Trial

Saghi Riahizadeh<sup>1</sup>, Reza Malekzadeh<sup>1\*</sup>, Shahram Agah<sup>2</sup>, Nasrin Zendehdel<sup>1</sup>, Rasoul Sotoudehmanesh<sup>1</sup>, Naser Ebrahimi-Dariani<sup>1</sup>, Akram Pourshams<sup>1</sup>, Homayoon Vahedi<sup>1</sup>, Javad Mikaeli<sup>1</sup>, Morteza Khatibian<sup>1</sup>, Sadegh Massarrat<sup>1</sup>

<sup>1</sup> Digestive Disease Research Center, Tehran university of medical sciences

<sup>2</sup> Gastrointestinal and Liver Disease Research Center, Iran University of medical sciences

*Introduction:* Furazolidone is a much cheaper drug with a very low resistance against H.pylori compared to Clarithromycin. We aim to evaluate safety and efficacy of furazolidone-based regimen versus clarithromycin-based therapy in H.pylori eradication for ulcer disease.

*Method:* Patients with proven peptic ulcer or duodenitis were randomized into three groups: A) metronidazole (500mgbid) for the first five days, followed by furazolidone (200mgbid) for the second five days; B) clarithromycin (500mgbid) for ten days;

and C) clarithromycin (500mgbid) for the first five days and furazolidone (200mgbid) for the second five days. All groups received omeprazole (20mgbid) and amoxicillin (1grbid). Groups A and C were also given bismuth subcitrate (240mgbid) whereas a placebo was given to group B. Adverse events were scored and recorded. Two months after treatment, a C13urea breath test was done

**Results:** 310 patients were enrolled of which 92(A), 95(B) and 98(C) completed the study. The intention-to-treat and per protocol eradication rates were 78.5%(95%CI=69-85),81.1%(95%CI=73-88) and 82%(95%CI=74-89), and 91.3%(95%CI=83-96), 90.4%(95\%CI=82-95) and 88.7%(95%CI=81-94), for group A,B and C respectively . Eradication rate differences did not reach statistical signicance. The most common adverse event, bad taste, occurred in all groups, but more frequently in groups B (34%) and C (32%), than A (14%) (p<005). Adverse symptoms score were  $0.88\pm2.05$  in group A,  $1.15\pm1.40$  in group B and  $1.87\pm1.62$  in group C.

*Conclusion:* Furazolidone can replace clarithromycin in H.pylori eradication regimens due to lack of development of resistant strains and very low cost. Send Date: 2010/09/06

Category: 4.1 Enterocyte biology/pathology and nutrient/water transport/electrolyte transport T-S-037

Erythropoitin Protects The Intestine Against Ischemia/Reperfusion Injury In The Rabbit Shahrvar Hashemzadeh<sup>1</sup>, Khosro Hashemzadeh<sup>1</sup>,

Ramin Nosrati<sup>1</sup>, Mohammad Hossein Somi<sup>2</sup>,

Monire Halimi<sup>3</sup>, Nosart... Zarghami<sup>4</sup>

<sup>1</sup> Department of surgery of Imam Reza Hospital, University of Medical Sciences, Tabriz

<sup>2</sup> Liver and Gastrointestinal Diseases Research Centre, University of Medical Sciences, Tabriz

<sup>3</sup> Department of Pathology of Imam Reza Hospital, University of Medical Sciences, Tabriz

<sup>4</sup> Tuberculosis & lung Research center, University of Medical Sciences, Tabriz

*Introduction:* Erythropoietin (EPO) is a hypoxiainduced hormone produced in the kidneys that stimulates hematopoiesis in the bone marrow. However, recent studies have also shown important nonhematopoietic effects of EPO. Previous studies have shown that erythropoietin (EPO) has protective effects against ischemia/reperfusion (I/R) injury in several tissues. The aim of this study was to determine whether EPO could prevent intestinal tissue injury induced by I/R.

Method: This clinical trial animal model study was done on rabbit in the animal lab research center in 2010. The superior mesenteric artery of rabbits was clamped for 60 minutes and then released. The rabbits were divided into 2 groups (n = 15 in each group): EPO treatment (EPO)(case) and sham operation (Sham)(control). EPO were administered subcutaneously at 1000 units/kg for 10 minutes before clamping, 30 minutes after the start of clamping, and just before declamping. This treatment was followed by determination of serum CRP, TNF-a, IL-6, Hb, Hct, Cr, BUN, AST, ALT, LDH and CRP levels before, 2, 6 and 12 houres after I/R injury, histologic evaluation of the small intestine. Data were analyzed with SPSS16. Descriptive statistics were applied for all variables. Differences between the two groups were tested for statistical significance with the Chi-square test and t test. The level of significance was set at p < 0.05 (5%).

**Results:** Blood TNF- $\alpha$  and IL-6 were significantly more suppressed in the EPO group than in the control group at 2 (P=0.011 & p=0.01). Blood IL-6 was significantly lower in the EPO group 6 hours after I/R injury too (P=0.003). Hemoglobin and hematocrit after I/R injury were lower in the EPO group at any of the time points (P<0.05). Furthermore, there were no significant intergroup differences in CRP at any of the time points. There was no deference between 2 groups for Park's scores in the intestinal mucosa at 2, 6, and 12 hours after I/R injury too.

**Conclusion:** It seems that EPO exert a strong protective effect against intestinal I/R injury, possibly by inhibiting release of TNF- $\alpha$  and IL-6 and decreasing apoptosis.

Send Date: 2010/08/21

Category : 4.1 Enterocyte biology/pathology and nutrient/water transport/electrolyte transport T-S-038

**Economic Burden Of Gluten-Free Foods In Iran** Mohammad Rostami Nejad<sup>1\*</sup>, Mohsen Vahedi<sup>1</sup>, Mohammad Amin Pourhoseingholi<sup>1</sup>, Asma

#### Pourhoseingholi<sup>1</sup>, Ehsan Nazemalhosseini Mojarad<sup>1</sup>, Mohammad Reza Zali<sup>1</sup>

<sup>1</sup>Research Centers for Gastroenterology and Liver Diseases, Shaheed Beheshti University, M.C., Tehran, Iran *Introduction:* Coeliac disease is a common, autoimmune disorder, for which the only treatment is a strict gluten-free diet for life. This diet is assumed to be more expensive because some of these foods are imported to Iran. The aim of this study is comparison the prices of gluten-free foods and regular (gluten-containing) foods.

*Method:* Prices were compared for all food products labelled "gluten-free" and comparable gluten-containing food items in the same group available in Iran. The unit cost of each food, calculated as the price in euro of each product, was calculated for purposes of comparison.

**Results:** All 19 gluten-free products are available were more expensive than regular products. The total unit price for gluten-free products was  $\notin$ 123.8 compared with  $\notin$ 33.7 for regular products. Gluten-free products were 367% more expensive than regular products. The lowest price was regarded to toothpaste and the highest was related to imported spaghetti.

*Conclusion:* The results of this study showed that available products labelled gluten-free foods have poor availability and are significantly more expensive than their gluten-containing products. This information will be useful to dietitians who counsel celiac patients, and to celiac advocacy groups for inviting the government for financial support. Send Date: 2010/09/18

Category: 4.2 Coeliac disease/malabsorption syndromes and food enteropathies T-S-039

Celiac disease in irritable bowel syndrome

Kazem Nezam1\*, Mahmoudali Keikhaei1,

Mohammadali Mashhadi<sup>1</sup>, Zahra Zakeri<sup>1</sup>

<sup>1</sup> Ali-ebne- Abitaleb Hospital, Zahedan University of Medical Sciences

*Introduction:* Irritable bowel syndrome (IBS) is one of the most prevalent, multi-symptom gastrointestinal disorder that have a wide clinical spectrum. Diagnosis of irritable bowel syndrome is generally symptom base. Symptom overlap and comorbidity

between IBS and other gastrointestinal motility disorders (eg, chronic diarrhea), with disorders that are not related to motility (eg, celiac disease, lactose intolerance), are frequent. The aim of this study is to find the frequency of celiac disease among patients with irritable bowel syndrome.

Method: During two-year periods (2008-10), patients with irritable bowel syndrome with Rome II or Rome III criteria(according to date of enterance to study) referred to GI clinic of Zahedan University of Medical Sciences, were studied to identify those who had also celiac disease. Serologic tests(IgA anti-tTG and serum IgA level and in IgA deficency IgG anti-gliadine) were used to screen patients for celiac disease. If the serologic test became positive, six duodenal biopsies(three from each proximal and distal of ampulla) were taken to confirm the diagnosis. **Results:** Two-hundred patients fulfilling Rome II or Rome III criteria for irritable bowel syndrome were evaluated. 16 (8%) patients were found to have IgA tissue transglutaminase (tTG) antibody and no body was IgA deficient. Out of these 16 patients, 13(6.5%) were diarrhea prodominant IBS and non of them constipation prodominant IBS. All of these 16 patients, had abnormal intestinal pathology according to the modified Marsh classification,6 had type I, 6 type II, 2 type IIIA and 1 had type IIIB lesions.

*Conclusion:* Celiac disease is a common finding among patients with irritable bowel syndrome, especially diarrhea prodominant type, and all patients with diarrhea prodominant IBS should be evaluated for celiac disease. Send Date: 2010/08/28

Category: 4.2 Coeliac disease/malabsorption syndromes and food enteropathies T-S-040

# Isolated vitamin B12 deficiency in a patient with celiac sprue with pernicious anemia

Mohammad reza Ghadir<sup>1\*</sup>, Amir Hosein Ghanooni<sup>2</sup>, Abolfazl Iranikhah<sup>1</sup>, Seyyed Saeed Sarkeshikian<sup>1</sup>, maryam Bolandmartabeh<sup>3</sup>

<sup>1</sup> Gastroentrology, Shahid Beheshti Hospital, Qom University of Medical Sciences

<sup>2</sup> Researcher, Qom University of Medical Sciences

<sup>3</sup> Shahid Beheshti Hospital, Qom University of Medical Sciences

Introduction: Celiac sprue or Celiac disease is an autoimmune enteropathy often seen in patients are sensitive to gluten. Usually due to impaired absorption of iron and folic acid at the proximal of small intestine, anemia and iron deficiency anemia not far from the expected, but vitamin  $B_{12}$ deficiency is rarely reported. We will describe here the case that in addition to have celiac disease, without deficiency of iron and folic acid serum levels, has deficient vitamin B<sub>12</sub> due to severe pernicious anemia and Pancytopenia and improved dramatically to treatment with injection of vitamin  $B_{12}$ . Method: The patient was a 38-year-old male who had complaints of weakness, malaise and abdominal pain. He had been suffering from abdominal pains for 2 years, but the symptoms had aggravated in the last 3 months. The abdominal pain was in the epigasterium region and of a pressure and constant type but with no twinge in other parts. The patient stated that the pain would start at the early hours in the morning and would slightly improve with an empty stomach. Moreover, the patient suffered from constipation, flatulence, weight loss (by 18 kg in one year), depression and graying of his hair.

**Results:** Celiac sprue or celiac disease is an autoimmune enteropathy which is often found in patients sensitive to gluten . The disease is characterized by malabsorption of foodstuff after taking gluten and gluten-containing foodstuff; atrophy of the small intestine's mucous villi; improvement of histological and clinical symptoms after restricting the use of gluten-containing foodstuff .Among the clinical manifestations of celiac disease in adults, iron deficiency anemia is the most common clinical manifestation in such patients, while diarrhea is the second most common .

As the examination of our patient's clinical symptoms revealed, such symptoms were of untypical type, e.g. abdominal pain, weakness, malaise, and depression which are justifiable with celiac sprue. Non-existence of diarrhea in the patient was indicative of the more proximal involvement of the small intestine. Elevated liver enzymes along with fatty change in the liver were also observed in our patient, while the reason behind this in celiac disease could be the absorption of toxic materials from damaged mucus and its effect on the liver . Abstracts of Iranian Congress of Gastroenterology and Hepatology- 2010

**Conclusion:** After the patient was diagnosed with celiac disease and pernicious anemia, he was given instructions to limit the use of gluten-containing foodstuff and was placed under treatment with intramuscular vitamin  $B_{12}$ , which, a month later, led to the dramatic improvement of the clinical symptoms including paleness, weakness, malaise, depression, abdominal pain and flatulence, constipation and lab results, and the entire hematological factors in the blood count were restored. Keywords: Celiac disease, celiac sprue, pernicious anemia, antiparietal cell antibody, anti-endomysial antibody, tissue transglutaminase Send Date: 2010/08/30

Category: 4.2 Coeliac disease/malabsorption syndromes and food enteropathies T-S-041

# HLA-DQ2 and -DQ8 genotypes in celiac disease and healthy Iranian population using Tag Single Nucleotide Polymorphisms

Mohammad Rostami Nejad<sup>1\*</sup>, Jihane Romanos<sup>2</sup>, Kamran Rostami<sup>3</sup>, Azita Ganji<sup>4</sup>, Ali Reza Bakhshipour<sup>5</sup>, Seyed reza Mohebbi<sup>1</sup>, Homayoun Zojaji<sup>1</sup>, Behrooz Alizadeh<sup>6</sup>, Mohammad Telkabadi<sup>7</sup>, Mohammad Reza Zali<sup>1</sup>, Cisca Wijmenga<sup>8</sup>

<sup>1</sup> Research Centers for Gastroenterology and Liver Diseases, Shaheed Beheshti University, M.C., Tehran, Iran <sup>2</sup> Department of Genetics, University Medical Centre of Groningen, University of Groningen, Groningen, the Netherlands

<sup>3</sup> School of Medicine, University of Birmingham, UK

<sup>4</sup> Imam Reza Hospital Mashhad, University of Medical Siences, Mashhad, Iran

<sup>5</sup> Zadedan University of Medical Siences, Zahedan, Iran

<sup>6</sup> Department of Epidemiology, University Medical Centre of Groningen, University of Groningen, Groningen, the Netherlands

<sup>7</sup> Golestan hospital, Tehran, Iran

<sup>8</sup> Department of Genetics, University Medical Centre of Groningen, University of Groningen, Groningen, the Netherlands

*Introduction:* Celiac disease (CD) is an immunemediated in genetically susceptible individuals. The major CD predisposing genes are the HLADQ2 and DQ8 genotypes. The main objective of this study is to investigate the frequency of HLA DQ2 and DQ8 for the first time in Iranian CD patients and healthy individuals.

*Method:* We evaluated 59 Iranian patients with CD and 151 healthy controls to predict the HLA-DQA1 and -DQB1 genes, using the six previously reported HLA-tagging SNPs.

**Results:** We observed a significant overrepresentation of DQ2 (DQ2.5 and DQ 2.2) heterodimer, either homozygous or heterozygous both in patients (86.4%) and controls (57.6%). In the group of patients, DQ8 heterozygous were found in 10 and homozygous in 2 patients. The frequency of DQ8 in controls was as follows: heterozygous in 31 cases and homozygous in 4 cases. Eight CD patients (13.5%) and 64 healthy controls were DQ2 or DQ8 negative.

*Conclusion:* We found that the proportion of HLA-DQ2 in celiac patients was higher than control and this finding is in agreement with other studies in Western populations. Also the frequency of HLA-DQ8 was higher than other reported frequency in rest of the world. These results underline the primary importance of HLA-DQ alleles in susceptibility to celiac disease.

Send Date: 2010/09/18

Category : 5.1 Basic/pathogenesis/pathology/ T-S-042

# Serum level of interleukin-23 in ulcerative colitis: A novel marker for disease activity

Mojgan Mohammadi <sup>1\*</sup>, Mohammad Mahdi Hayatbakhsh<sup>2</sup>, Mohammad Javad Zahedi<sup>2</sup>, Sodaif

Darvishmoghadam<sup>2</sup>, Mahmoud Reza Jalalpour<sup>2</sup>

<sup>1</sup> Phyisology research centre, Kerman University of medical sciences

<sup>2</sup> Gastroentrology department, Kerman University of medical sciences

*Introduction:* Interleukin- 23 (IL-23) driven inflammation has primarily been linked to the actions of a new subset of T-helper cells namely T helper type 17. They not only play an important role in host defense against extracellular pathogens, but are also associated with the development of autoimmunity and inflammatory response such as IBD. It is known that both ulcerative colitis (UC) and chron disease (CD) are sever intestinal inflammatory conditions which both are resulted from autoimmune and

immune mediated phenomena. IL-23 is a newly diagnosed cytokine with increased expression in inflamed biopsies of cloning mucosa in patients with Crhon's disease; however there is conflicting evidence on its role in ulcerative colitis(UC).

*Method:* We performed a cross sectional analysis of 58 patients with UC from gastroenterology clinic of Afzalipour Hospital affiliated to Kerman university of Medical Science plus 20 controls from the Kerman Blood Centre. All patients underwent endoscopic study to define the severity of disease. Blood samples were collected from all participants. Serum IL- 23 levels was measured using ELISA method.

**Results:** The age (mean  $\pm$  SD) of patients was: 37.48 $\pm$ 16.09 and for controls it was 35.35 $\pm$ 14 (p= 0.5). Regaring the sex; 63.8% of patients and 55% of controls were male (p=0.48).Serum IL-23 level was 233.50  $\pm$  86.347 and 130.76  $\pm$  30.50 pg/ml in patients and controls respectively (p< 0/001). There was a strong association between serum IL-23 level and two factors including disease activity (OR: 5.250, CI: 1.75 – 15.75) and duration of UC (Pearson correlation (r)= 0.268, p= 0.044).

*Conclusion:* According to these findings detection of IL-23 level can be a reliable factor in order to predict UC disease. Therefore, IL- 23 plays an important role in the pathogenesis and disease activity of UC patients.

Send Date: 2010/09/29

Category: 5.2 Etiology/epidemiology T-S-043

# Nutritional status and associated elements in patients with inflammatory bowel disease in Mashhad,Qaem hospital, from 21/4/2009 to 20/4/2010

Faride Moradi Moghadam<sup>1</sup>, Ahmad Khosravi<sup>1</sup>, Majid Ghayour Mobarhan<sup>1</sup>, Behzad Ramezani Farkhani<sup>1</sup>

<sup>1</sup> Qaem Hospital, Mashhad University Of Medical Sciences

*Introduction:* Patients with inflammatory bowel disease (IBD) includes Crohn's disease and ulcerative colitis not only due to their disease, but due to change of diet and drugs during treatment, are suffering from nutritional deficiencies. These deficiencies lead to complications in patients who are not only the process of treatment is effective but has many

symptoms that the patient's quality of life will damage. Recognizing this deficiency in Iranian patients with diet and culture of their own region is a way of providing therapeutic strategy and suggested use of different elements

*Method:* This descriptive analytical study, 147 patients with inflammatory bowel disease referred to Ghaem Hospital (aj), Mashhad, in the years 1388-1387 were studied. Information about the project, including 50 different data, the questionnaire and statistical tests were evaluated.

Results: Severity of the disease was 64% severe, 20% moderate and 16% mild. Extent was extensive in 65% (pan colitis), moderate in 17% (upto splenic curve) and limited in 18% (rectosigmoid). 88% of patients was anemic with Hb<13gr/dl. 7% had megaloblastic anemia. 12% was vitaminB12 deficiency. Ferritin deficiency 30%, iron deficiency 15% and increased TIBC were 13%. Activity of liver tests, was completely normal in 95% of patients. 20% of patients had calcium deficiency and less than 3% of patients were vitamin D deficiency. A vitamin D level of 70% of patients was less than average. While 30% of patients were deficient in zinc, but almost none of the patients was magnesium deficient. Contrary to initial thought only 3% of patients had weight loss and lack of BMI. There was no significant correlation between the severity or extent of the disease and different deficiencies; but in almost all cases, there was the significant relationship between duration and/or disease activity, and deficiencies.

*Conclusion:* Although the severity of the disease cause more harm patients and their problems early is a lot more in the long term but what will hurt patients, deficiencies resulting from the duration. Meanwhile the role of doctors and nutrition experts to eliminate nutritional deficiencies affecting patient health care was more important in this context requires. Send Date: 2010/08/04

### Category : 5.2 Etiology/epidemiology T-S-044

# A four-year report from Mashhad IBD Registry 2004 to 2008

Abbas Esmaeilzadeh<sup>1</sup>, Mina Erfani<sup>2\*</sup>, Hamid Reza Sima<sup>1</sup>, Zahra Rajai<sup>2</sup>, Hanieh Hosseinnezhad<sup>3</sup>, Omeed Moaven<sup>4</sup>, Abstracts of Iranian Congress of Gastroenterology and Hepatology- 2010

Farideh Moradi Moghadam<sup>1</sup>, Ali Mokhtarifar<sup>1</sup>

<sup>1</sup> Department of Internal Medicine, Imam Reza Hospital, Mashhad University of Medical Sciences

<sup>2</sup> Medical School, Mashhad University of Medical Sciences

<sup>3</sup> Mashhad Branch, Islamic Azad University, Young Researcher's Club

<sup>4</sup> Gastric Cancer Research Group, Mashhad University of Medical Sciences

*Introduction:* Inflammatory bowel disease (IBD) is a group of disorders driven by immune dysregulation, genetic and environmental factors and diagnosed by symptoms of abdominal pain , diarrhea (often bleeding type), hematochezia or rectorrhagea, vomiting, weight loss, etc. The aim of this study is to report epidemiologic and clinical aspects of IBD in Northeastern provinces

*Method:* This cross-sectional Analytical study was done on 139 patients diagnosed as IBD referring from northeastern provinces of Iran to IBD Registry Center of Mashhad University of Medical Sciences from 2004 to 2008. Demographic, clinical, paraclinical data and a full history including known risk factors for IBD were collected by the patient's files using a standard questionnaire, and physical examination was done by a physician. Data analysis was performed using Pearson Chi-square and Fisher exact test

Results: Among these 139 patients (46% male, 54% female); Mean age of  $(36.75\pm13.65)$  the main chief complaint was bleeding diarrhea (73.4%). 6.5% of patients suffered from extra intestinal complications with significantly higher frequency of mucosalskeletal complication (6.9%); and also 2.2% suffered from intestinal complications. There was a significant correlation between the extension of the disease and mucosal ulcers 51.7% (P=0.026) loss of vascular pattern 56 % (P<0.001), diffuse erythema 56.6 % (P=0.008) and friability 48.2% (P=0.045). According to extension of the disease, the correlation between rectum and loss of vascular pattern containing (62.2%) (P=0.025), left colon and weakness/fatigue containing 80.9% (P=0.02) rectosigmoid and loss of vascular pattern containing 63.1% (P=0.01) were also considered significant.)

*Conclusion:* Smoking, positive family history for IBD and different genders were not associated to any special intestinal or extra intestinal symptoms and histopathological pattern of disease. Registry is sug-

gested as a useful indicator to understand the epidemiology of the disease. More studies on IBD patients are required to assess the exact pattern of IBD in Iran.

Send Date: 2010/09/22

Category: 5.3 Genetics T-S-045

# Frequency of thiopurine S-methyltransferase alleles in southeast Iranian population

Ali Bahari<sup>1</sup>, Mohamad Hashemi<sup>2</sup>, Zohre Bari<sup>3\*</sup>, Karim Moazeni<sup>2</sup>, Mahmud Ali Keykhaie<sup>1</sup>

 <sup>1</sup> Department of Gastroenterology, Ali-ebn-Abitaleb hospital, Zahedan University of Medical Sciences, Zahedan, Iran.
 <sup>2</sup> Department of Clinical Biochemistry, Zahedan University of Medical Sciences, Zahedan, Iran.

<sup>3</sup> Department of Internal Medicine, Ali-ebn-Abitaleb hospital, Zahedan University of Medical Sciences, Zahedan, Iran.

Introduction: Thiopurine S-methyltransferase (TPMT) is an enzyme being involved in the metabolism of thiopurine drugs such as 6-mercaptopurine and azathioprine which are generally used for treatment of various diseases such as inflammatory bowel disease. Mutations in TPMT alleles result in moderate activation or inactivation of the enzyme, leading to accumulation of thioguanine nucleotides in hematopoietic tissues, causing severe toxicity. Although the distribution of TPMT polymorphisms are well known across various populations worldwide, very little is currently known about the frequency of these variants in the Iranian population. The aim of the present study was to investigate the most common TPTM alleles (TPMT\*2, TPMT\*3A, TPMT\*3B and TPMT\*3C) in a samples of southeast Iranian population.

*Method:* This population based cross-sectional study was performed on 832 apparently healthy individuals (41.1% male and 58.9% female) in Zahedan. A multiplexed allele-specific polymerase chain reaction assay was used for detecting the presence of the G238C, G460A, and A719G polymorphisms.

*Results:* Among the 832 individuals, the frequencies of 238G>C, 460G>A, and 719A>G polymorphism were 4.3%, 6.6%, and 4.4%, respectively. The frequency of the four allelic variants of the TPMT gene, TPMT\*2 (G238C), TPMT\*3A (G460A and A719G), TPMT\*3B (G460A) and TPMT\*3C

(A719G), were 2.16%, 1.68%, 1.62% and 0.54%, respectively. The distribution of the TPMT genotypes were 87.98% for TPMT\*1/\*1, 4.33% for TPMT\*1/\*2, 3.36% for TPMT\*1/\*3A, 3.24% for TPMT\*1/\*3B, and 1.08% for TPMT\*1/\*3C.

*Conclusion:* Since 93.99% of population had no TPMT mutations and no one was hemozygote for TPMT mutations, it may be possible to prescribe thiopurine drugs with little fear of adverse reactions in this population. Send Date: 2010/07/24

Category : 5.4 Diagnosis and monitoring T-S-046

Frequency of positive serology for celiac disease in patients with inflammatory bowel disease

Hamid Tavakkoli<sup>1\*</sup>, Saeed Haghdani<sup>1</sup>, Haideh Adilipour<sup>2</sup>, Mohammad Hasan Emami1, Peyman Adibi<sup>3</sup>, Mohammad Minakari<sup>3</sup>, Khalil Ahmadi<sup>3</sup>

<sup>1</sup>Poursina Hakim Research Institute, Isfahan University of Medical Sciences

<sup>2</sup> Poursina Hakim Research Institute, Poursina Hakim Research Institute

<sup>3</sup> Department of gastroenterology, Isfahan University of Medical Sciences

*Introduction:* There is association of celiac disease (CD) with several gastrointestinal illnesses. We aim to determine the prevalence of CD in patients with IBD to evaluate the value of the routine serological tests for CD in these patients.

*Method:* Patients with IBD underwent screening test for CD. The test was based on IgA anti-tTG antibody which assay with an ELISA method and IgA EMA by the indirect immunofluorescence method.

**Results:** The study consisted of 100 patients, with a mean age of  $34.74 \pm 12.03$  (SD) years. The mean Simplified Crohn's Disease Activity Index was  $90 \pm 17$  (SE) and mean colitis activity index was  $3.46 \pm 0.96$  (SE). 17 patients (17%) had Ig A antitTG antibody levels above the cutoff (cut off > 20). 32 patients were positive for IgA EMA. IgA EMA was positive in 9 IgA anti-tTG positive patients (3 CD and 6 UC). All patients who were positive for anti t-TG and/or IgA EMA were invited for duodenal biopsy. Unfortunately none of patients accepted undergoing duodenal biopsy

Conclusion: We found a serologic celaic disease

prevalence of 9%, a higher prevalence of serologic celiac disease in IBD patients than in the general population. Not performing endoscopy and small sample size challenge our findings and further studies are needed to clarify association between IBD and celiac disease. Key words: Celiac disease, Inflammatory bowel disease. Send Date: 2010/09/20

#### Category: 5.5 Treatment

T-S-047

# Clinical evaluations of Silymarin in Patients with Ulcerative Colitis

Miriam Mohammadi<sup>1</sup>, Houmayoon Vahedi<sup>2</sup>, Mohammad Abdollahi<sup>3</sup>, Reza Malekzadeh<sup>2</sup>, Mansoor Rastegarpanah<sup>2\*</sup>

<sup>1</sup> Azad Islamic University, Pharmaceutical Sciences, Azad Islamic University

<sup>2</sup> Digestive Disease Reserach Center, Tehran University Of Medical Sciences

<sup>3</sup> Pharmaceutical Reserach Center, Faculty Of Pharmacy, Tehran University Of Medical Sciences

*Introduction:* There are no safe and effective medical therapies yet available for patients with ulcerative colitis. Many drugs are being evaluated for safety and efficacy as an alternative to current drug therapies in IBD. Silybum marianum, are known commonly as silymarin and silibin and possess anti-inflammatory actions by inhibiting lipid peroxidation. In-Vitro studies have shown the efficacy of Silymarin in rat model.

*Method:* We evaluated the safety and efficacy of silymarin in patients with ulcerative colitis (UC) in this pilot study (Randomized double blind, placebo controlled clinical trial) at Shariati hospital gastrointestinal disease research center. 80 patients with UC were randomly enrolled in two groups in our study. Either silymarin 140 mg (n = 42) or placebo (n = 38) orally was given daily for 6 months period along with their standard therapy. The efficacies were assessed by Disease Activity Index.

**Results:** 15 patients (4 of silymarin group and 11 of placebo group) excluded from study because of adverse drug effects (headache, diarrhea, urticarria, pain abdomen) and 15 patients did not want to continue with this study. 28 people from silymarin group (100%) showed improvement of clinical and Para-clinical variables Only 3 people from the

placebo group (13.63%) showed improvement of clinical symptoms. (P < 0.005)

A statistically significant improvement in Hb (11.8+-1.6 vs.13 +-1.2, p< 0.001) and ESR levels (23.7 +-11.5 vs.10.8+-3.2, p< 0.001) occurred with Silymarin treatment. Disease Activity Index significantly decreased (11.32+- 3.1 vs.10.71+- 2.8, P=0.001).

*Conclusion:* The results of this study showed improvement in disease index and lowered ESR with supplementation of Silymarin in Ulcerative Colitis patients compared with placebo. Send Date: 2010/09/21

Category : 5.7 Management T-S-048

# Study of life events and Social Support in Inflammatory Bowel Disease

Reza Bagherian<sup>1</sup>, Hamed Daghaghzadeh<sup>2</sup>, Monireh Seraj<sup>3</sup>, Shadab Nasre-Isfahani<sup>4</sup>,

Ali Toghiani<sup>5\*</sup>, Hamid Afshar<sup>6</sup>, Peyman Adibi<sup>2</sup> <sup>1</sup>Assistant Professor, Department of Psychiatry and Behavioral Sciences Research Center, School of Medicine, Isfahan University of Medical Sciences, Isfahan, IRAN.

<sup>2</sup> Associate Professor, Department of Internal Medicine, Isfahan University of Medical Sciences, Isfahan, IRAN.

<sup>3</sup> School of Medicine, Isfahan University of Medical Scienses, Isfahan, IRAN

<sup>4</sup> School of Medicine, Isfahan University of Medical Scienses, Isfahan, IRAN.

<sup>5</sup> Medical Student, Young Researchers Club, Islamic Azad University, Najafaband Branch, Isfahan, IRAN.

<sup>6</sup> Associate Professor, Department of Psychiatry, School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran. *Introduction:* Although environmental factors are

essential components of the pathogenesis of inflammatory bowel disease, the link between life events, social support and inflammatory bowel disease (IBD) is unclear. Hypothesis is that number of the exposure of life events and degree of social support among patients with IBD different from normal people.

*Method:* In this case-control study, 45 patients with IBD and 30 normal people were entered. All participants completed Holmes & Rahe Readjustment Rating Scale and Iranian version of Multidimensional Scale of Perceived Social Support (MSPSS). Student's t-test, Chi-squared test, Covariance analysis and MONCOVA were used to analyze the data.

**Results:** Covariance analysis showed that Significant differences between case and control groups in Readjustment Rating Scale (F=30.19, p= 0.0001). However, MANCOVA showed no significant difference between tow groups in MSPSS (F=0.36, p= 0.78). **Conclusion:** Although the findings suggest that an association between stress and IBD, the findings do not support a link between social support and IBD. Send Date: 2010/08/16

Category : 6.1 Malignant disease – pathogenesis T-S-049

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

sahand Sohrabi<sup>1</sup>, reza malekzadeh<sup>1\*</sup>, reza Ansari<sup>1</sup>, farin kamangar<sup>2</sup>

<sup>1</sup> Digestive Disease Research center, Tehran University of Medical Sciences Tehran, Iran.

<sup>2</sup> Digestive Disease Research center, Department of Public Health Analysis, School of Community Health and Policy, Morgan State University, Baltimore, MD, USA

*Introduction:* Sitting position, rather than squatting, during defecation has been hypothesized to be a risk factor for colorectal cancer (CRC). We conducted a case-control study to test this hypothesis.

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

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

*Conclusion:* In conclusion, our study did not support an appreciable role for using sitting toilets as risk factors for CRC.

Send Date: 2010/09/06

Category: 6.2 Malignant disease - diagnosis/histopathology

Abstracts of Iranian Congress of Gastroenterology and Hepatology- 2010

## T-S-050

# **Epidemialogy of Colorectal Cancer in Kurdistan** Ezat Rahimi<sup>1</sup>

<sup>1</sup> Kurdistan Digestive Research Center, Kurdistan *Introduction:* Colorectal cancer is a relatively common cancer of gasterointestinal tract. It has a world wide distribution with different prevalence among countries. This research was aimed to demonstrate the periodic prevalence of cancers of

colon and rectum in Kurdistan province

*Method:* The subjects were total number of patients with colorectal cancer who diagnosed .Data was collected from patient's files and archieves of pathalogy centers in Sanandaj.

**Results:** In our study the relative frequency of colon and rectum cancers were 62% and 38%, respectively. Ninety percent of cancers were adenocarcinoma while 7% were lymphoma and 3% were carcinoid tumor. Sixty one percent of patients were male and 39% were female. The prevalence of colorectal cancer in general population was 7/100000.

The most common age of colorectal cancer was above 60 years old. The mean age of the patients was 50 years old. The range of patient's age was between 4 to 93 years.

*Conclusion:* Colorectal cancer had relatively high incidence rate in Kurdistan province in our study. We recommend further evaluation to detect risk factors for colorectal caneers here.

Send Date: 2010/09/27

Category : 6.3 Malignant disease – management T-S-051

MALT Lymphoma of the Rectum: Report of a Case Treated with Chemotherapy Mohammad Reza Ghadir<sup>1\*</sup>, Maryam Vaez Javadi<sup>2</sup>,

Ali Reza Bakhshipour<sup>3</sup>, Shadi Kolahdouzan<sup>4</sup>

<sup>1</sup> Shahid Beheshti Hospital, Qom University of Medical Sciences

<sup>2</sup> Qom University of Medical Sciences, Qom University of Medical Sciences

<sup>3</sup> Zahedan University of Medical Sciences, Zahedan University of Medical Sciences

<sup>4</sup> Shariati Hospital, DDRC, Tehran University of Medical Sciences

*Introduction:* The term mucosa-associated lymphoid tissue (MALT) lymphoma was first introduced by

Isaacson and Wright in 1983.(1), The most frequently involved extranodal location for MALT lymphomas is gastrointestinal (GI) tract and the stomach is the most common GI site. MALT lymphomas of the large intestine are very rarely observed. (2, 3),MALT-type lymphomas of the gastrointestinal tract are low-grade lymphomas derived from this specialized lymphoid tissue. (1, 4), A treatment for colonic MALT lymphoma has not yet been established. Here, we report a case of MALT lymphoma manifesting in colonoscopy as multiple mucosal discolorations and some localized granularity of the rectal mucosa in a 56 year-old man. Complete remission was achieved with combination chemotherapy.

Method: A 56 year-old man from Saveh-Iran was referred for investigation of five months history of generalized abdominal pain, fresh rectal bleeding and constipation. Since five months prior to the referral time, his pain was sustained with no radiation to any other area, and was neither positional nor related to feeding and activity. He had about 8kg weight loss, fever, night sweating and decreased appetite before admission to the hospital. During the prior years, he had no history of diabetes mellitus, hypertension, ischemic heart disease, tuberculosis, hyperlipidemia and malignancy. The patient had a history of occasional dyspepsia and was opium addicted and cigarette smoker (20 pack-year), but no drughistory was present. There were no risk factors for HIV infection and there was no preceding history of inflammatory bowel disease. At the time of presentation, his general health was good and appeared normal without any remarkable findings except mild to moderate splenomegaly and foot finger clubbing on physical examination.

*Results:* management and follow-up of patientled to the diagnosis of low grade marginalB-cell lymphoma of MALT type presenting asdiffuse multiple lymphomatous polyposis. Thepatient's good general health and the diffusenature of the disease led to chemotherapy(CHOP: cyclophosphamide, doxorubicin,vincristine and prednisolone) after referring tooncology clinic.

His presenting symptoms, includingrectal bleeding and abdominal pain, anorexia andnight sweating subsided after treatment. Threemonths after treatment, a follow-up colonoscopyrevealed no

### abnormalmucosa.

*Conclusion:* MALT lymphoma develops in diverse anatomic locations such as stomach, salivary gland, thyroid, lung, and breast;(21), however, colorectal involvement is extremely rare.(22, 23) Colonic MALT lymphoma has not been well investigated as compared to stomach MALT lymphoma.

The metastatic ability and sensitivity against chemotherapy of the colonic MALT lymphoma is not known. Because colonic MALT lymphoma presents with various features, meticulous observation is mandatory in colonoscopic evaluations. In general, those patients who undergo resection with or without adjuvant chemotherapy or radiotherapy have the best prognosis.

Send Date: 2010/08/31

Category: 6.4 Other colonic and anorectal disorders T-S-052

# Polyethylene Glycol versus Lactulose in chronic pediatric constipation

Ali Aghapour<sup>1</sup>, Mohsen Aarabi<sup>1</sup>, Shahryar Semnani<sup>1\*</sup>, Sima Besharat<sup>1</sup>, Gholamreza Roshandel<sup>1</sup>, Mohammad Sobhani<sup>1</sup>

<sup>1</sup> Golestan Research Center of Gastroenterology and Hepatology, Golestan University of Medical Sciences, Golestan Research Center of Gastroenterology and Hepatology, Golestan University of Medical Sciences *Introduction:* The most prevalent cause of abdominal pain in pediatric medicine is constipation, which has no underlying pathology and defined as functional constipation in 95% of cases. This study was designed to compare the therapeutic effect of polyethylene glycol (PEG) and lactulose in treating chronic functional constipation in children.

*Method:* In this randomized double blind clinical trial, patients were classified into two groups (lactulose and PEG). During an eight-week period, they were under treatment with an average of 3.5 gr/day for PEG and 7gr/day for lactulose. Successful treatment was defined as defecation (painless and soft or in a normal manner) three times or more in a week. Analysis was done throughout calculating the success rate in both groups and comparing them, then reporting the relative risk and number needed to treat (NNT).

**Results:** Response to treatment in the second week

was significantly higher in PEG than lactulose

(P-value<0.0001). There was significant difference in response rate between two groups in the 4th week and 6th week (P-value<0.0001). In the 8th week all patients in PEG group were treated successfully but in lactulose group there were 5 cases without response (7.7%). Complications were seen more in PEG (1.3 times) than in lactulose, but the difference was not significant.

*Conclusion:* These results showed that a 4-weeks treatment with PEG (3 gr/d) could lead to a response rate of 87% in children, comparing to lactulose which needs at least 8 weeks of treatment. Send Date: 2010/07/26

Category : 6.4 Other colonic and anorectal disorders T-S-053

# بررسی تاثیر چاقی در میزان آمادگی روده برای کولونوسکوپی

Azita ganji<sup>1\*</sup>, tayebe hosiynei<sup>1</sup>,

mohamad reza hedayati2, hamid reza sima1 <sup>1</sup> Gastroenterology, mashhad university of medical sciences <sup>2</sup> Iranian Academic Center for Education, Culture & Research, mashhad university of medical sciences

مقدمه : نئوپلاسمها ی کولون بخصوص در مردان چاق ۲ تا ۳ برابر افراد با وزن نرمال می باشد. از طرفی علیرغم افزایش ریسک در افراد چاق این بیماران کمتر از نظر کانسر اسکرین می شوند . گر چه که در مطالعات مختلف اثر BMI پایین در افزایش احتمال کولونوسکوپی ناقص و عدم توانایی رسیدن به سکوم و حتی در مشکل بودن و طولانی شدن کولونوسکوپی مطرح شده است ولی اثر چاقی در کیفیت آمادگی کولون فقط در ۱ مطالعه در امریکا در سال ۲۰۰۸ بررسی شده است کیفیت آمادگی کولون فقط در ۱ مطالعه در امریکا در سال ۲۰۰۸ بررسی شده است است BMI با آماده سازی ناکافی روده ارتباط داشته باشد بر آن شدیم که اثر BMI در کیفیت آماده سازی ناکافی روده ارتباط داشته باشد بر آن شدیم که اثر BMI پیشگویی کننده عدم آمادگی روده به طور مناسب برای کولونوسکوپی می باشد و آیا افراد با BMI بالا نیاز به تمهیدات و مصرف داروی بیشتر از افراد با BMI نرمال پایین دارند این تحقیق طراحی شد.

روش کار : بیمارانی که برای انجام کولونوسکوپی به مرکز درمانی بیمارستان امام رضا(ع) مراجعه داشتند و کولونوسکوی تا خم کبدی یا بیشتر انجام شده بود تحت این بررسی قرار گرفتند. بررسی شامل میزان آمادگی روده برای کولونوسکوپی بر اساس Aronchick Scale بود. میزان آمادگی روده توسط آندوسکوپیست با معیار ۱ عالی ۲ خوب ۳ متوسط ۴ ضعیف و ۵ غیر قابل بررسی معیار گذاری شد. ( بر اساس Aronchick Scale ) آمادگی روده کمتر و یا مساوی ۲ قابل قبول گزارش شده وآمادگی ۳ و یا بیشتر از ۳ غیر قابل قبول بررسی در نظر گرفته شد. برای تمام بیماران دستورات آمادگی با استفاده از رژیم دارویی مشابه و ارزان و روتین و رژیم غذایی یکسان تجویز شد. معیارهای خروج از مطالعه : ۱. بیمارانی که قسمتی و یا کل کولون شان را برداشته بودند ۲. بیمارانی که بعد از انجام کلونوسکوپی قبلی به دلیل عدم آمادگی برای نوبت بعدی مراجعه کرده بودند. ۳. بیمارنی که به دلایلی اختلال موتیلیتی داشتند مانند بیماران دیابتیک،بیمارانی که داروی اعصاب استفاده می کردندو بیمارانی که اعتیاد به مواد مخدر را داشتند.

نتایج: در جریان ۶ ماه مطالعه ۱۸۵ بیمار که برای کولونوسکوپی کامل مراجعه کرده بودند وارد مطالعه شدندو نتیجه کولونوسکوپی ثبت گردید. سن بیماران بین ۱۳ تا ۹۰ سال بود و میانگین سنی برای آنان ۴۸ سال بود. ۶۹٪ زن و بقیه مرد بودند. ۲۹٪ BMI نرمال داشتند ( مساوی ویا کمتراز BMI=۲۵) و ۴۰٪ اضافه وزن داشتند، ۱۰٪ چاق بودند (۳۰ BMI=۳۰ یا بیشتر) و ۱۹٪ BMI مساوی و یا بزرگتر از ۳۵ داشتند.

میزان اسکور امادگی روده برای کولونوسکوپی بین بیماران با BMI مختلف اختلاف معنی داری نداشت و با تقسیم به دو گروه با BMI بیشتر و کمتر از ۳۰ در سیتم اسکور بندی در افراد چاق میزان امادگی در هر چهار اسکور کمتر از افراد با BMI کمتر از ۳۰ بود ولی احتمالا به علت حجم نمونه کم این اختلاف معنی دار نبود . (میزان امادگی در افراد نرمال۳۷ ٪ در مقابل ۶۳٪در افراد چاق و عدم امادگی ۲۲٪ در افراد با وزن نرمال در مقابل ۳۵٪در افراد چاق)

نتیجه گیری: احتمالا میزان و نحوه امادگی کولون برای کولونوسکوپی در افراد چاق و نرمال بایدمتفاوت باشدگرچه که این اختلاف در مطالعه ما به علت حجم نمونه پایین معنی دار نشد ولی با توجه با انی که ضایعات و بیماریهای کولون از قبیل پولیپ و کانسر در افراد چاق شایعتر است و امادگی مناسب در این گروه اهمیت بیشتر دارد باید این تئوری در سطح وسیعتری بر سی شود.

Send Date: 2010/09/03

Category : 6.4 Other colonic and anorectal disorders T-S-054

# The Efficacy Of Fluoxetine In Compare With Doxepin In Treatment Of Irritable Bowel Syndrome: Results Of Randomized Clinical Trial

Ali Asghar Keshavarz<sup>1\*</sup>, Homayoon Bashiri<sup>1</sup>, Shahrzad Bazargan-Hejazi<sup>2</sup>

<sup>1</sup> Gastroenterology and Hepatology, Imam Reza hospital, Kermanshah University of Medical Sciences, Kermanshah, Iran

<sup>2</sup>Psycholog, David Geffen School of Medicine at UCLA, Los Angeles, CA, United States

*Introduction:* The efficacy of antidepressants in irritable bowel syndrome (IBS) is controversial .Apart of psychoneurological changes, immune activation of gut are involved in IBS pathogenesis. Drugs with immune modulation property may be an effective therapy.

*Method:* No trial so far has compared the efficacy of Fluoxetine (Serotonin-selective reuptake inhibitors-SSRI) and Doxepin (Tricyclic antidepressants - TCAs) with its antihistaminic effects in IBS patients.

In a randomized clinical trail study, 200 patients who were seen in an outpatient gastroenterology clinic from 2006 to 2007 and had Rome II criteria of IBS were recruited. Before being randomized to the therapy, patients' severity of symptoms was evaluated by Gastro Intestinal Symptoms Rating Scale (GISRS) ranging from: 0= weak, to 3= severe (baseline score). Patients then were randomized based on day of the week to receive therapy during their outpatient visits: Odd-days group received Fluoxetine 20mg /day and even-days group received Doxepin 20mg/ day for 12 weeks. Four weeks after the end of the therapy patients' severity of symptoms were re-evaluated by two scales: (i) GISRS and (ii) self-report of improvement in symptoms more than 50% of the times measured as "Yes/No" (follow-up score). Baseline and follow-up scores were compared using independent t-test (Levene's test or Mann-Whitney test as appropriate). Analysis was done using SPSS software version12.

**Results:** Fluoxetine was effective for abdominal pain, bloating, increase in bowel movement, stool consistency, urgency and incomplete evacuation (p<0.05). Doxepin was effective for abdominal pain, bloating, stool consistency, urgency and incomplete evacuation (p<0.05). The positive effect of Doxepin on bloating, stool consistency, urgency and incomplete evacuation was more than Fluoxetine, and the positive effect of Fluoxetine in abdominal pain and bowel movement was more than Doxepin (p<0.05). The positive response (50% improvement of symptoms) was 67% and 52% in Doxepin and Fluoxetine groups, respectively.

*Conclusion:* According to the study results, Doxepin is more likely to be effective than Fluoxetine in relieving most of the symptoms in IBS patients. Therefore suggesting that when there is a need for antidepressant therapy in non IBS-C patients, Doxepin could be the drug of choice. Send Date: 2010/09/13

Category : 6.4 Other colonic and anorectal disorders T-S-055

Evaluation of effects and complications of probiotics in microscopic colitis, a double blind placebo control clinical trial Amir Taheri<sup>1\*</sup>, Ali Sadighi<sup>1</sup>, Farshad Sheykh esmayeeli<sup>1</sup>, Fardin Gharibi<sup>1</sup>, Elham Farhangi<sup>2</sup>

<sup>1</sup>Kurdistan digestive research center, kurdistan university of medical science

<sup>2</sup> private clinic, kurdistan university of medical science Introduction: Microscopic colitis is one of causes that induce chronic nonbloody watery diarrhea. Probiotics are useful organisms that have been used in many kind of diarrheal disease (e.g. IBD, IBS, traveler's diarrhea & etc), but effects of these resources have not been evaluated adequately in microscopic colitis. Only a couple of articles have been published in this field and most of them have been done on Collagenous colitis and with low sample volume. Regarding to previous research that has been performed in Kurdistan province of Iran, incidence of microscopic colitis (especially Lymphocytic colitis) seems to be very high in this area, so we decided to perform a double blind clinical trial on patients with microscopic colitis in order to evaluate the effects and complication of probiotics in these patients.

*Method:* Fifty two patients with microscopic colitis (46 with Lymphocytic & 6 with Collagenous colitis) were enrolled in this study (27 in Probiotic and 25 in Placebo group). All patients received Loperamide 1mg daily. Patients in Probiotic group also received probiotics and patients in placebo groups received placebo with same appearance twice daily for 4 weeks. [Both probiotics and placebos had been made by wren laboratories in England under trade name of Optibac, and probiotics had been consisted of Lactobacillus rhamnosus Rosell-11, Lactobacillus acidophilus Rosell-52, Bifidobacterium longum Rosell-175, Lactococcus lactis Rosell-1058, Bifidobacterium breve Rosell-70, Bifidobacterium bifidum Rosell-71.And concentration of probiotics was 2.5billion in each capsule i.e. 5 billion daily for each patient]. Severity of abdominal pain (by vas system), frequency of defecation and frequency of nocturnal defecation Along with complications were assessed before and after treatment in both groups.

**Results:** Patients were match for age, sex, proportion of lymphocytic to Collagenous colitis and also severity of symptoms in both groups before treatment. In patients with lymphocytic colitis abdominal pain and frequency of defecation (both in days and nights) were decreased more significantly in probiotics group than in placebo group. (p<0.001).But in patients with Collagenous colitis such dramatic differences were not seen between two groups. (p>0.01).Neither in Probiotic nor in placebo group, serious complications, were not seen in this study. Only one of patients in Probiotic group terminated the study before ending because of intensifying of her diarrhea. Other complications were minimal and same statistically in both groups. **Conclusion:** This study showed that probiotics are effective and safe in treatment of lymphocytic colitis but they were not significantly effective in patients with Collagenous colitis.

Send Date: 2010/09/19

Category : 6.4 Other colonic and anorectal disorders T-S-056

# comparison of blood lead level in children complain of constipation with control

shohreh maleknejad<sup>1\*</sup>, babak ghomashpasand<sup>1</sup>

<sup>1</sup> guilan university medical science, guilan *Introduction:* Lead poisoning is a preventable environmental disease that can have adverse health effects such as constipation which is a common problem in children. The aim of this study was comparing lead poisoning frequency in children with and without constipation.

Method: In this cross sectional study 90 children 2-12 years afflicted with constipation were selected from pediatric clinic of 17 shahrivar Hospital of Rasht. Children with normal bowel habits served as non-constipated controls. Blood lead levels (BLL) were measured. Lead poisoning is considered as BLL>10 µg/dl. The questionnaire provided information about age, sex and lead exposure factors. Data were analyzed by 2 test using SPSS version 18. **Results:** Frequency of lead- poisoned patients in case group (37.8%) was significantly higher than control group (8.9%) (P<0.05). Odds Ratio of constipation in lead poisoned children was 6.22 times to non-lead poisoned cases (confidence interval: 2.682-14.441). Frequency of lead- poisoned patients in case group was significantly higher than control group in the children < 7 years (40.2% versus 10.0%), males(40.9% versus 9.3%), females(34.8% versus 8.3%), residents in old house(43.1% versus 9.7%), residents in new house(28.1 %versus 8.5%), living in low traffic place(26.8% versus 5.3%), low risk parental job(33.3% versus 10.9%), high risk parental job(40.7% versus 3.8%) and living urban area(40.5% versus 9.9%). Age of living house and traffic rate of living place were confounding variables.

*Conclusion:* Despite high rate of lead poisoning in constipated children, there is no significant difference between two groups in respect with age, sex, parental job and living place (rural or urban). Send Date: 2010/09/26

Category: 7.2 Nutrition - metabolism– pharmacology T-S-057

**Comparing livergol and vit E on NASH patients** Ahmad Sobhani<sup>1\*</sup>, Matina Jafary<sup>2</sup>,

Mehran Rogha<sup>1</sup>, Ali Nourozi<sup>3</sup>

<sup>1</sup> Department of Internal Medicine, Islamic Azad University, Najafaband Branch, Isfahan, Iran

<sup>2</sup> Medical student, Islamic Azad University, Najafaband Branch, Isfahan, Iran

<sup>3</sup> Department of Radiology, Islamic Azad University, Najafaband Branch, Isfahan, Iran

Introduction: Non Alcoholic Fatty Liver Disease (NAFLD) is a common and frequently silent liver disease marked by fat accumulation in the liver along with inflammation, hepatocellular injury and fibrosis. Patients typically have few symptoms but can have mild to moderate elevations in serum ALT levels and evidence of fat in the liver by ultrasound. A liver biopsy is required to diagnose NAFLD, separating simple hepatic steatosis (fatty liver) from steatohepatitis. NAFLD resembles alcoholic liver disease histologically but by definition occurs in persons who drink little or no alcohol. According to prevalence of fatty liver disease in Iran and recommendation to treat, this study examines the comparision between the effect of livergol(contain silymarin in silybum marianum)and vitamin E as one of this disease treatments.

**Method:** In a clinical trial study 70 fatty liver patients were selected and randomly divided in two groups. The first group treated by Livergol and the second group treated under Vitamin E (control) for 3 mounths. We provided ultrasonographic diagnostic for all patients in the start and end of study.

Results: In the end of study the frequency distribution

of fatty liver improvement in Vit.E and Livergol groups was 31.4% and 67.6 respectively and according to chi-square test the difference between two groups was statistically significant (P<0.001).

*Conclusion:* Livergol have a better effect than vitamin E for treatment of non alcoholic fatty liver disease and because low side effects for this drug, our physicians can prescribe for patients. Send Date: 2010/08/20

Category: 7.3 Metabolic/genetic disorders T-S-058

#### Non-Alcoholic Fatty Liver Disease and Correlation of Serum Alanin Aminotransferase (ALT) Level with Histopathologic Findings

Somaye Khosravi<sup>1</sup>, Seyed-Moayed Alavian<sup>2</sup>,

Ali Zare<sup>3</sup>, Nasser Ebrahimi Daryani<sup>1\*</sup>,

Seyed-Mohammad Fereshtehnejad<sup>4</sup>, Nargess Ebrahimi Daryani<sup>1\*</sup>, Peiman Habibollahi<sup>1</sup>, Mohammad Reza

Keramati<sup>5</sup>, Mohammad Reza Pashaie<sup>1</sup>,

Sahar Taba taba Vakili<sup>1</sup>, Sina Abdollahzadeh<sup>6</sup> <sup>1</sup> Department of Gastroenterology and Hepatology, Tehran University of Medical Sciences, Tehran, Iran

<sup>2</sup> Center for Gastroenterology and Liver Disease, Baqiatallah University of Medicine and Tehran Hepatitis Center, Tehran, Iran

<sup>3</sup> Department of Pathology, Firouzgar Hospital, Iran University of Medical Sciences, Tehran, Iran

<sup>4</sup> Gastrointestinal & Liver Disease Research Center (GILDRC), Firoozgar Clinical Research Development Center (FCRDC), Iran University of Medical Sciences, Tehran, Iran

<sup>5</sup> Department of Surgery, Iran University of Medical Sciences, Tehran, Iran

<sup>6</sup> Department of Gastroenterology and Hepatology, Students Scientific Research Center, Tehran University of Medical Sciences, Tehran, Iran

*Introduction:* Non alcoholic fatty liver disease (NAFLD) has been recognized to be the most common cause of chronic liver disease worldwide . Hepatic transaminases, alanine (ALT) and aspartate aminotransferase (AST), are hepatocellular injury indicators. Several documented studies demonstrated that high ALT levels are correlated with the higher risk of NASH We aimed to characterize the histopathologic specifications of Non-Alcoholic Fatty Liver Disease(NAFLD), in patients with little or no history of alcohol consumption based on the level of

serum alanin aminotranferase(ALT).

**Method:** In a cross-sectional study, biopsy proved NAFLD patients from two gastroenterology clinics were assessed. Patients' histopathologic, demographic, and laboratory data of the patients were retrospectively collected. We defined two groups according to the ALT level (cut-point of 35 U/l), and quantitative pathologic grading of all biopsy specimens was calculated based on Brunt Scoring Values.

**Results:** Data from 147 NAFLD patients including 127 males (86.4%) and 20 females (13.6%) with the mean age of 41.36 years (SD=11.18) was analyzed. Considering ALT level, mean quantitative grade of hepatosteatosis was 1.50 (SD=0.67) and 1.74 (SD=0.73), p=0.136 and advanced fibrosis (consisted of grades III and cirrhosis) 4.5% (1/22) and 5.6% (7/125), p=0.327 were not significantly different. *Conclusion:* These findings reflect ALT's little contribution to predict NAFLD severity. Thus, considering ALT levels as an indicator of disease severity may result in false direction of physicians and patients. Send Date: 2010/08/14

Category: 7.3 Metabolic/genetic disorders T-S-059

Non-alcoholic steatohepatitis and influence of age and gender on histopathologic findings Nargess Ebrahimi Daryani<sup>1\*</sup>, Nasser Ebrahimi Daryani<sup>1</sup>, Seyed-Moayed Alavian<sup>2</sup>, Ali Zare<sup>3</sup>, Seyed-Mohammad Fereshtehnejad<sup>4</sup>, Peiman Habibollahi<sup>1</sup>, Mohammad Reza

Keramati<sup>5</sup>, Mohammad Reza Pashaie<sup>1</sup>

<sup>1</sup> Department of Gastroenterology and Hepatology, Tehran University of Medical Sciences, Tehran, Iran

<sup>2</sup> Center for Gastroenterology and Liver Disease, Baqiatallah University of Medicine and Tehran Hepatitis Center, Tehran, Iran

<sup>3</sup> Department of Pathology, Firouzgar Hospital, Iran University of Medical Sciences, Tehran, Iran

<sup>4</sup> Gastrointestinal & Liver Disease Research Center (GILDRC), Firoozgar Clinical Research Development Center (FCRDC), Iran University of Medical Sciences, Tehran, Iran

<sup>5</sup> Department of Surgery, Iran University of Medical Sciences, Tehran, Iran

*Introduction:* Nonalcoholic steatohepatitis (NASH) is a common clinicopathological entity with a

worldwide distribution. Because different sections of metabolic syndrome show significant differences that are related to age and gender, there is speculation that the clinicopathological features of NASH may also vary in relation to these factors. The following study was performed to evaluate the relationship between age and gender with pathologic findings on liver biopsies of NASH patients.

*Method:* An analytical cross-sectional study was conducted in two private gastroenterology clinics on biopsy proven patients suffering from NASH. Biopsy histopathologic findings as well as demographic and laboratory data of the patients at the time of biopsy were gathered retrospectively from clinical records. The grading and staging of histopathologic findings were performed according to the Brunt method after reevaluation of the slides by a pathologist. Patients were divided into two groups according to age (below and above 55 years). Mean quantitative grade of all pathologic findings were also calculated according to Brunt scoring values.

Results: A total number of 77 NASH patients, consisting of 58 males (75.3%) and 19 (24.7%) females with a mean age of  $41.99 \pm 11.80$  years (range, 18-70 years), were enrolled. The mean age (48.72±13.99) years vs 39.74±10.16 years, P=0.004 and AST level (75.11±29.68 U/L vs 52.78±25.00 U/L, P=0.002) was significantly higher in female patients. Mean quantitative grade of hepatosteatosis was significantly higher in females (2.00±0.82 vs 1.59±0.68, P=0.031) compared to males. 54% (34/65) of young patients had mild hepatosteatosis (Grade I) while only one patient (11.2%) in the older group had grade I hepatosteatosis. Patients aged >55 had significantly more severe hepatosteatosis (Grade III) (44.4% vs 9.5%, P=0.007) and the mean quantitative grade of hepatosteatosis was significantly higher among them (2.33±0.71 vs 1.56±0.67, P=0.002). Multivariate analysis after omitting the confounding role of age revealed a higher grade of hepatosteatosis in female patients (P=0.010)

*Conclusion:* These findings point toward the possible influence of age in the severity of steatohepatitis, portal and lobar inflammation in patients suffering from NASH while gender independently might contribute to the level of steatohepatitis. Send Date: 2010/08/14

Category : 7.3 Metabolic/genetic disorders T-S-060

# Wilson's disease Children

<sup>1</sup>Children Hospital Medical Center, Tehran, Iran

*Introduction:* Wilson's disease (WD) is a rare autosomal recessive disorder of copper metabolism with a highly variable spectrum of clinical manifestation in children. We evaluated the clinical and laboratory characteristics of 65 children with WD to determine clinical presentation, diagnostic course and outcome.

*Method:* We reviewed retrospectively the medical reports of 65 children whom were diagnosed as WD during 1383-1388 in children medical center. Physical examination, laboratory tests and liver biopsies of them were evaluated.

**Results:** 40 boys and 25 girls, with mean age was (8.5  $\pm$  3.1 gr) (3.5 -16 years). There were consanguity of parents (79.12%) 40 patients presented with hepatic disease, 5 with neurologic, 10 both hepatic and neurologic features. 4 patients were diagnosed by family screening in 5 different family, three of their sibling's child had WD. Hepatomegaly, icterus and d ascites were found in 25 and 48 patients respectively. Kayser - Flaeisher - Rings were present in 42 patient (64.61%) serum cerulopalasmin level was below 20 mg/dl in 62 subjects (95.38%). Urinary copper excretion was above 100 mg/24/hr in 55 patients (84.61%). Liver copper is increased in 45 cases (62.93%). Steatosis, chronic hepatitis and cirrhosis, were the most findings of liver biopsies. 15 patients with acute liver failure died. 2 patients died after liver transplantation, 45 patients were treated with D - Penicillamine and zinc. In 3 patients, with no response to this drug, therapy have changed to trientine, but they were died later.

*Conclusion:* Wilsons' disease in children may present in different forms. The top priorities of diagnostic process are to identify all patients as soon as possible, the medical therapy improved course of WD. Send Date: 2010/09/21

Category: 7.5 Cirrhosis and complications: basic aspects

#### T-S-061

### **Does Lipid Profile have some thing to do with Severity of Liver Damage in Cirrhotic Patients?**

Mohammad Reza Ghadir<sup>1</sup>, Ali Akbar Riahin<sup>2</sup>,

Abbas Havaspour<sup>3</sup>, Abolfazl Iranikhah<sup>4</sup> <sup>1</sup>Gastroentrology, Shahid Beheshti Hospital, Qom University of Medical Sciences

<sup>2</sup> Infectious diseases, Islamic Azad university of Qom

<sup>3</sup> Researcher, Islamic Azad university of Qom

<sup>4</sup> Gastroentrology, Qom University of Medical Sciences *Introduction:* An impaired lipid metabolism is often found in patients with chronic liver diseases. The aim of this study was to determine lipid profiles in patients with cirrhosis and control subjects and to relate the findings to the severity of the cirrhosis.

*Method:* This study was a descriptive-analytical research. 50 patients with cirrhosis were considered as «case» and matched non-cirrhotic admitted patients were regarded as «control». A questionnaire was used containing personal characteristics, etiology of cirrhosis, pathologic criteria of CHILD and MELD and lipid profile (total cholesterol, LDL, HDL and triglyceride). Data were analysed using SPSS software.

**Results:** In patients with cirrhosis, there was a significant decrease in triglyceride, total cholesterol, LDL and HDL serum levels compared with controls(mean 82 vs. 187, 138 vs. 184, 80 vs. 137 and 40 vs. 44, respectively; all p<0.05). Comparison of lipid profile with pathologic progression of cirrhosis revealed that with the exception of TG, serum level of lipids diminishes linearly with progression of liver damage (ANOVA, p < 0.05).

*Conclusion:* The decreases in the levels of serum total cholesterol, LDL and HDL in patients with cirrhosis were related to the increasing severity of cirrhosis. Keywords: Cirrhosis; Lipid Profile; MELD Score

Send Date: 2010/08/30

Category: 7.6 Cirrhosis and complications: clinical aspects T-S-062

```
مقایسه گلوکز ناشتا و آزمون تحمل گلوکز خوراکی
در تشخیص دیابت ملیتوس در سیروز کبدی
علی اکبر حاج آقامحمدی<sup>(*</sup>، یوسف محمدی کبار<sup>۲</sup>، امیرضیائی<sup>۲</sup>
'بخش داخلی، دانشگاه علوم پزشکی قزوین
```

ٔ بخش داخلی، دانشگاه علوم پزشکی اردبیل

<sup>۲</sup>مرکز تحقیقات بیماریهای متابولیک، دانشگاه علوم پزشکی قزوین زمینه و هدف: اختلال تحمل گلوکز و دیابت ملیتوس در سیروز کبدی شایع بوده و به عنوان یک عامل پیشگویی کننده پیش آگهی در این بیماران مطرح است. روش کار: در این مطالعه توصیفی - تحلیلی. کلیه بیماران مبتلا به سیروز کبدی مراجعه کننده به درمانگاه گوارش از ۱۳۸۷/۲/۱ لغایت ۸۷/۱۲/۱۵ انتخاب شدند (سرشماری) و بعد از اطلاع رسانی کامل رضایت نامه آگاهانه کتبی از بیماران اخذ گردید و پرسشنامه طرح تحقیقاتی تکمیل شد. آزمون گلوکز ناشتای سرم و آزمون تحمل گلوکز خوراکی (OGTT) با ۷۵ گرم گلوکز و اندازه گیری قند ۲ ساعت بعد به عمل آمد. برای آنالیز داده های کمی (Quantitative data) از آزمون بر آورد نسبت و برای آنالیز داده های کیفی از آزمون مجذور کای و تست دقیق فیشر استفاده شد. ارزش احتمالی کمتر از ۰/۰۵ از نظر آماری قابل توجه تلقی گردید. نتایج: در این مطالعه تعداد ۹۲ بیمار با میانگین سنی ۵۴/۴ سال ( محدوده ۱۵ تا ۸۴ سال ) مورد بررسی قرار گرفتند. از این تعداد ۴۱ نفر ( ۴۴/۶ درصد ) زن و ۵۱ نفر ( ۲/۴ درصد ) مرد بودند. بر اساس گلوکز ناشتای سرم ۶۲ بیمار ( ۶۷/۴ ٪) FBS نرمال، ۱۶ بیمار (۱۷/۴ ٪) گلوکز ناشتای مختل (IFG) و ۱۴ بیمار ( ۱۵/۲٪) دیابت ملیتوس (DM) داشتند. بر اساس ۳۰OGTT بیمار (۳۲/۶٪) تحمل گلوکز نرمال (NGT)، ۲۶ بیما, (۲۸/۳٪) اختلال تحمل گلوکز (IGT) و ۳۶ بیما, (۳۹/۱٪) دیابت مليتوس (DM) داشتند. تفاوت ميزان تشخيص ديابت مليتوس بر اساس FBS (p-value < ۰/۰۰۱) و OGTT ٪) از نظر آماری معنی دار بود.(۱۵/۲) حساسیت گلوکز ناشتای سرم ۴۶/۷٪ و ویژگی آن ۹۶/۷٪ و ارزش اخباری مثبت وارزش اخباری منفی تست به ترتیب و ۹۶/۷٪ و ۴۶/۷ ٪ بود. cut off به دست آمده برای گلوکز ناشتا ۸۳/۵۰ بود.

نتیجه گیری: بر اساس نتایج این مطالعه آزمون گلوکز ناشتا برای تشخیص دیابت ملیتوس در بیماران مبتلا به سیروز کبدی کافی نیست. می توان در این بیماران آزمون تحمل گلوکز خوراکی (OGTT) را به عنوان یک آزمون روتین پیشنهاد کرد. هم چنین با توجه با ارزش اخباری مثبت و منفی حساسیت و ویژگی آزمون گلوکز ناشتای سرم در مقایسه با آزمون تحمل گلوکز به نظر میر سد بیماران سیروزی با گلوکز ناشتای سرم بالای ۸۲/۵۰ احتمال بیشتری برای و جود دیابت یا اختلال تحمل گلوکز داشته باشند و انجام آزمون TGTT برای ایشان توصیه می شود. مطالعات بیشتر در این زمینه پیشنهاد می گردد.

Send Date: 2010/07/22

Category: 7.6 Cirrhosis and complications: clinical aspects

T-S-063

# The survey of thyroid function tests in hepatitis B and C induced cirrhosis in patients

Fariborz Mansour-Ghanaei<sup>1\*</sup>, Mojtaba Mehrdad<sup>1</sup>, Zahra Atrkar roshan<sup>1</sup>, Sahereh Mortazavi<sup>1</sup> <sup>1</sup>Gastrointestinal and liver diseases research center of guilan, guilan university of medical sciences *Introduction:* The liver plays an important role in the metabolism of thyroid hormones, being involved in their conjugation, excretion and peripheral deiodination and in synthesizing thyroid binding globulin(TBG). Thus liver dysfunction may influence thyroid function. We conducted this study to survey changes of thyroid function tests in patients with liver cirrhosis due to hepatitis B and C and correlation of thyroid hormone levels with severity of liver dysfunction.

*Method:* 64 Cirrhotic patients due to hepatitis B and C referred to Razi hospital, Rasht, Iran were studied between 2008-2009. Data were collected by prepared questionnaire. Thyroid hormone levels was measured in a same laboratory. Liver dysfunction was scored by MELD and child pugh scoring systems. We have used mann-withney U, chi square and kruskal wallis test of statistical analysis. A P-Value less than 0.05 was considered significant.

**Results:** 64 patients involved in this study, (42 males and 22 females). Mean age of patients was  $55.03\pm12.05$ . In the majority of patients who were studied, TT3, TT4 and FT3 levels were decreased. (P=0.02)we found statistically significant correlation between decreased level of TT3 and history of GI bleeding, Ascites and encephalopathy. (in order P=0.01, P=0.011, P=0.009).It means that as TT3 level was lower, probability of this complications was high.

Beside this, there was statistically significant difference between TT3 and severity of liver dysfunction according to child score (P=0.0001) and mean score of MELD.(P=0.02)

*Conclusion:* This study shows that liver disease is accompanied by changes in thyroid hormone levels specially decreased level of TT3, TT4, FT3 and it is indicative that TT3 level can be used as liver function index in cirrhotic patients due to hepatitis B and C. Send Date: 2010/08/15

Category: 7.6 Cirrhosis and complications: clinical aspects T-S-064

**Congenital Hepatic Fibrosis Leading to Cirrhosis and Hepatocellular Carcinoma** Mohamma Reza Ghadir<sup>1\*</sup>, Amir Hosein Ghanooni<sup>2</sup>, Maryam Vaez Javadi<sup>3</sup>

<sup>1</sup> Gastroentrology, Shahid Beheshti hospital, Qom University Of Medical Sciences

<sup>2</sup> Researcher, Qom University Of Medical Sciences

<sup>3</sup> Qom University Of Medical Sciences, Qom University Of Medical Sciences

*Introduction:*Congenital Hepatic Fibrosis (CHF) is an uncommon cause of portal hypertension. Despite the presence of portal hypertension, hepatocellular and renal function are usually well reserved. CHF is included in the group of congenital diseases of Fibropolycystic disorders. These include a broad spectrum of clinical diseases which are usually accompanied by hepatic involvement.

*Method:*A 27 year old lady was admitted to the Kamkar Hospital for evaluation of worsening hepatic function. She first came to medical attention at the age of 10 when hepatosplenomegaly was noted incidentally on routine physical examination at another hospital, so she was admitted to undergo further examination of hepatosplenomegaly.

**Results:** Congenital hepatic fibrosis is defined pathologically by bands of fibrous tissue within the liver, linking the portal area and containing multiple bile ductules. It occurs in association with a range of inherited disorders involving the kidneys. Although infantile-type polycystic kidney disease is usually an autosomal recessive disorder, the patient in the present report represents a sporadic case. Clinically, congenital hepatic fibrosis is characterized by portal hypertension with well-preserved liver function.

*Conclusion:* We propose that there be a high index of suspicion for the development of HCC in young patients with CHF, particularly in those with jaundice, and cirrhosis. Screening could be undertaken with serum AFP measurements and hepatic imaging studies, using either ultrasound, CT, or magnetic resonance imaging. However, the exact modality of screening and the frequency of testing required to prevent the development of HCC remains to be determined.

Send Date: 2010/08/30

Category: 7.7 Viral hepatitis: basic aspects T-S-065

Concurrent Infections of Hepatitis C and HIV in Hepatitis B Patients in North-East of Iran Abdolvahab Moradi<sup>1</sup>, Behnaz Khdabakhshi<sup>1</sup>, Alijan Tabaraii<sup>2</sup>, AmirAli Fallah<sup>1</sup>, Masoud Sadeghipour<sup>1</sup>, Sima Besharat<sup>1\*</sup>, Koosha Ghazimoghadam<sup>1</sup>, Gholamreza Roshandel<sup>1</sup>

<sup>1</sup> Golestan Research Center of Gastroentrology and Hepatology, Golestan Medical University

<sup>2</sup> Golestan Research Center of Infectious Diseases, Golestan Medical University

*Introduction:* Hepatitis B Virus, Which is a major worldwide problem now, is a DNA virus in Hepadna Viride families and is transmitted through blood and other body fluids such as Semen, and Saliva. In our country, there are about 2 million people with hepatitis B and 200 thousand of these people are suffering from chronic hepatitis. Concurrent infections of HIV, HCV and HBV are considered as a major health problem, because their transmission ways are similar; also the co-infection can bring about serious hepatic complications.

*Method:*This study was a descriptive study conducted on patients with hepatitis B referred to Cellular-Molecular Pathology center in Gorgan (2009) to determine the viral load by real-time PCR. Then HCV or HIV antibody was detected by ELISA kits. The data were entered and analyzed by SPSS 16 software.

**Results:** Among patients with HBV infection, 168 were selected randomly. The patients mean age was  $37.12 \pm 12.07$  years; 129 patients (76.3%) of them were male. Seven co-infection were found; 4 (2.4%) were HVC/HBV co-infections and 3(1.8%) were HIV/HBV co-infections. Six of 7 were males. No co-infections with all three viruses were detected.

*Conclusion:* Considering that there was no significant statistical relation between HBV infection and HIV or HCV infection, our study is not comparable to other studies and need further study with more patients. HBV, HCV and HIV are transmitted through preventable ways; therefore, this must have an importance role in the therapeutic protocols.

Send Date: 2010/07/21

Category: 7.7 Viral hepatitis: basic aspects T-S-066

Hepatitis C virus genotypes in Northeast of Iran Abdolvahab Moradi<sup>1</sup>, Shahryar Semnani<sup>1</sup>, Abbasali Keshtkar<sup>2</sup>, Behnaz Khodabakhshi<sup>2</sup>, Vahideh Kazemnejhad<sup>2</sup>, Aliasghar Molana<sup>2</sup>, Gholamreza Roshandel<sup>1\*</sup>, Sima Besharat<sup>1</sup>

<sup>1</sup> Golestan Research Center of Gastroenterology and Hepatology, Golestan University of Medical Sciences, Golestan Research Center of Gastroenterology and Hepatology, Golestan University of Medical Sciences

<sup>2</sup> Golestan Research Center of Gastroenterology and Hepatology, Golestan University of Medical Sciences, Golestan University of Medical Sciences

*Introduction:* Hepatitis C virus is one of the main causing factors of liver disease which can lead to chronic hepatitis C disease in 80% of cases. Genotypes of HCV have special geographical spread worldwide and have an important role in the trend and treatment of HCV. The goal of the present study was detecting HCV genotypes in patients with anti-HCV positive titers in Golestan province.

*Method:* In this cross-sectional study, 95 positive samples of HCV detected by RIBA were enrolled. Virus RNA was extracted with Roche (High pure viral RNA extraction) kit, virus genome cDNA synthesis was done by Fermentase cDNA kit due to random Hexamer. Then PCR was done on all samples by a general primers for HCV. Second step PCR was done by HCV genotype specific primers, reading the results after electrophoresis in 1.5% agarose gel and Ethidium Bromide staining in gel documentation.

**Results:** General primer PCR revealed to 91 positive samples and finally genotypes of 77 samples were assessed. Results showed that genotypes 1 and 3 included [1a (19.5%), 1b (19.5%), 3a (15.6%), 3b (24.7%)], 2a (2.6%), 4 (7.8%) and others were mixed genotypes 1 and 3. Genotype 1 was most seen in Sistani ethnicity, genotype 3 in Turkmen and genotype 4 only seen in Persians.

*Conclusion:* The most prevalent genotypes were 1 and 3 in Golestan province which the distribution was different from other sites of Iran but genotype 4 was in accordance to others. Genotype 2 was only reported in a study in Tehran and the present one. Send Date: 2010/07/26

Category: 7.7 Viral hepatitis: basic aspects T-S-067

Correlation of Quantitative Assay of HBs Ag and HBV DNA Levels in Chronic HBV Azita Ganji<sup>1\*</sup>, Abbas Esmailzadeh<sup>1</sup>, kamran

Ghafarzadegan<sup>2</sup>, Hoda Helalati<sup>2</sup>, Hoshang rafat Panah<sup>3</sup> <sup>1</sup> Imam Reza Hospital, mashhad university of medical sciences

<sup>2</sup> cancer research center, mashhad university of medical sciences

<sup>3</sup> cancer research center, mashhad university of medical sciences

Introduction: Chronic hepatitis B is a major global problem that leads in one million deaths each year. If active hepatitis B is not treated, it may lead in dangerous complications such as cirrhosis, and liver cell carcinoma. Indication for treatment depends on different factors including, quantitative level of HBV DNA, amount of ALT and histological findings. The quantification of HBV DNA shows replicative state and active viral infection. Viral load is used for making decision about treatment and monitoring of patients who are on treatment for chronic hepatitis B. This method is molecular-based and expensive. Finding a cheaper laboratory test as a surrogate marker for the molecular detection of HBV DNA may make our management more practical. Previous studies suggested that quantitative hepatitis B surface antigen (HBs Ag) determined by automated chemiluminescent microparticle immunoassay.

*Method:* In this Cross sectional study all CHB patients who were referred for HBV DNA assay were enrolled and selected by non-random sampling method. After explaining the research purpose and obtaining informed consent for all patients who referred to laboratory for quantitative HBV DNA by a gastroenterologist, sample was obtained for HBs Ag quantification, HCV Ab and HDV Ab.115 patients were enrolled, HCV and HDV Ab positive patients were excluded. HBV DNA was measured by Real time polymerase chain reaction and at the same time liver function tests was done and serum HBs Ag was quantified using Electrochemi luminence assay (Roche Diagnostic).

**Results:** The study included 97 patients, 70 male(72%), 27 female with mean age of: 39 years  $\pm$  11 years with CHB.85 patients were HBe Ag negative (87%). We excluded patients with normal ALT and HBV DNA less than 100 from study. With Mann-Whitney test HBS Ag titer had significant difference between HBe Ag positive and negative patients (P value= 0.001). HBV DNA level also had

significant difference between Hbe Ag positive and negative patients with P value: 0.009. With Spearman test there was no significant correlation between HBS Ag and HBV DNA (P; 0.606 and r: 0.53). after splitting our datainto two group of HBe Ag positive and negatives , correlation between HBsAg and HBV DNA level was not significant in HBe Ag positive patients with P: 0.053 and r: -0.57 and in HBe Ag negatives with P:0.605 and r: 0.057 ,and there was no significant correlation overally (P=0.45) .HBV DNA level were correlated strongly with ALT (P= 0.05 ,r:0.19) but there was no significant correlation of HBs Ag with ALT level.

*Conclusion:* 85% of our patients were HBe Ag negative with higher level of HBS Ag and lower level of HBV DNA but we don't know about their genotype .Based on our study HBs Ag studied by Electrochemi luminence assay had no significant correlation with HBV DNA level .

Send Date: 2010/08/02

Category: 7.7 Viral hepatitis: basic aspects T-S-068

#### Occult Hepatitis B in Cryptogenic Liver Disease: A Systematic Review and Meta-analysis

Mehrdad Nooranipour<sup>1</sup>, Seyed Moayed

Alavian<sup>1\*</sup>, Peter Karayiannis<sup>2</sup>

<sup>1</sup> Baqiyatallah Research Center for Gastroenterology and Liver Disease, Tehran, Iran, Baqiyatallah University of Medical Sciences

<sup>2</sup> Department of Medicine, Hepatology and Gastroenterology Section, Imperial College London, London, UKBaqiyatallah Research Center for Gastroenterology and Liver Disease, Tehran, Iran, Department of Medicine, Hepatology and Gastroenterology Section, Imperial College London, London, UK

*Introduction:* There is no overall estimate of Occult hepatitis B infection (OBI) prevalence in cryptogenic chronic liver disease. We reviewed all of the published and unpublished data related to OBI in cryptogenic liver disease in order to accurately estimate the prevalence and help clarify the clinical impact of OBI on chronic liver disease.

*Method:* In this systematic review, we searched all electronic databases and gray literature about OBI in cryptogenic chronic liver disease up to May 2010. We selected descriptive and analytical cross-sectional

studies and surveys related to the prevalence of OBI in cryptogenic liver disease that have sufficiently stated objectives, used proper sampling methods with identical and valid measurement instruments for all study subjects and proper analysis methods. We used a survey data analysis method to estimate the OBI prevalence rate in cryptogenic liver disease.

*Results:* The meta-analysis included seven original articles with 961 participants. The overall prevalence of OBI in cryptogenic liver disease was estimated to be 29.7 % (95%CI: 17.4% -42.0%)

*Conclusion:* The prevalence of OBI is high in patients with cryptogenic chronic liver disease. It is possible that persistent OBI is a contributor to liver disease, but this needs to be further investigated. Send Date: 2010/08/29

Category : 7.7 Viral hepatitis: basic aspects T-S-069

The Relationship between hepatitis C and B infections with anemia in hemodialysis patients

Mohammad Reza Ghadir<sup>1\*</sup>, Seyyed Majid Mousavi Movahhed<sup>2</sup>, Ahmad Komeili Movahhed<sup>3</sup>, Akram

Heidari<sup>4</sup>, Tahereh Komeili Movahhed<sup>3</sup>, Shamsi Darabi<sup>3</sup> <sup>1</sup> Shahid Beheshti Hospital, Qom University of Medical Aciences

<sup>2</sup> Kamkar Hospital, Qom University of Medical Aciences

<sup>3</sup> Researcher, Qom University of Medical Aciences

<sup>4</sup> Qom University of Medical Sciences, Qom University of Medical Sciences

*Introduction:*Hepatitis C (HCV) and B (HBV) infections are commonly seen in dialysis patients, but them long-term deleterious effects in these patients are unknown. We evaluated the effect of HCV and HBV infections on anemia in our hemodialysis population.

*Method:* A total of 90 chronic hemodialysis patients with anemia at kamkar and Hazrat Valiasr hemodialysis centers were included for the period 3 months, in 2008. Data classified according to the hepatitis-free, chronic hepatitis B and C groups. Nineteen HCV-positive and eleven HBV-positive patients were included for comparison analysis with 60 control patients. Erythropoietin was administered for 3 month. They were followed for 3 months and their hemoglobin and hematocrit were measured before administration of erythropoietin and the end of third

month. For statistical analysis, T-test was employed. **Results:** The mean rise of hemoglobin and hematocrit in hepatitis-free, HCV and HBV groups were  $1.50 \pm$ 1.45 g/dL and  $3.88\% \pm 5.01\%$ ,  $2.56 \pm 1.40$  g/dL and  $7.56\% \pm 3.75\%$ ,  $1.86 \pm 1.17$  g/dL and  $5.73\% \pm$ 4.11%, respectively. The mean rise of hemoglobin and hematocrit in HCV group was significantly higher than hepatitis-free group and t test showed a significant statistical correlation (P<0.01). However the mean rise of hemoglobin and hematocrit in HBV group was higher than hepatitis-free group but t test significant didn't show а statistical correlation(P>0.5).

*Conclusion:* We found that hepatitis C virus infection was associated with significant elevation in mean of hemoglobin and hematocrit than hepatitis-free group. Send Date: 2010/08/30

Category : 7.8 Viral hepatitis B: clinical aspects T-S-070

## Occult hepatitis B virus infection in hemodialysis patients : a multicenter study in Guilan Province, North of Iran

Farahnaz Joukar<sup>1\*</sup>, Reyhaneh Jafarshad<sup>1</sup>, Sepiedeh Besharati<sup>1</sup>, Fariborz Mansour-Ghanaei<sup>1</sup>

<sup>1</sup> Gastrointestinal and liver diseases research center of guilan, guilan university of medical sciences

*Introduction:* Occult hepatitis B virus (OHB) infection is characterized by presence of HBV infection with undetectable hepatitis B surface antigen (HBsAg). OHB infection harbors potential risk of HBV transmission through hemodialysis (HD). The aim of this study was to assess the OHB infection among hemodialysis patients in Guilan Province, North of Iran.

*Method:* In a cross sectional study, from May to September 2009, in 11 different hemodialysis units in Guilan province, HBsAg and anti-HCV antibody of 514 hemodialysis patients were recorded. Patients with positive antibodies to HCV were tested for detecting HCV RNA. Except the patients with positive HBsAg, all patients were screened for HBV presence of detectable HBV DNA by PCR. The presence of HBV-DNA was determined quantitatively in plasma samples of HD patients with negative HBsAg by real-time PCR using the artus HBV RG PCR kit on the Rotor-Gene 3000 real-time thermal cycler.

**Results:** From 514 patients, 286(55.64%) of them were male. In this study, 61 (11.9%) patients were anti HCV positive and 31 (50.8%) were HCV PCR positive. Seven cases (1.4%) with HBsAg positive and two cases (0.38%) of dual infection of HBs Ag and Anti HCV Ab positivity were identified. No patients with negative HBsAg had detectable HBVDNA by PCR. Thus, no one with OBV infection was identified among hemodialysis patients.

*Conclusion:* The prevalence of OHB in a highly endemic area of chronic HBV, even among hemodialysis patients was very low. So, it is not cost benefit to screen all hemodialysis patients for OHB even they with any other hepatitis viral infection (e.g. HCV) Send Date: 2010/09/22

Category: 7.9 Viral hepatitis C: clinical aspects F-T-071

# Distribution of Serum Lipids and Their Relationship with Liver Histologic Characterization and Viral

Markers in HCV Infected Thalassemic Patients

Seyed-Vahid Tabatabae<sup>1</sup>, Seyyed Mohammad Miri<sup>1</sup>, Seyed-Moayed Alavian<sup>1\*</sup>, Maryam Keshvari<sup>2</sup>, Bita Behnava<sup>3</sup>, Pegah Karimi Elizee<sup>4</sup> Kamran Bagheri Lankarani<sup>5</sup>

<sup>1</sup> Baqiyatallah Research Center for Gastroenterology and Liver Disease (BRCGL), Baqiyatallah University of Medical Sciences

<sup>2</sup> Baqiyatallah Research Center for Gastroenterology and Liver Disease (BRCGL)

<sup>3</sup> Baqiyatallah Research Center for Gastroenterology and Liver Disease (BRCGL), Tehran, Iran, Baqiyatallah University of Medical Sciences

<sup>4</sup> Iranian Blood Transfusion Organization Research Centre (IBTO),

<sup>5</sup> Baqiyatallah Research Center for Gastroenterology and Liver Disease (BRCGL), Shiraz University of Medical Sciences, Shiraz, Iran

*Introduction:* Background and aims: The distribution of blood lipids and glucose and their determinants in thalassemic patients impaired glucose tolerance or diabetes in these patients.

*Conclusion:* The majority of the patients had blood lipid levels (by the exception of HDL) within the defined normal range. We could not find that

virologic and liver histologic factors plaid significant role in changing serum lipids and glucose in these patients.

Send Date: 2010/07/03

Category: 7.9 Viral hepatitis C: clinical aspects F-T-072

### Survey on Knowledge and Attitude of health care professionals' of Razi Hospital of Rasht toward caring for people with Hepatitis C

Fariborz Mansour-Ghanaei<sup>1\*</sup>, Farahnaz Joukar<sup>1</sup>, Panah Meskinkhoda<sup>1</sup>

<sup>1</sup> Gastrointestinal and liver diseases research center of guilan, guilan university of medical sciences

Introduction: There are more than 20 blood born diseases which hepatitis C, B and AIDS are 3 major of them. HCV is one of the major causes of chronic liver diseases including cirrhosis and hepatocellular carcinoma. As estimated by WHO, 170 million people worldwide have hepatitis C, which is a significant cause of morbidity and mortality. Needle stick injury in health care providers is a path of blood born pathogen transmission and health care providers of people with hepatitis C are in risk of contamination at some stage in their job. Little is known about their knowledge and attitude toward these patients in Iran. So we conducted this survey to study health care providers' knowledge and attitude toward hepatitis C in Razi Hospital in Rasht the capital city of Guilan, North province of Iran in order to improve the level of health care service in this field.

*Method:* In This a cross- sectional study. The study sample consists of 239 health care professionals of Razi hospital. Inclusion criteria were working in Razi hospital as doctors, nurses and operation room technicians. A standared validated questionnaires which consisted of questions on demographic characteristics, knowledge and attitude toward hepatitis C were distributed and data were collected and analyzed by SPSS16 software.

**Results:** The mean knowledge score was  $17.43 \pm 2.65$  and 51.9% got upper this grade while 48.1% got lower this limit. There was a significant relationship between knowledge score and study population's age, sex, occupation and education history (p<0.05). And also there was a significant relationship between

attitude level and study population's age, sex, work history and education history (p<0.05). There was a positive correlation between knowledge scores and attitude scores that means better knowledge correlates with better attitude (P=0.02).

*Conclusion:* Evidences show that discriminatory attitude is common among health care providers toward hepatitis C patients. so its necessary to increase health care providers' knowledge and attitude toward this disease to provide optimal health services for hepatitis C patients and decrease its burden.

Send Date: 2010/08/15

Category : 7.9 Viral hepatitis C: clinical aspects F-T-073

### Quality of life and hepatitis C Antiviral therapy in hemophilia and thalassemic patients; is there any effective factor?

Seyed Moayed Alavian<sup>1\*</sup>, M Teimoori<sup>1</sup>, A Hoseinzade<sup>1</sup>, B Behnava<sup>1</sup>, M Noorani<sup>1</sup>, A Tavalaei<sup>2</sup>, M Keshvari<sup>3</sup>

<sup>1</sup> Baqiyatallah Research Center for Gastroenterology and Liver Diseasse, Baqiyatallh University of Medical Sciences <sup>2</sup> Psychology department, Baqiyatallh University of Medical Sciences

<sup>3</sup> Infectious Specialist; Blood Transfusion Research Center, Iran Blood Transfusion Organization, Tehran, Iran, Infectious Specialist; Blood Transfusion Research Center, Iran Blood Transfusion Organization, Tehran, Iran

**Introduction:** Treatment for Hepatitis C with Alpha Interferon (IFN $\alpha$ ) therapy in patient with Hemophilia and thalassemic increase problematic physical side effects, but prior studies have found little influence on patients' perceived health status. The aim of this study was to determine the psychosocial outcomes of treatment Hepatitis C with Pegylated Interferon alpha 2 a (Pegasys) therapy in patient with Hemophilia ant thalassemia.

*Method:* This research was done on 202 chronic hepatitis C patients whom they also diagnosed by hemophilia or thalasemia. A self-reported questionnaire of HRQOL and continence was administered to patients who were candidates for Pegylated Interferon alpha 2 a (Pegasys) therapy. The questionnaire was re-administered during follow-up. The pretreatment and post treatment HRQOL burden scores were compared and correlated with the treatment, socioeconomic variable, virus type and other co morbid status.

**Results:** There were no significant differences' between two groups at base line HRQOL score (P>0.05). Total score of HRQOL significantly increased after therapy in overall two groups (1951.83 $\pm$ 175.45 versus 2059.31 $\pm$ 236.52 P value= 0.01). Significant improvement in total score of HRQOL was seen in two groups separately. Reduces In domains of physical domain and was seen than mental and psychological domain. Except of Physical energy domain, all difference was the same in two groups of patients. Total score and physical function were significantly better in thalassemic patient than the hemophilia at the end of study. In summary male disrupted PTT in hemophilia and greater age in thalassemia associated with reduce in HRQOL.

*Conclusion:* our findings demonstrate that physical domains of HRQoL are impaired among patients with hemophilia and thalassemia with hepatitis C and mental domains tend to gone better in antiviral treatment, however physical profile may be reduced because of treatment side effect. These results support the initiation of antiviral treatment in this population, it's strongly showed that successful treatment for hepatitis C has can improve HRQoL.

Send Date: 2010/08/29

Category: 7.9 Viral hepatitis C: clinical aspects F-T-074

Incarceration is a major risk factors for blood born infection among Intravenous Drug Users

mohammad mehdi mir-nasseri<sup>1\*</sup>, Hossein Poustchi<sup>1</sup>, Ashraf Mohammadkhani<sup>1</sup>, Hamid Tavakkoli<sup>2</sup>, Esmaeil Ansari<sup>1</sup>

<sup>1</sup> Digestive Disease Research Center, Tehran University of Medical Sciences

<sup>2</sup> GI department, Isfahan University of Medical Sciences *Introduction:* Current knowledge indicates a strong association between hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV) infection which mainly are transmitted by contaminated blood via intravenous drug abuse and sexual contact. We aimed to determine the prevalence of these infections and the risk factors associated with them among prisoner and non prisoner IVDUs in Tehran (Iran).

Method: This cross-sectional study was performed in two jails and three drug rehabilitation centers between 2001 and 2002 in Tehran. HBsAg and HBcAb were checked using highly specific third generation enzyme immunoassays (DIA.PRO, Italy, specificity >99%, and Radim, Italy, specificity 99.7%, respectively). HCVAb was detected using ELISA (DIA.PRO, Italy) with both sensitivity and specificity >98%. HIVAb test (DRG Diagnostics kit, Germany) was performed for 459 of the 468 IDU subjects. SPSS for Windows Version 12 (SPSS Inc, Chicago, USA) was used for all analyses. Chi-square and Fisher's exact tests were used to find the relationship between imprisonment and probable risk factors. The Student t-test and one-way ANOVA were used for continuous variables.

Results: In this study 392 prisoners and 135 individual attending in drug rehabilitation centers were approached. Of the 518 subjects studied, 464 (89.5%) were male, 386 (74.5%) were prisoners and 132 (25.5%) were non-prisoners. In this study HBsAg, HCVAb and HIVAb were positive in 19 (3.7%), 359 (69.5%) and 70 (15.5%) of subjects respectively. These tests was positive in 17 (4.5%), 311 (80.5%) and 63 (17%) among prisoners and 2 (1.5%), 48 (36.5%) and 7 (7.8%) in non-prisoner respectively. Multiple logistic regression analysis revealed that independent factors related to co-infection of HCV and HIV infection were imprisonment (P<0.001. OR 7.5) and using common syringe (P=0.03, OR 4.5). *Conclusion:* Our findings strongly suggest that drug injection inside prison carries a particular risk for HIV infection and that HIV infection among IDUs is likely to be bridged to the broader population through sexual contact without strong prevention programs. Send Date: 2010/08/30

Category : 7.9 Viral hepatitis C: clinical aspects F-T-075

# Mutations in E2 and NS5A Regions in Patients Infected with Hepatitis C Virus Genotype 1a and

**Correlation with Response to Treatment** Neda Yahoo<sup>1</sup>, Farzaneh Sabahi<sup>2</sup>, Kiana Shahzamani<sup>3</sup>, Mohamad Ali Malboobi<sup>4</sup>, Hossain Jabbari<sup>5</sup>, Houshang Sharifi<sup>5</sup>, Seyed Hossain Mousavifard<sup>1</sup>, Shahin Merat<sup>5\*</sup> <sup>1</sup> Department of Virology, Tarbiat Modares University, Tehran, Iran <sup>2</sup> Department of Virology, Tarbiat Modares University, Tehran, Iran

<sup>3</sup> Digestive Disease Research Center, Tehran University of Medical Sciences, Tehran, Iran

<sup>4</sup> National Research Center for Genetic Engineering and Biotechnology, Tehran, Iran

<sup>5</sup> Digestive Disease Research Center, Tehran University of Medical Sciences, Tehran, Iran

*Introduction:* Heterogeneity of subgenomic regions of hepatitis C virus (HCV) may be associated with response to interferon (IFN) therapy

*Method:* Amino acid sequences of HCV NS5A PKR binding domain (NS5A-PKRBD), IFN sensitivity determining region (ISDR), variable region 3 (V3) and PKR/eIF-2 $\alpha$  phosphorylation homology domain (E2-pePHD) were evaluated for the pretreatment and post treatment plasma samples of 19 HCV genotype 1a infected patients who were treated with pegylated-IFN plus ribavirin, 13 responders and six treatment failures

**Results:** The results showed no significant difference in prediction of treatment outcome based on mutation rates in these regions. Variations of amino acid sequences between the two groups were not seen in E2-pePHD. All patients demonstrated almost overall similar sequences. However, amino acid substitution at position 2252 of PKRBD might have a critical role (p = 0.044). Higher mutation rate in NS5A-V3 region in responder group was observed (p < 0.001). In this region, position 2364 also significantly differed in the two groups of IFN sensitive and resistance patients (p = 0.018).

*Conclusion:* Prevalence of definite amino acids in residues 2252 and 2364 in PKRBD and V3 regions respectively, could be associated with clinical response to IFN.

Send Date: 2010/09/06

Category : 7.9 Viral hepatitis C: clinical aspects F-T-076

# Genotyping of hepatitis c virus infection (HCV) in infected patients in mashhad

hassan vossoughinia<sup>1</sup>, saeid amel jamedar<sup>2</sup>, ladan goshayeshi<sup>1\*</sup>, sina kazemi<sup>1</sup>, abolfazl erfani<sup>1</sup> <sup>1</sup>Ghaem hospital, mashhad university of medical sciences <sup>2</sup> Microbiology and virology department, faculty of medicine, mashhad university of medical sciences Introduction: Hepatitis C infection is now recognized as an important health problem. It is one of the leading causes of liver failure and cancer, and the single most common indication for liver transplantation, estimated as 200 million .HCV Genotype information is important because of the role it plays in predicting HCV medical treatment response, treatment duration and the dose of ribavirin Method: 235 clinical specimens obtained from HCVinfected patients living in Mashhad were selected for this study. Patients were questioned concerning documented risk factors (6H). All sera were sent to our laboratory for HCV genotyping during the period march 2009 to march 2010. The patient group included known or suspected i.v. drug abusers, multiply transfused patients, hemophilia and patients with community-acquired chronic liver disease.

**Results:** From the 235 patients, only 236 cases had type able genotypes. The highest frequency was for genotype 3a, with 95 (39.1%) of subjects. Genotype 1a was the other frequent genotype, with 52(21.4%) subjects. Genotype 1b, 5 and 2 was 20 (8.2%), 9 (3.7%) and 6 (2.5%) respectively. Of the samples, 7(2.9%) had an undetermined genotype. Mixed genotypes(1a1b) were also found in 54 samples (22.2%).

*Conclusion:* According to genotype analysis should be part of treatment algorithms at some point in the process. This study indicates that the dominant HCV genotype among patients living in Mashhad was 3a. Send Date: 2010/09/30

Category: 7.12 Imaging - radiology (incl. interventional radiology)

#### F-T-077

### The efficacy of sonography to determine the Non Alcoholic Steatohepatitis (NASH)

Fariborz Mansour-Ghanaei<sup>1\*</sup>, Masroor Vahhabi Moghaddam<sup>1</sup>, Zahra Atrkar roshan<sup>1</sup>, Noofar Kiyani<sup>1</sup>

<sup>1</sup> Gastrointestinal and liver diseases research center of guilan, guilan university of medical sciences

*Introduction:* Sonography is a nonvasive method for the assessment of NASH disease. Objective: This study was conducted to evaluate the efficacy of sonography in determination of the NASH in patents who refer to GI clinic in Razi Hospital, Rasht

*Method:* In this prospective cross sectional study, 39 patients with elevated AST and ALT were selected for sonography and liver biopsy. All the information was filled out in previously designed information forms. Sensitivity, specificity, positive predictive value, negative predictive value and accuracy of sonography were determined using SPSS soft ware.

**Results:** In this study, true positive was 35, true negative was 0, false positive was 0 and false negative was 4, considering these, sensitivity 89%, positive predictive valued 100% and accuracy for sonography was 89% in detection of NASH.

*Conclusion:* The power of the sonography is excellent in evaluation of patients who are suspected to the NASH and it is recommended as a really good non invasive method to evaluate NASH with acceptable accuracy.

Send Date: 2010/08/15

Category : 7.12 Imaging - radiology (incl. interventional radiology)

### F-T-078

#### Computer- aided diagnosis on MRI for differentiating healthy and cirrhotic liver: Performance testing of several texture analyzers

Akbar Gharbali<sup>1\*</sup>, Nosrat Jabari<sup>2</sup>,

Tahmineh Payrovi<sup>3</sup>, R.A. Lerski<sup>4</sup>

<sup>1</sup> Medical Physics Department, Faculty of Medicine, Urmia Medical Science University, Iran

<sup>2</sup> Imaging Department, Paramedicine faculty, Urmia Medical Science University, Iran

<sup>3</sup> Histology Department, Faculty of Medicine, Urmia Medical Science University, Iran

<sup>4</sup> Medical Physics Department, School Medicine & Ninewells Hospital, Dundee University, UK

*Introduction:* The goal of the present study is to classify differences in texture parameters between normal and cirrhotic (mild and sever) liver on T2- weighted MRI images, using texture analysis software

*Method:* In this study, the MRI – T2 weighted half angle turbo spin echo (HASTE) image database consists of 28 patients, including 6 mild, 5 severe cirrhotic and 17 normal livers that were reported by radiologist. First, MaZda software used to perform texture analysis on the MR images by selecting regions of interest (ROI) on the loaded MR images.

More than 230 statistical texture feature parameters extracted for each defined ROI. All possible options trained to identify the best ten feature parameters for each two categories of the liver MRI slice that yield the highest discrimination power and no error in the classification of training set images. Next, obtained results in training test were used for distinguishing suspicious single ROI sample from pathological liver slice by applying MathCad software. Then, discrimination performance of four texture analysis methods: LDA (Linear discriminat analysis), PCA (Principle component analysis), FLPA (Fusion LDA and PCA) and PLA (PCA plus LDA) measured by the area under the receiver operating characteristic (ROC) curve (Az value).

**Results:** In this study up to 150 none overlapping ROIs consisting of 50 progressive, 50 mild cirrhotic and 50 normal livers were tested. In differentiation of the severe cirrhotic from normal liver, discrimination performance of the texture analyses methods under selected features compared and found that the most significant distinguish between progressive cirrhosis and normal liver was with PCA and FLPA( A Z =0.98). Good results were also achieved with LDA (Az = 0.89) and PLA (Az = 0.73) respectively. In differentiation of the mild cirrhotic liver from healthy, discrimination performance results show that four texture analysis methods represents almost the same performance with no significant difference in discrimination mild cirrhosis from normal liver. So, their discrimination accuracy (Az value) was varied just between 0.80 and 0.84.

*Conclusion:* It is shown that our four texture analysis procedure can effectively discriminate histological changes of the cirrhotic liver and thus has the potential to help radiologist as a complementary tool in evaluation cirrhotic patients.

Send Date: 2010/09/22

Category: 7.13 Miscellaneous F-T-079

#### Clinical Characteristics of Hydatid cyst Patients in Guilan province of Iran

Fariborz Mansour-Ghanaei  $^{1\ast},$  Farahnaz

Joukar<sup>1</sup>, Motahareh Javadi<sup>1</sup>

<sup>1</sup> gastrointestinal and liver diseases research center of

guilan, guilan university of medical sciences

*Introduction:* Hydatid Diseases (HD) is a zoonosis disease that caused by larve/ cyst of eccinococus granolosus. It is an Endemic illness in many countries like Iran and it poses an important public health problems. Clinical manifestation of HD is similar to some gastrointestinal diseases; it may be mistake with other ones. There isn't specific medical treatment for HD, the only one is surgery. In this study we enrolled all patients who were admitted in Rasht hospitals for a 10 years period (from 2000 until 2010)with diagnosis of HD and analyzed it.

*Method:* In this retrospective cross sectional study, all of the patients in the 10 years duration who were diagnosed for HD were enrolled. The variables which studied were: age, sex, job, chief complaint, involved organs, situation, diagnostic methods, medical therapy & hospital prognosis.

**Results:** In this study, from 62 patients, 40.3% were in 40-60 years range. Mean of the age was 46.38±18.36 years. Thirty eight patients (61.3%) were male, 40.3% were home worker, 22.6% were farmer, 8.1% were students, 6.5% poulterer husbandry. The most chief complaint of patients was abdominal pain, then cough (10.8%), sputum (8.7%), nausea & vomiting (6.4%), dyspnea (5.4%). The most common organ involvement was liver in 71%, after that in lungs (16.1%). No brain involvement was seen. The method of suspension to diagnosis in 75.3% of patients were radiologic tests, and the most radiologic method was sonography (48.14%), then CT-SCAN (43.2%) and finally Chest X Ray (8.6%). In this study, 95.2% of patients cured and 2 patients (3.2%) were died

*Conclusion:* The most common clinical manifestation of HD is abdominal pain. this disease must be in differential diagnosis of other causes of abdominal pain. Then HD in internal medicine is very important and with early diagnosis, and appropriate treatment we can prevent from its morbidity and mortality. Send Date: 2010/08/15

Category : 7.13 Miscellaneous F-T-080

Serologic Prevalence of Hepatitis E in Khorrmabad city,IRAN, 2009 mohamad reza nazer<sup>1</sup> <sup>1</sup> Lorestan University of medical science, Lorestan University of medical science

*Introduction:* The Hepatitis E is a kind of viral infectious disease that involves the liver and can be variable from a simple and asymptom to a fulminant and lethal disease. The cause of this disease is HEV, that has a 10-35% prevalence in developing countries and Iran is in endemic area. The importance of HEV is its mortality in pregnant women. Any study had not done in Lorestan province yet and whereas importance of HEV prevalence and history of epidemy in neighborhood provenances, this study is performed to evaluate the seroprevalence of HEV in Khorrmabad city in 2009.

*Method:* This study was a cross sectional research which was done in 2009. in total, 400 people who referred to the health centers of Khorrmabad city were selected as the subjects of study based using multiphase sampling method. After getting informed consents from all cases as well as getting 5 milliliters of blood from each one, the intended demographic data was collected by a questionnaire. Then ELISA test was performed for evaluate the samples.

**Results:** In this study, the result was positive for 31 cases that showed the 7.8% prevalence of HEV in Khorramabad city. The mean age of the all cases was 36 year, respectively. The mean age of positive cases was 49.7 years that was higher than negative cases mean age (34.8 years). Our research showed that highest prevalence was in 40-59 age range (61.2%). there was no significant relationship between sex and HEV positive test. 16 cases had blood transfusion history that 3 cases was positive but there was no significant relationship between blood transfusion and HEV positive test.

*Conclusion:* According to the get prevalence (7.8%), Khorramabad city is endemic for HEV, probably that this prevalence is higher in the mean age 49.7% years and 40-59 age range. We suggest that hepatic patients should be evaluated for HEV, routinely in Lorestan province that pregnant women have special importance. We recommend that more studies should be performed in Lorestan province, in villages specially.

Send Date: 2010/09/23

Category : 8.3 Malignant hepato-biliary diseases

#### F-T-081

#### The Role of Endoscopic Ultrasound for Pre-operative Evaluation of Cholangiocarcinoma: A Large Single Center Experience

Mehdi Mohamadnejad <sup>1\*</sup>, John M DeWitt<sup>2</sup>, Stuart Sherman<sup>2</sup>, Julia K LeBlanc<sup>2</sup>, Henry A Pitt<sup>3</sup>, Michael House<sup>4</sup>, Kelly J Jones<sup>5</sup>, Evan L Fogel<sup>6</sup>,

Lee McHenry<sup>7</sup>, James L. Watkins<sup>7</sup>, Gregory A Cote<sup>8</sup>, Glen A Lehman<sup>8</sup>, Mohammad A Al-Haddad<sup>8</sup>

<sup>1</sup> Digestive Disease Research Center, Tehran University of Medical Sciences

<sup>2</sup> Division of Gastroenterology and Hepatology, Indiana University School of Medicine

<sup>3</sup> Department of Surgery, Indiana University School of Medicine, Indianapolis, IN

<sup>4</sup> Department of Surgery, Indiana University School of Medicine, Indianapolis, IN

<sup>5</sup> Department of Pathology, Indiana University School of Medicine, Indianapolis, IN

<sup>6</sup> Division of Gastroenterology and Hepatology, Indiana University School of Medicine, Indianapolis, IN

<sup>7</sup> Division of Gastroenterology and Hepatology, Indiana University School of Medicine Indianapolis, IN

<sup>8</sup> Division of Gastroenterology and Hepatology, Indiana University School of Medicine Indianapolis, IN

*Introduction:* Accurate pre-operative diagnosis and staging of cholangiocarcinoma remains difficult.

Method: Objectives: To evaluate the utility of endoscopic ultrasound (EUS) in the diagnosis and pre-operative evaluation of cholangiocarcinoma. Design: Observational study of prospectively collected data. Setting: Single, tertiary referral hospital in Indianapolis, Indiana. Patients: Consecutive patients with cholangiocarcinoma from January 2003 through October 2009. Interventions: EUS, and EUS-guided fine needle aspiration (FNA). Main outcome measures: 1) Sensitivity of EUS for detection of a tumor and predict unresectability compared to CT scan and MRI; 2) Sensitivity of EUS- FNA to provide tissue diagnosis, using surgical pathology as reference standard

**Results:** A total of 228 patients with biliary strictures undergoing EUS were identified. Of these, 81 (45 males; mean age 70 years) had cholangiocarcinoma. Fifty one (63%) patients had distal, and 30 (37%) had proximal cholangiocarcinoma. For those with available imaging, tumor detection was superior for EUS compared to triphasic CT (76 of 81 (94%) vs. 23 of 75 (30%); p < 0.001). MRI identified the tumor in

11 of 26 (42%) patients (p=0.07 vs. EUS). EUS identified a cholangiocarcinoma in all 51 (100%) distal and 25 of 30 (83%) proximal tumors (p<0.01). EUS-FNA (median 5 passes; range 1-12) was performed in 74 (91%) patients.

Overall sensitivity of EUS-FNA for the diagnosis of cholangiocarcinoma was 73% (95% CI: 62%- 82%) and was significantly higher in distal compared to proximal cholangiocarcinomas (81% vs. 59% respectively; p= 0.04). Fifteen tumors were definitely unresectable. EUS correctly identified unresectability in 8 of 15, and correctly identified the 38 of 39 cases with resectable tumor (sensitivity of 53% and specificity of 97% for unresectability). CT and/or MRI failed to detect unresectability in six of these 8 cases.

*Conclusion:* EUS, and EUS-FNA are sensitive for the diagnosis of cholangiocarcinoma and very specific in predicting unresectability. The sensitivity of EUS-FNA is significantly higher in distal compared to proximal cholangiocarcinoma Send Date: 2010/09/06

Category: 10.2 Nutrients and gut function F-T-082

#### Diet in nonnuclear dyspepsia

Mohsen Akhondi-Meybodi<sup>1\*</sup>, mk amirbaigi<sup>2</sup>, hassan salmanroughani<sup>1</sup>, asghar khoshnod<sup>1</sup>, mh antikchi<sup>1</sup>, Mohsen Aghaei<sup>3</sup>

<sup>1</sup> shahid sadoghi hospital, shahid sadoughi medical university

<sup>2</sup> shahid sadoghi hospital, ssu

<sup>3</sup> shahid sadoghi hospital, Azad medical university yazd *Introduction:* Diet is a main question that challenge every clinicians especially in gastroenterology fild,.35 year ago internist recommend peptic ulcer and dyspeptic patients to avoid fruit and vegetables but no study was performed about this until recently. *Method:* We select 384 non ulcer dyspepsia patients that were normal esophagogastrodudnoscopy and interviewed with a questioner that have 114 type of common dishes or fruit ,vegetables, dairy products, meat. Nuts and wheat-containing foods and three open questions about foods that annoy and three main alleviating foods in GI clinics in Yazd in 2010. Questioners contain items that aggrieved or alleviate or no effects. If aggrieved or alleviating was positive

so divided to mild, moderate or sever depending in Harvard food questioner.

**Results:** Three hundred and eighty four 384 (152 male, 231 female) participants was complete questioners, that Aged between 13-80 year( mean age was  $39.16 \text{ year} \pm 14 \text{ y}$ ).

In grains and wheat-containing food, macaroni and beans were the main culprit, in fruit groups, watermelon, in dairy products milk; in meat group's sausage were the foods that aggravatet the symptoms of patients' complaints dyspepsia. In combined foods pizza and lasagna was mentioned and carbonated drinks were the main food that annoy the symptoms of dyspeptic patients. Also red pepper, winger and pickle main aggravating factor, vegetables has no role in annoy.

*Conclusion:* we recommended dyspeptic patient don't to avoid vegetables or fresh fruits but avoidance from sausages and carbonated drinks and pizza and pickle, red pepper.

Send Date: 2010/08/22

Category : 10.2 Nutrients and gut function F-T-083

The relationship between consumption of different foods and apoptosis in human gastric mucosa

Jabiz Modaresi Esfeh<sup>1\*</sup>, Alireza Ostadrahimi<sup>2</sup>, Mohammad hosein Somi<sup>3</sup>, Babak Seddigh Tonekaboni<sup>4</sup>, Leila Roshangar<sup>5</sup>

<sup>1</sup> Tabriz Faculty of Health and Nutrition

<sup>2</sup> Tabriz Nutritional research Center, Tabriz Faculty of Health and Nutrition

<sup>3</sup> Tabriz Liver and Gastrointestinal research Center, Tabriz Faculty of Medicine

<sup>4</sup> Mazandaran University of Medical Sciences

<sup>5</sup> Tabriz Faculty of Medicine

*Introduction:* Gastric cancer is the fourth most common malignancy and the second most prevalent cause of cancer induced death in the world. Both genetic and environmental factors such as Helicobacter pylori infection and diet are involved in the development of this cancer. On the other hand apoptosis has been reported to play a decisive role in precancerous changes in stomach. Apoptosis participates in the development of cancers including epithelial hyperplasia which occurs in the gastric mucosa.

*Method:* This pilot, cross-sectional study was designed to verify if there is any relationship between consumption of different food groups (according to the food guide pyramid)and various food items and apoptosis (as an early indicator of gastric cancer changes) in human gastric mucosa. Subjects were patients being referred to 2 hospitals in Tabriz, Iran, to undergo an upper gastrointestinal endoscopy. Diet was assessed by a previously validated Food Frequency Questionnaire and apoptosis was detected by TUNEL technique.Data were analysed by SPSS 16.

*Results:* No relationship was found between apoptosis rate in gastric mucosa and the average weekly intake of any of the 6 food groups in the food guide pyramid, yet a positive relation was detected between raw tomato, raw carrot and citrus fruit consumption and apoptosis rate in gastric mucosa and a reverse relation was observed between raw onion and apoptosis rate.

*Conclusion:* It seems that altering apoptosis rate might be one of the mechanisms through which food elements impact on gastric carcinogenesis. However more elaborated researches are required before this theory can be considered definite. Send Date: 2010/09/18

Category : 13.1 Proliferation – carcinogenesis F-T-084

Which rectal disimpaction protocol might be better for childhood functional constipation? bahar Allahverdi <sup>1\*</sup>, Mehri Najafi sani <sup>1</sup>,

Behrouz Bavarian<sup>1</sup>, Bahare Yaghmaei<sup>1</sup>

<sup>1</sup> Children Medical Center Hospital, TUMS

*Introduction:* Constipation is a common symptom in children accounting for 3% of general pediatrician outpatient visits and up to 25% of visits to pediatric gastroenterologists. Worldwide prevalence of childhood constipation vary from 0.3% to 28% and it seems to be rising over the last years. Stool withholding behavior can result in gradual but significant fecal impaction. This not only bothers the child but also may cause encopresis and overflow diarrhea. Disimpaction is necessarily the 1st part of therapeutic schedule and is possible through different protocols.

Method: All of the children 3to10 year age attending

a paediatric gastroenterology clinic in CMC hospital for constipation during a 18 month period were assessed. After excluding the children with the so called "red flags for childhood constipation",60 children with habitual constipation and almost heavy fecal impaction which adhered to treatment were enrolled in an interventional study.Participants were randomly divided into two groups.Both groups received disimpactant per os for 3 consecutive days .The disimpactant used was PEG without electrolyte(1g/kg/day) and mineral oil(20ml/yr of age/day) for groups A and B respectively.On the 4th day,the ease of the bowel movement , possibility of fecal incontinence and patient and/or parents' compliance were compared between groups

**Results:** From all 32 patients in group A, 30 ones had a soft bowel movement on the 4th day. There was one report of fecal incontinence despite correct drug usage.The treatment was reported feasible and the drug palatable by all of the 32 children.24 from all 28 patients in group B, had a soft bowel movement and 4 experienced diarrhea, oil discharge and underwear staining. 17 children or parents complained from unfavorable and greasy taste of mineral oil.

**Conclusion:** It was apparent with meaningful P-values(in all three eras less than 0.001) that PEG should be considered as an effective , desirable and palatable drug for disimpaction in childhood constipation. Many Iranian pediatric gastroenterologists are not used to prescribe PEG for either disimpaction or maintenance regimen for constipated children yet.Further trials can prove its convenience for pediatric use.

Send Date: 2010/09/22

Category : 13.1 Proliferation – carcinogenesis F-T-085

Holistic approach to childhood constipation : An invariable rule

Bahar Allahverdi <sup>1\*</sup>, Mehri Najafi sani<sup>1</sup>, Behrouz Bavarian<sup>1</sup>, Bahare Yaghmaei <sup>1</sup>

<sup>1</sup> Children Medical Center Hospital, TUMS

*Introduction:* Constipation is one of the most common reasons a child is referred to a paediatric gastroenterologist. Thorough history taking and

physical examination are mandatory to reach the correct diagnosis and treatment plan. Voiding dysfunction and / or a lumbosacral malformation poses the patient at high risk for having some important urological abnormality(ies).

*Method:* All of the patients who had attended one of the gastroenterology clinics in Children Medical Center Hospital during a 6 month period (January to June 2010) because of constipation, were assessed. After history taking and complete physical examination , any patient found to have at least one suspicious clue in favor of Hirschsprung's disease was excluded. Each patient with voiding dysfunction and/or sacral morphological abnormalities, underwent urologist counseling. Final result was recorded and relevant treatment plan was chosen according to diagnosis.

Results: From the whole 86 patients, 11(7 boys and 4 girls ) had at least one of the following voiding dysfunctions: frequent voiding, infrequent voiding, nocturnal enuresis, dribbling. In physical examination , 8 out of the 11 dysfunctional voiders had at least one of these sacral abnormalities : dimple, sinus, short sacrum, impaired bulbocavernous reflex, anterior anal displacement. This ratio for the larger group was 2 out of 75 (p=0.001). Of the former group, 7 had detrusor-sphincter dyssynergia, 1 was found to have dilated neuropathic bladder with bilateral high grade vesicoureteral reflux. The last two from normal voiders had detrusor-sphincter dyssynergia. All of the patients had been visited at least one time by a pediatrician before, but none had been appropriately examined.

*Conclusion:* Thorough , problem oriented history taking and physical examination in childhood constipation ,makes the physician able to detect important abnormalities that whenever neglected would ensue detrimental complications . Send Date: 2010/09/22

Category : 13.2 Molecular biology/genetics/pathology F-T-086

> MSI2 gene is heterogeneously expressed in gastric cancer Faezeh Mohammad-Hashem <sup>1\*</sup>, Modjtaba

Emadi-Baygi<sup>2</sup>, Parvaneh Nikpour<sup>1</sup>, Shaghayegh Haghjooyjavanmard<sup>3</sup>

<sup>1</sup> Department of Genetics and Molecular Biology, Faculty of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran, Isfahan University of Medical Sciences

<sup>2</sup> Department of Genetics, Faculty of Basic Sciences, Shahrekord University, Shahrekord, Iran, Shahrekord University

<sup>3</sup> Applied Physiology Research Center, Isfahan University of Medical Sciences, Isfahan, Iran, Isfahan University of Medical Sciences

Introduction: Gastric cancer is the fourth most common cancer worldwide, with a frequency that varies greatly across different geographic locations. In Iran, gastric cancer is the second most common cancer in men but it is the first most lethal neoplasm overall. MSI2 functions as an RNA-binding protein and plays a central role in post-transcriptional gene regulation. Some studies revealed cell type-specific and developmentally regulated expression of MSI2 in the mammalian CNS. Recently, it has been showed that MSI2 expression is not only highly up-regulated during human CML progression but is also an early indicator of poorer prognosis. To investigate potential involvement of MSI2 in gastric cancer, we examined, for the first time, its expression in human normal and tumoral gastric specimens.

*Method:* 30 (paired) fresh frozen normal and tumoral gastric specimens were provided from Iran Tumor Bank. Specific primers for MSI2 and TBP (as an internal control) were designed and used for measuring relative expression of MSI2 by quantitative real-time RT-PCR.

**Results:** According to the relative expression level of the MSI2 gene, the samples can be categorized into 3 classes. The first class included those samples in which MSI2 over-expressed in tumoral tissues compared to their normal adjacent specimen (n=8). In the second class, there were no significant changes in the expression level of the gene between the tumoral and normal paired tissues (n=3). Finally those samples in which MSI2 under-expressed in tumoral tissues placed in the third class (n=4). By pooling all the data, there was no significant difference in the MSI2 gene expression between tumoral and normal tissues.

*Conclusion:* Our results indicated that MSI2 is heterogeneously expressed in gastric cancer and has a potential to be used as a marker for classifying the tumors.

Send Date: 2010/08/31

Category : 13.2 Molecular biology/genetics/pathology F-T-087

# Evaluation of expression of ZFX gene in gastric cancer

Parvaneh Nikpour<sup>1\*</sup>, Faezeh Mohammad-Hashem<sup>1</sup>, Modjtaba Emadi-Baygi <sup>2</sup>, Shaghayegh Haghjooyjavanmard <sup>3</sup>

 <sup>1</sup> Department of Genetics and Molecular Biology, Faculty of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran, Isfahan University of Medical Sciences
 <sup>2</sup> Research Institute of Biotechnology, Shahrekord University, Shahrekord, Iran, Shahrekord University

<sup>3</sup> Applied Physiology Research Center, Isfahan University of Medical Sciences, Isfahan, Iran, Isfahan University of Medical Sciences

*Introduction:* Gastric cancer is the fourth most common cancer worldwide, and mortality due to it is second only to that from lung cancer. In Iran, gastric cancer is the second most cancer in men but it is the first most lethal neoplasm overall. Located on X chromosome and as a marker of stem-ness, ZFX encodes a member of the krueppel C2H2-type zinc-finger protein family. Examining its expression in malignancies showed that it over-expresses in prostate adenocarcinoma and B-cell lymphoma. In an attempt to establish the probable role of ZFX in gastric tumorigenesis, we analyzed its expression level in tumoral and normal tissues of human stomach.

*Method:* Relative expression of ZFX was determined by quantitative real-time RT-PCR in 17 tumoral and 17 morphologically juxtaposed normal gastric tissues (paired samples). Specific primers for ZFX and TBP (as an internal control) were designed and used for qRT-PCR.

**Results:** According to the expression level of the gene, the samples can be categorized into 3 classes. The first ones included those samples in which ZFX over-expressed in tumoral tissues (n=8). In the second class, there were no significant changes in the expression level of the gene between the tumoral and normal tissues (n=5). Finally those samples in which ZFX under-expressed in tumoral tissues placed in the third class (n=4). By pooling all the data, there was no significant difference in the MSI2 gene expression between tumoral and normal tissues.

*Conclusion:* Our results indicated that ZFX is heterogeneously expressed in gastric cancer. Using microdissected tissue specimens can give us a further insight into exact expression distribution of ZFX in gastric tissue samples.

Send Date: 2010/08/31

Category : 13.2 Molecular biology/genetics/pathology F-T-088

Quantitative analysis of Guanylyl Cyclase c as a tumor marker, validates this marker for detection of circulating tumor cells in the peripheral blood of colorectal cancer patients

somaye chavoshi<sup>1\*</sup>, ezzat Dadkhah<sup>2</sup>, mahmoud tavallaie<sup>3</sup>, arash velayati<sup>4</sup>, reza reisossadati<sup>2</sup>, reza tavasoli<sup>5</sup>, mostafa mehrabi bahar<sup>6</sup>, mohamad reza abbaszadegan<sup>4</sup>

- <sup>1</sup> Buali-mashhah, imam hosein
- <sup>2</sup> Buali-mashhah, azad Tehran
- <sup>3</sup> Department of biology, baghiyatalah
- <sup>4</sup> Buali-mashhah, medical science mashhad
- <sup>5</sup> Surgery department, Ghaem hospital
- <sup>6</sup> Surgery department, medical science mashhad

*Introduction:* Colorectal cancer (CRC) is the fourth leading cause of cancer-related deaths in Iran. Quantitative PCR (Q-PCR) assays could be very useful for the reliable detection of circulating tumor cells (CTCs) in peripheral blood. One of the most frequently accepted genetic markers used to detect CTCs in peripheral blood of colon cancer patients is Guanylyl cyclase C (GCC). This marker is expressed selectively by cells derived from intestinal mucosa. GCC has been proposed to be a new target for the diagnosis, staging, recurrence prediction and postoperative surveillance of patients with CRC. This study evaluated the quantitative expression of GCC in blood of patients with CRC.

*Method:* The studied population consisted of 40 consecutive CRC patients and 41 histological confirmed healthy controls. Total RNA were extracted from PBMC (Peripheral blood mononuclear cell) of samples. To prepare standard curve, GCC fragment was amplified using a GCC expressing cell line (HT29) and it was cloned in PTZ57/R vector. Linearized vector with restriction enzymes serially diluted, and standard curve with 5 dilutions was included in each absolute Q-PCR run. Real-time PCR

were performed with Stratagene Mx-3000P thermocycler using SYBR green and absolute quantitative (by <sup>sig</sup>ct) method. All data were analyzed using SPSS version 11.5 (SPSS Inc, Chicago, IL, USA).

**Results:** GCC mRNA was detected in bloods of most samples. The average copy number of patients and controls were 2.8 x 103 and 85 copies per 5 mL blood respectively. In our analysis, more than 90% of patients showed expression of GCC bloods and 50% of patients had overexpression of GCC. Detection of GCC in bloods of patients had 70% sensitivityand 46% specificity. Patients with higher GCC copy number showed increasing in stage of tumor(p value=0.041)

#### Conclusion:

Our data suggests that GCC may be a useful marker for molecular staging and detecting circulating tumor cells in bloods and of CRC patients. Send Date: 2010/09/05

Category : 14.1 Malignant disease - epidemiology screening and prevention F-T-089

# Frequency of precancerous lesions in patients with dyspepsia in northeast of Iran

Hamid Reza Raziee<sup>1</sup>, Tahoora Abdolahi<sup>2\*</sup>, Hamid Reza Sima1, Sepideh Ghadri<sup>2</sup>, Hanieh Hosseinnezhad<sup>3</sup>, Mahboube parsa<sup>4</sup>, Anahita Masoom<sup>3</sup>, Vahideh

Hosseinzadeh<sup>4</sup>, Samineh Bloursaz<sup>4</sup>, Mohsen Tadayon<sup>3</sup>, Mostafa Jafarzadeh<sup>5</sup>, Kamran Ghaffarzadegan<sup>6</sup>

<sup>1</sup> Department of Internal Medicine, Imam Reza Hospital, Mashhad University of Medical Sciences

<sup>2</sup> Mashhad branch, Islamic Azad University, Young Researcher's Club

<sup>3</sup> Mashhad Branch, Islamic Azad University of Mashhad, Young Researcher's Club

<sup>4</sup> Medical School, Mashhad University of Medical Sciences

<sup>5</sup> Gastric cancer Research Group, Mashhad University of Medical Sciences

<sup>6</sup> Department of Pathology, Cancer Research Center, Omid Oncology Hospital, Mashhad University of Medical Sciences

*Introduction:* Although gastric cancer mortality rates have been declining worldwide, its prevalence has been increasing in the last thirty years in Iran. Gastric cancer develops through reversible precancerous

lesions (PLs). We are able to stop progression of gastric cancer rate with early detection of these lesions. Know the frequency of PL and its probable relationships with risk factors of gastric cancer is an important factor to suggest an effective screening method for gastric cancer

*Method:* To estimate the prevalence of gastric PLs, we had cross-sectional studied on 87 nontumoral patients (49.4% female & 50.6% male) who underwent upper gastrointestinal endoscopy for investigation of dyspepsia. After signing a written consent, History taking and physical examination was done by a physician. Following, tissue biopsies were taken from six locations of stomach, and checked by experienced pathologist. Results divided to chronic gastritis, atrophic gastritis, intestinal metaplasia and dysplasia, according to updated Sydney system and PATU system.

**Results:** According to histopathological findings, there were 75.7% Chronic Gastritis, 1.4% Atrophic gastritis, 20.0% Intestinal Metaplasia and 2.9% Dysplasia. The prevalence of H. Pylori infection in our cases was 77.5% that was shown 41/53 in Chronic Gastritis, 0/1 in Atrophic gastritis, 13/14 in Intestinal Metaplasia, and 1/2 in Dysplasia respectively, but there were no significant differences were seen. Although the high frequency of opium abuse 38.4% and salt excess intake 34.7%, we did not found any significant differences in demographic data and risk factors among different PLs.

*Conclusion:* Our study shows that, the relatively common gastric lesion is chronic gastritis. he life style does not increase the risk of PLs progression, but It seems further research in Iran is needed to clarify different aspects of chains of events leading to cancer.

Send Date: 2010/09/22

Category : 14.1 Malignant disease - epidemiology - screening and prevention

F-T-090

# Trends of gastrointestinal tract cancer in northeastern Iran

Hamid Reza Sima<sup>1</sup>, Sepideh Ghadri<sup>2\*</sup>, Abbas Esmaeilzadeh<sup>1</sup>, Mohsen Tadayon<sup>2</sup>, Hamid Reza Hakimi<sup>3</sup>, Mostafa Abrishami<sup>3</sup>, Mostafa Parizadeh<sup>3</sup>, Zahra Ahmadi<sup>3</sup>, Fatemeh Abbasi<sup>3</sup>, Tahoora Abdolahi<sup>2</sup>, Anahita Masoom<sup>2</sup>, Hanieh Hosseinnezhad<sup>2</sup>, Mostafa Jafarzadeh<sup>4</sup>,

Omeed Moaven<sup>4</sup>, Ali Mokhtarifar<sup>1</sup>, Azita Ganji<sup>1</sup>,

#### Mosalreza Hoseini<sup>1</sup>

<sup>1</sup> Department of Internal Medicine, Imam Reza Hospital, Mashhad University of Medical Sciences

<sup>2</sup> Mashhad Branch, Islamic Azad University of Mashhad, Young Researcher's Club

 <sup>3</sup> Medical School, Mashhad University of Medical Sciences
 <sup>4</sup> Gastric Cancer Research Group, Mashhad University of Medical Sciences

*Introduction:* Cancer is one of the most common causes of mortality rate in developed and developing countries, such as Iran. Each year more than 51000 new cases of cancer occur in Iran. The most involved organ in both genders is gastrointestinal tract (38%). Most important gastrointestinal cancers are gastric, esophageal and colorectal cancer. In this study we are trying to understand the epidemiology and the pattern of these malignancies in North-East of Iran.

*Method:* The Mashhad GI Cancer Registry covers all the patients with newly diagnosed gastric, esophageal, and colorectal cancer from northeastern provinces. History taking and physical examination are done by a physician and all data (demographic, clinical and laboratory) are saved in a computerized registry program. Also, after signing a written consent, tissue biopsies are stored by endoscopy, and 10 ml blood sample is taken for saving DNA, serum and plasma

**Results:** From 2005 up to now there were 593GI tract cancer patients registered in our GI tract cancer registry in Medical University of Mashhad; 66.3% male, 75.9% Fars, 71.9% illiterate & 78.8% were in low economical state. 48.6% of cases with mean age  $63.30\pm12.35$  have esophagea cancer, 17.4% with mean age  $57.31\pm14.45$  have colorectal cancer and 34.1% with mean age  $68.02\pm11.46$  have gastric cancer. GI cancer history in immediate relatives was positive among 8.4% of studied samples. Smoking history and opioid dependency were seen in 22% and 18.2% respectively.

**Conclusion:** The epidemiological characteristics of GI tract cancer differ worldwide and in different regions of Iran. Esophageal cancer has been observed among people over 63, while colorectal cancer was seen among people older than 57 (p<0.05) and gastric cancer among people over 68 (p<0.05). Based on our

findings we recommend registry of these malignancies to obtain further understanding about epidemiology and pattern of GI cancer in Iran Send Date: 2010/09/22

Category: 14.2 Diagnosis of malignant disease F-T-091

#### **Gastric cancer detection using electrical impedance spectroscopy** Ahmad Keshtkar<sup>1</sup>, Mohammad Hossein Somi<sup>2</sup>,

Amir Taher Eftekharsadat<sup>3</sup>, Zeynab Salehniya<sup>1\*</sup>

<sup>1</sup> Department of Medical physics, University of Medical Sciences, Tabriz

<sup>2</sup> Liver and Gastrointestinal Diseases Research Centre, University of Medical Sciences, Tabriz

<sup>3</sup> Department of Pathology of Imam Reza Hospital, University of Medical Sciences, Tabriz

*Introduction:* Gastric cancer is the most common cancer of the gastrointestinal tract. Unfortunately, the symptoms of early gastric cancer are non-specific and rather vague . Most patients with gastric cancer are being diagnosed in advanced stages of the disease and they do not gain any survival benefit from conventional therapeutic methods. Therefore, early cancer detection using an efficient surveillance program is a justified way to reduce gastric cancer mortality. But, it is not a particular screening test to be chosen. The aim of this paper is to introduce a novel minimally invasive diagnostic technique to be appropriate for the early detection of flat lesions and assessing gastric pathology.

*Method:* A total of 97 points from 45 patients were studied in terms of their biopsy reports matching to the electrical impedance measurements (in vivo). Bio-impedance measurements were performed at 30 different frequencies in the frequency range of 2KHz-1MHz using electrical impedance spectroscopy system and 4-electrode probe. According to the reports, the impedance readings were classified histologically into normal, benign changes, malignant, and dysplasia groups. To evaluate the significance of separating measured impedance spectrum, the Kruskal-Wallis test was applied to these data. Finally, the ROC curves was applied to evaluate the possibility of individual classifications of the benign and malignant points.

Results: According to the results, the resistivity of

normal group was higher than that of the benign group, and the resistivity of these groups was higher than that of the malignant group at frequencies between 470 KHz and 1MHz (P < 0.05). In these frequencies, the impedivity of dysplastic tissue was significantly lower than that for other groups (P < 0.05). The ROC curve for these impedance measurements indicated that the technique could provide diagnostic information partly(57%).

*Conclusion:* The impedance technique would be sufficiently sensitive to detect changes in a few cells. Thus, this minimally invasive technique would assist the Gastroenterologist to detect appropriate sites for biopsy because current diagnostic methods use random biopsies. Therefore, it seems that this minimally invasive technique can be a low cost technique and complementary method for endoscopy, biopsy and histopathological evaluation of the stomach abnormalities.

Send Date: 2010/08/19

#### Category: 15.3 Upper GI motility F-T-092

### Frequency of Gastrointestinal Bleeding among ICU patients of Razi and Pursina Hospitals in Rasht

Fariborz Mansour-Ghanaei<sup>1</sup>, Farahnaz Joukar<sup>1</sup>, Mojtaba Tajbakhsh<sup>1</sup>, Aliyar Danaei<sup>1</sup>

<sup>1</sup> Gastrointestinal and liver diseases research center of guilan, guilan university of medical sciences

*Introduction:* Critically ill patients admitted in ICU are in high risk of GI bleeding from stress related Gastritis which is called Hemorrhagic Gastritis or Erosive Gastritis. The incidence of GI Bleeding in ICU patients is variable from 3.4% to 52.7%. Severe GI Bleeding is an important condition that can cause mortality in almost 30% of critically ill patients. Considering that prevalence and importance of preventing stress related GI Bleeding in ICU patients is under controversy, we decided to study on the prevalence of GI bleeding as an important factor affecting on morbidity and mortality of ICU patients and its related factors in ICUs of Razi and Poursina Hospitals of Rasht, Guilan, Iran.

*Method:* This is a retrospective cross sectional study. Sampling is by census and consists of all the patients

who were admitted in Razi and Poursina's ICUs from 1384 till 1388. Inclusion criteria were having GI Bleeding in ICU. Data were collected from patients' files and analyzed in SPSS 14 software.

**Results:** From 3766 patients, 196 had GI Bleeding (5.20%). Of this group, 145 of them (74%) were male and 51 of them (26%) were female. The mean age of patients with GI Bleeding was  $45.27 \pm 20.71$ . Of GI Bleeding group, 73.5% had endotracheal tube or tracheostomy and mean duration of having tracheal tube in patients with GI Bleeding was  $15 \pm 15.06$  days. Among patients with GI Bleeding, 39 (19.9%) were admitted for medical problems, 148 patients (75.5%) for surgical problems, 3 patients (1.5%) were admitted for poisoning and 2.5% had both surgical and medical problems and 0.5% had both surgical problems and poisoning.

*Conclusion:* Considering results of our study, incidence of GI Bleeding in ICUs of our educational Hospitals is the same or even lower than risk of GI Bleeding in other studies, and this can be suggestive of different indications for admission in ICU in different countries. Key words: Gastritis, Gastrointestinal Hemorrhage, Intensive Care Units Send Date: 2010/08/15

Category: 15.5 Functional gastrointestinal disorders (clinical - management)

F-T-093

# Is Farsi version of ROME III criteria questionnaire valid?

Peyman Adibi<sup>1</sup>, Ali Toghiani<sup>2\*</sup>, Hamid Afshar<sup>3</sup>, Bahareh Mohebi<sup>2</sup>, Saideh Mahdavi<sup>4</sup>, shahrzad Shariaaty<sup>2</sup>, safura hoseini<sup>2</sup>, Ahmad Sobhani<sup>5</sup>

<sup>1</sup> Gastroenterology section, Department of internal medicine, Medical school, Isfahan University of medical sciences, Isfahan, Iran.

<sup>2</sup> Medical Student, Young Researchers Club, Islamic Azad University, Najafaband Branch, Isfahan, IRAN.

<sup>3</sup> Psychosomatic clinic, Behavioral sciences research center, Isfahan University of medical sciences, Isfahan, Iran.

<sup>4</sup> Medical Student, Young Researchers Club, Islamic Azad University, Najafabad branch, Isfahan, Iran.

<sup>5</sup> Department of internal medicine, Medical school, Islamic Azad University, Najafaband Branch, Isfahan, IRAN

*Introduction:* The aim of this study was to validate the Farsi version of the ROME III modular

questionnaire which contains all functional gastointestinal disorder (FGID).

*Method:* One hundred and sixty nine patients who were suffering from different types of FGID such as IBS, functional dyspepsia were included to this study. Patients disorders were diagnosed by a gastroenterologist during 13 months. All patients were full field the Farsi version of FGID questionnaire which was translated to Farsi in an academic clinic. Farsi version was checked by a gastroenterologist and a psychiatrist then the new Farsi version of FGID questionnaire was backward to English.

**Results:** Our results show that FGID questionnaire diagnosed 153 patients between 169 patients who were diagnosed to have diffrent types of FGID. The sensitivity of this questionnaire was 90.5%. Internal reliability by Cronbach's Alpha was 0.68 it means that good consistency of questions in the form. If we omit 6 questions which was about regarding loose pass following pain the Cronbach's Alpha will be 0.73.

*Conclusion:* The Farsi version of FGID questionnaire is valid and reliable and could be used in Persian Functional gastrointestinal disorder studies. Our results show that the sensitivity in our study is higher than other Asian studies.

Send Date: 2010/08/16

Category: 16.2 Inflammation and inflammatory mechanisms F-T-094

-1-094

# MEFV mutations in Iranian Azeri Turkish patients with familial Mediterranean fever

Mortaza Bonyadi<sup>1</sup>, Mohsen Esmaeili<sup>2\*</sup>, Mohammad Hossein Somi<sup>2</sup>, Nader Lotfalizadeh<sup>3</sup>,

Manouchehr Khoshbaten<sup>2</sup>, Neghar Laghaeian<sup>2</sup> <sup>1</sup> Faculty of Natural Sciences, Center of Excellence for Biodiversity, University of Tabriz, Tabriz

<sup>2</sup> Liver and Gastrointestinal Diseases Research Centre, University of Medical Sciences, Tabriz

<sup>3</sup> Welfare and Rehabilitation Center, Behzisty, Tbriz

*Introduction:* Familial Mediterranean fever (FMF) is an autosomal recessive autoinflammatory disorder with more than 60 disease-associated mutations in the responsible gene, MEFV. In the present study, we determined 15 MEFV mutations in Iranian Azeri Turkish FMF patients.

Method: Five hundred and twenty-four unrelated

patients were tested for 15 known mutations in the MEFV gene using amplification refractory mutation system-polymerase chain reaction and polymerase chain reaction-restriction fragment length polymorphism methods.

**Results:** Thirty-five different genotypes were characterized among the studied . Of the alleles investigated, the most common mutation was p.M694V (42.4%), followed by p.V726A (17%), p.E148Q (16.2%), and p.M680I (c.2040G>C) (15.2%). The p.R761H mutation (4.7%) was found to be the most frequent among the rare mutations. The mutations p.M680I (c.2040G>A), p.I692del, p.M694del and p.K695R were not found in this cohort. The remaining mutations account for 7.7% of the identifiable mutations. Five different types of complex alleles were also identified.

*Conclusion:* The results show the diversity and the frequency of the mutations in the Iranian Azeri Turkish FMF patients. The p.R761H mutation is rather prevalent in Azeri Turks; therefore, it should be included in the routine molecular diagnosis of FMF patients from this ethnic group.

Send Date: 2010/08/21

Category: 16.3 Gastrointestinal infections F-T-095

# Survey of Leptospirosis Knowledge of General Physicians in Rasht, Iran, 2009

sonbol taramian<sup>1\*</sup>, keyvan aminian<sup>1</sup>, kaveh ekhlasi<sup>1</sup> <sup>1</sup> Gastrointestinal and liver diseases research center of guilan, guilan university of medical sciences

*Introduction:* The main purpose of this study was to assess knowledge of leptospirosis among a sample of general physicians in the highly endemic area, Rasht, Iran

*Method:* This cross-sectional descriptive study was conducted among a sample of 139 general physicians. A questionnaire containing 25 questions was used. Those questions were in 4 compasses (Epidemiology; Transferring & Suffering ways; Signs & Symptoms; Treatment & Prevention). They must answer the questions with True, False or I don't know by a check mark.

*Results:* The average of obtained scores was 17.87 2.04 from 25. Maximum score was 23, while minimum was 11.

88 physicians (63.3 %) were upper than average; It means that 63.3 % had a good knowledge of leptospirosis, while 51 (36.7 %) were lower than average; It means that 36.7 % had a poor knowledge. The total knowledge and also the knowledge in every compass were independent of gender, age, professional history and pre-experience on leptospirosis treatment. Also; the knowledge in treatment & prevention compass was lower than others.

*Conclusion:* According to this study, the main problem is the poor knowledge level of general physicians in this highly endemic area; It means that the educational programs for general physicians were not satisfactory. Some necessary actions should be performed in order to increase the knowledge level of general physicians on leptospirosis in this endemic area. In addition, a plan to improve the basic knowledge of rural villagers on leptospirosis in endemic areas such as Guilan must be initiated. Send Date: 2010/08/11

Category: 16.3 Gastrointestinal infections F-T-096

Prevalence of Tuberculous peritonitis in patients with Ascites for 7 Years in Guilan province

Fariborz Mansour-Ghanaei1\*, Afshin Shafaghi1,

Farahnaz joukar<sup>1</sup>, Farzad Banijalali<sup>1</sup>

<sup>1</sup> Gastrointestinal and liver diseases research center of guilan, guilan university of medical sciences

*Introduction:* Tuberculosis, one of the oldest diseases known to affect humans, is a major cause of death worldwide. This disease, which is caused by bacteria of the Mycobacterium tuberculosis. Incidence of Tuberculous peritonitis is variable in 0.1% to 0.7%. It may be seen in all age and usually more prevalent in women. It's main symptom is ascitis . research done mainly on pulmonary Tuberculosis and extrapulmonary is less attention . Our aim in this study was to detect Tuberculosis peritonitis in a time period of 7 years in all Rasht's hospitals.

*Method:* The files of all of the patients who were admitted to Rasht Hospitals from 2001 to 2008 with abdominal distention (Ascitis) were studies and Tuberculos peritonitis were diagnosed in these patients by clinical presentation and paracentesis reports documented by biopsy. Symptoms, signs and

paraclinical findings were analyzed in SPSS14 software.

**Results:** Among 26 patients, with tuberculus peritonitis, 57.7% were female and 42.3% were male. Mean age of patients was  $46.34 \pm 18.22$  years old. Of them 88.5% didn't have history of TB, 96.2% didn't have family history of TB and 7.7% of patients had old radiographic changes of TB. The longest duration of symptoms was 28 weeks. The most prevalent symptom (100%) was abdominal distention and the second one was abdominal pain (88.4%), then fever (73%) and night diaphoresis (65.3%) . The color of paracentesis fluid was yellow in 42.3% and the mean lymphocyte count in paracentesis fluid was 75.84%  $\pm$  22.1%. Only 19.2% of patients had abdominal ESR, and CRP was positive in 58.3% of patients

*Conclusion:* Our study results was different in age of onset with other studies in Iran and out of Iran . This can be related to more careful clinical diagnosis and using more appropriate diagnosis methods and also better informing about TB in the province. However in endemic regions like Iran, in any young and specially female patient who comes with constitutional symptoms of chronic disease and symptoms of ascites with positive laboratory test or tuberculin test, we should consider Tuberculos peritonitis. Send Date: 2010/08/15

Category: 19.1 Endoscopy - Upper GI F-T-097

### A Study Of Indications And Complications Of Percutaneous Endoscopic Gastrostomy

Mohammad Hossein Somi1, Leili Maghboli1\*

<sup>1</sup> Liver and Gastrointestinal Diseases Research Centre, University of Medical Sciences, Tabriz

*Introduction:* Since it was described in 1980, percutaneous endoscopic gastrostomy (PEG) has been a widely used method for insertion of a gastrostomy tube in patients who are unable to swallow or maintain adequate nutrition. The aim of the present paper was to determine the complications of PEG insertion and to study post-procedural nutritional status.

*Method:* This is a crosssectional study that 100 consecutive adults referred to our unit for consideration for primary percutaneous endoscopic gastrostomy

feeding The Emam Reza University Hospital of Tabriz University of medical sciences, were evaluated prospectively during 2007. Patient nutritional status and complications was assessed after PEG insertion. They were followed up for 6 mounth after placement of PEG.

**Results:** PEG insertions were successful in all 100 patients (64 Males, 36 Females). The indications for PEG were neurogenic at 66 patients, recurrent aspiration at 14 patients, trauma at 9 patients, Guillain-Barre Syndrome (GBS) at 6 patients, esophageal tumor at 3 patients and encephalopaty at 2 patients. 99 percent of the patients had at least one follow-up after the tube insertion. Major complications were peritonitis at 1 patient. Minor complications were PEG site infection at 8 patients, tube blockage at 5 patients, Aspiration pneumonia at 4 patients and leakage at 2 patients.

Oral feed was resumed in 27% of the patients and the tube was removed subsequently.

*Conclusion:* Percutaneous endoscopic gastrostomy is a minimally invasive gastrostomy method with low morbidity and mortality rates, is easy to follow up and easy to replace when clogged. Send Date: 2010/08/19

Category : 19.1 Endoscopy - Upper GI

F-T-098 Upper gastrointestinal bleeding as first

# manifestation of Wegener's Granulomatosis

Hamid Tavakkoli<sup>1</sup>, Mehdi Zobeiri<sup>2\*</sup>, Mansour Salesi<sup>3</sup> <sup>1</sup> Poursina Hakim Research Institute, Isfahan University of Medical Sciences

<sup>2</sup> School of Medicine, Kermanshah University of Medical Sciences

<sup>3</sup> Rheumatology Department, Isfahan University of Medical Sciences

*Introduction:* Wegener's granulomatosis (WG) is an uncommon inflammatory disease that manifests as vasculitis, granulomatosis and necrosis. While its standard form involves the upper and lower respiratory tracts and kidneys, it may essentially involve any organ. Although most organ systems can be involved, gastrointestinal involvement in WG is notably uncommon.

*Results:* A 20 year-old male patient presented with epigastric pain, vomiting, hematemesis and

melena..On physical examination, he had orthostatic change and pale conjunctiva. There was not tenderness or organomegaly in the abdomen. Upper GI Endoscopy revealed dark blue colored infiltrative lesions in prepyloric area. Biopsy was obtained and mononuclear cell infiltration in the submucosal area was reported. High dose proton pump inhibitor and adjunctive supportive measures were given but no any change in follow up endoscopy detected. During hospital course he developed intermittent fever and rising of creatinin. Twelve days after admission he developed dyspnea, tachypnea and painful swelling of metacarpophalangeal joints, and maculopapular rash in extensor surface of right forearm. Chest X-ray showed pulmonary infiltration. Serum c-ANCA titer was strongly positive and skin biopsy revealed leukocytoclastic vasculitis. received Patient methylprednisolon pulse resulted in complete recovery of symptoms and gastric lesion

*Conclusion:* The present case indicates that gastrointestinal bleeding may be the first manifestation of Wegener's granulomatosis. Moreover, it should be emphasized that gastric biopsy is not characteristic or diagnostic in these patients. Send Date: 2010/09/20

Category : 19.1 Endoscopy - Upper GI F-T-099

**Evaluation of patients' satisfaction from clinical sedation in GI endoscopic procedures in Iran** 

Shahrokh Irvani<sup>1\*</sup>, Mojgan Frootan<sup>2</sup>,

Homayoon Zojaji<sup>3</sup>, Mohammad Azizi<sup>1</sup>,

Sandra Saeedi<sup>1</sup>, Mahmood Reza Hashemi<sup>1</sup>

<sup>1</sup> Department of Gastroenterology, Army University of Medical Sciences

<sup>2</sup> Taleghani Hospital, Shahid Beheshti University of Medical Sciences

<sup>3</sup> Department of Gastroenterology, Shahid Beheshti University of Medical Sciences

*Introduction:* Nowadays, the level of satisfaction from anesthesia and sedation during GI endoscopy is a matter of concern and an important factor in decision making about this procedure. The aim of this study was to assess satisfaction level in endoscopic patients and factors which are involved; and also validate the translated questionnaire for evaluating sedation satisfaction in endoscopic patients.

*Method:* The translated version of questionnaire was answered by 379 patients who were candidate for elective upper GI endoscopy or colonoscopy or both within 72 hours after procedure. Sedation satisfaction was graded into 4 major groups: sedation delivery, procedural recall, side effects and global satisfaction. *Results:* The validity of translated questionnaire was proved. There were significant differences in patients' satisfaction level between different jobs (p=0.02) as well as different levels of education (p=0.01).

*Conclusion:* Overall, only two factors were related to patients' satisfaction: educational level and job. Higher educational level was accompanied with greater sedation satisfaction and the highest satisfaction level was in retired patients and the lowest satisfaction was in housekeepers. Send Date: 2010/09/22

Category : 19.1 Endoscopy - Upper GI F-T-100

#### Comparison of patient satisfaction with upper and lower GI endoscopic procedures between non-sedated conventional and sedated method of endoscopy

Shahrokh Irvani<sup>1\*</sup>, Homayoon Zojaji<sup>2</sup>,

Mohammad Azizi<sup>1</sup>, Sandra Saeedi<sup>1</sup>, Mojgan Frootan<sup>3</sup>, Mahmood Reza Hashemi<sup>1</sup>, Kamyab Alizadeh<sup>1</sup>

<sup>1</sup> Department of Gastroenterology, Army University of Medical Sciences

<sup>2</sup> Department of Gastroenterology, Shahid Beheshti University of Medical Sciences

<sup>3</sup> Taleghani Hospital, Shahid Beheshti University of Medical Sciences

*Introduction:* There has been a considerable worldwide increase in upper and lower GI endoscopic procedures, and to decrease the pain and anxiety in this procedure sedation is used by gastroenterologists. But in Iran, use of sedation in endoscopic procedures is not common and the level of patient's satisfaction with this issue is not investigated. The aim of this study was to compare the unsedated conventional endoscopy with sedated method of endoscopy regarding the satisfaction and acceptance among Iranian patients.

*Method:* In a prospective, multicenter, nonrandomized clinical trial 756 patients were included between 2009 and 2010. A satisfaction developed questionnaire was answered by the patients who were candidate for elective upper and/or lower GI endoscopy within 72 hours after the procedure. Total satisfaction score was measured and compared between sedated and unsedated endoscopy patients. Different factors analyzed in order to find the influencing factors in patient satisfaction during the endoscopic procedures.

**Results:** The mean age of patients was  $40.7 \pm 15.1$  years and 59% of them were female. Overall, 50.5% of patients were sedated during the endoscopic procedure. There was a significant correlation between education level and satisfaction with the endoscopy. Also the sedation significantly increased the total satisfaction score of the patients (OR= 2.07, 95% CI: 1.24-2.90, p=0.0001).

*Conclusion:* The level of patient's education and use of sedation during GI endoscopy were two factors influencing the total patient satisfaction with the endoscopic procedures. Therefore, we suggest using sedation for GI endoscopic procedures. Send Date: 2010/09/22

Category: 19.4 Endosonography F-T-101

#### Bedside Endoscopic Ultrasound in Critically III patients Mehdi Mohamad nejad<sup>1</sup>

<sup>1</sup> Digestive Disease Research Center, Capriati Hospital, Tehran University of Medical Sciences, Tehran, Iran *Introduction:* The role of bedside endoscopic ultrasound (EUS) in the management of critically ill patients is not well described. The aim of this study is to evaluate safety, feasibility, and impact of bedside EUS in the management of medically unstable patients.

*Method:* In a retrospective analysis of prospectively collected data, consecutive patients who underwent

bedside EUS in an intensive care unit (ICU) at our hospital between January 2004 and August 2009 were identified. EUS, cytology and pathologic findings and clinical follow-up data were collected. EUS was considered to have a significant impact if a new diagnosis was established and/or the findings altered subsequent patient management.

Results: Fifteen patients (9 male; mean age 58±15 yrs.) in the medical (n=9), surgical (n=3), organ transplant (n=2) or neurosurgical ICU (n=1) were included. Bedside EUS was technically successful and completed in all patients without complications. EUS-FNA (median 4 passes; range 2-7) was performed in 12 (80%) and demonstrated a malignant mediastinal mass/lymph node in 5 [non-small cell lung cancer in 2, small cell lung cancer in 1, metastatic adenocarcinoma in 1. non-Hodgkin's lymphoma in 1], pancreatic abscess in 1,. EUS also established as benign both enlarged gastric folds (n=1) and lymph nodes in the mediastinum (n=1) and portahepatis region (n=1), and successfully thrombosed gastric varices following cyanoacrylate injection in 1. Also, EUS successfully excluded choledocholithaisis (n=1), extrahepatic bile duct tumor (n=1) and pelvic abscess (n=1). In two patients, EUS-FNA failed to diagnose mediastinal histoplasmosis (n=1) and a hemorrhagic pancreatic pseudocyst (n=1). EUS was considered to have an impact in 13/15 (87%) including 10/12 (83%) who had EUS-FNA and 3/3 (100%) who underwent diagnostic EUS alone.

*Conclusion:* In this series, bedside EUS (including FNA) in ICU patients was technically feasible, safe and had a major impact on the diagnosis and management of the majority of patients. Send Date: 2010/09/07

# Index

### Author Index (English Abstracts)

Aarabi M34
Abbasi F55
Abbaszadegan MR54
Abdolahi N12 Abdolahi T54,55
Abdolahi T
Abdollahi H23
Addollani H23
Abdollahi M31
Abdollahzadeh S37
Abedian S11
Abedi-Ardekani B15
Abiar H17
Abnet C16,18,21
Abrishami M55
Adibi P31,32,57
Adilipour H31
Afshar H32,57
Agah S25
A 1 1 1 II 10
Agdarkosh H12
Aghaei M50
Aghajanzadeh M13
Aghapour A34
Aghcheli K18 21 Ahmad Dar N15
Ahmad Dar N 15
Ahmadi Z55
Ahmadi K31
Akbari MR14
Alphandi Markadi M
AKNONGI-WEVDOGI WI
Akhondi-Meybodi M

Banijalali F58
Bari Z30
Bashiri H
Bashiri J14
Bavarian B51,52
Bazargan-Hejazi S35
Besharat S
Besharati S44
Biazar P14
Bloursaz S54
Boffetta P16,18
Bolletta P10,18
Bolandmartabeh M27
Bonyadi M57
Brant A15 Chavoshi S54
Chavoshi S54
Cote GA50
Dadkhah E54
Daghaghzadeh H32
Danaei A
Darabi S43
Darvish Moghadam S
Dawsey S16,18,21
DeWitt JM50
Ebrahimi Daryani N
25 37 38
Elternaisadat Al
Ekhlasi K
Elahi E9
Emadi-Baygi M53
Emami MH31
Engstrand L18
Erfani A47
Erfani M29
Esmaeili M 5/
Esmaeili M
Esmaeilzadeh A29,55
Esmaeilzadeh A29,55 Etemadi A21
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9.39
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9.39
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL50
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL50 Faramarzi E23
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL50 Faramarzi E23 Fazel AR12
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL50 Faramarzi E23 Fazel AR12 Fereshtehnejad SM37,38
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL50 Faramarzi E23 Fazel AR12 Fereshtehnejad SM37,38 Frootan M60
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL50 Faramarzi E23 Fazel AR12 Fereshtehnejad SM37,38 Frootan M60 Ganji A42,55,28,34
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL50 Faramarzi E23 Fazel AR12 Fereshtehnejad SM37,38 Frootan M60 Ganji A42,55,28,34 Ghadir MR27,33,39,40,43
Esmaeilzadeh A29,55 Etemadi A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL36 Fogel EL30 Faramarzi E23 Fazel AR12 Fereshtehnejad SM37,38 Frootan M60 Ganji A42,55,28,34 Ghadir MR27,33,39,40,43 Ghadirian P14
Esmaeilzadeh A29,55 Etemadi A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL36 Fogel EL30 Faramarzi E23 Fazel AR12 Fereshtehnejad SM37,38 Frootan M60 Ganji A42,55,28,34 Ghadir MR27,33,39,40,43 Ghadirian P14
Esmaeilzadeh A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL50 Faramarzi E23 Fazel AR12 Fereshtehnejad SM37,38 Frootan M60 Ganji A42,55,28,34 Ghadir MR27,33,39,40,43 Ghadirian P14 Ghadri S54,55
Esmaeilzadeh A29,55 Etemadi A29,55 Etemadi A21 Faghri J7 Fahimi S16 Fallah AA41 Farahmand F9,39 Farhangi E36 Fogel EL36 Fogel EL30 Faramarzi E23 Fazel AR12 Fereshtehnejad SM37,38 Frootan M60 Ganji A42,55,28,34 Ghadir MR27,33,39,40,43 Ghadirian P14

Ghajarieh-Sepanlou S12
Ghanooni AH27,40
Gharbali A48
Ghasemian safaei H7
Ghasemian salael H/
Ghavidel A18
Ghayour Mobarhan M29
Ghazimoghadam K41
Ghomashpasand B36
Ghorbani Haghjo A23
Ghotb S9 Ghotbi MH
Ghotbi MH8
Golozar A21
Goshayeshi L47
Habibollahi P37,38
Haghdani S
Haghjooyjavanmard SH53
Hainaut P 15
Hainaut P15 Hajavi N20
Hakimi HR55
Halimi M25
Hasanzadeh A9
Hashami M 30
Hashemi M30 Hashemi MR60
Hashemzadeh K25
Hashemzadeh S25
Havaspour A
Hayatbakhsh MM28
Hedayati MR34
Heidari A43
Helalati H42
Hemminki K15
Hoseini M55
Hoseini S57
Hoseinzade A45 Hosiynei T34
Hosiynei T34
Hosseinnezhad H29,54
Hosseinzadeh V54
House M50
Iranikhah A27,39
Irvani S60
Islami F16,18,22
Jabari N48
Jabbari H46
Jafarshad R44
Jafary M37
Jafarzadeh M54,55
Jalalpour MR28
Javadi M49
Javadi MV33,40
Joukar F13,17,44,49,56,58
Iones KI 50
Jones KJ50 Kamangar F16,18,21,32
xamangai 1°10,10,21,32
Karayiannis P43

Karimi Elizee P44
Karimi Yazdi AR14
Kazemi S47
Kazemi S47 Kazemnejhad V42
Keikhaei MA 26
Keikhaei MA26 Keramati MR37,38
Keraman WIK
Keshavarz AA35
Keshtkar A56
Keshtkar AA42
Keshvari M44,45
Kesthair MA 20
Keykhaie MA30
Khademi H16
Khalili Pour E22
Khatami GR9
Khatibian M25
Khdabakhshi B41
Khoshbaten M57
Khoshnod A25, 50
Khosravi A29
Khosravi S37
Kiyani N47
Kolahdouzan S33
Komeili Movahhed A43
Komeili Movahhed A43 Komeili Movahhed T43
Labani Motlagh MR19
Laghaeian N
Lepage P14
Lenage P 14
LeBlanc JK50
LeBlanc JK50 Lehman GA50
LeBlanc JK50 Lehman GA50
LeBlanc JK50 Lehman GA50 Lerski RA48
LeBlanc JK50 Lehman GA50 Lerski RA48 Lotfalizadeh N57
LeBlanc JK50 Lehman GA50 Lerski RA48 Lotfalizadeh N57 Muqbool Lone M15
LeBlanc JK50 Lehman GA50 Lerski RA48 Lotfalizadeh N57 Muqbool Lone M15 Maghboli L59
LeBlanc JK50 Lehman GA50 Lerski RA48 Lotfalizadeh N57 Muqbool Lone M15 Maghboli L59 Martel-Planche G15
LeBlanc JK50 Lehman GA50 Lerski RA48 Lotfalizadeh N57 Muqbool Lone M15 Maghboli L59 Martel-Planche G15 Mahdavi S57
LeBlanc JK50 Lehman GA50 Lerski RA48 Lotfalizadeh N57 Muqbool Lone M15 Maghboli L59 Martel-Planche G15 Mahdavi S57
LeBlanc JK50 Lehman GA50 Lerski RA48 Lotfalizadeh N57 Muqbool Lone M15 Maghboli L59 Martel-Planche G15 Mahdavi S57 Majdzadeh R16
LeBlanc JK
LeBlanc JK
LeBlanc JK
LeBlanc JK50 Lehman GA50 Lerski RA50 Lerski RA48 Lotfalizadeh N57 Muqbool Lone M15 Maghboli L59 Martel-Planche G15 Mahdavi S57 Majdzadeh R16 Malboobi MA46 Maleki T13 Maleknejad S36 Malekzadeh R8,9,11,12
LeBlanc JK

# Index

Merat S.....12, 47 Meskinkhoda P.....45 Mikaeili J .....9 Minakari M......31 Mir-Naseri SMM......9 Moaven O.....29,55 Moazeni K ......30 Modaresi Esfeh J.....22,51 Modaresi Saryazdi V.....9 Mofid A.....8 Moghim S.....7 Mohamad nejad M.....61 Mohammad-Hashem F .... Mohammadi M......28 Mohammadi M.....31 Mohammadkhani A.....46 Mohebbi SR......28 Mohebi B.....57 Mokhtarifar A ......30,55 Molana AA ......42 Moradi A.....41 Moradi Moghadam F..... Mortazavi S.....40 Mounawar M.....15 Mousavi SM.....15 Mousavi Movahhed SM .. Mousavifard SH.....47 Naghashi S.....20,23 Najafi sani M.....51,52 Narod SA.....14 Nasre-Isfahani S.....32 Nasrollahzadeh D....16,18 Nasseri-Moghaddam S.... Nazemalhosseini Mojarad Е.....26 Nazer MR.....49 Nezam K ......26 Niaragh MM.....13 Nikpour P.....53 Noorani M.....43,45 Nooranipour M.....43 Nosrati R.....25

Nouraie         M
Peikan-Heirati M12
Persson C18 Pitt HA50
Pitt HA
Pourgsassenii Gargari B
Pourhoseingholi A 26
Pourhoseingholi A26 Pourhoseingholi MA26
Pourshams A25
Poustchi H46
Qujeq D21
Rafat Panah H42
Rahbar taromsari M17
Rahimi E16,33
Rajai Z29
Ramezani Farkhani B29
Rashidi N7
Rasmi Y13
Rastegarpanah M31
Raziee HR54
Razjouyan H8
Reisossadati R54
Riahin AA39
Riahizadeh S25
Riyahi nezhad S17
Rogha M37
Romanos J28
Roquis D14
Roshandel GR
Roshangar L22,51
Rostami K28 Rostami Nejad M26,28
Rostami Nejad M26,28
Sabahi F46
Saberifiroozi M11 Sadeghipour M41
Sadeghipour M41
Sadighi A
Sadjadi AR14
Sadreddini M13

Saeedi S
Sarkeshikian SS27 Savari M23 Seddigh Tonekaboni B 22,51
Semnani S
Sharifi H47 Sharifzadeh M17 Sherman S50 Sheykh esmayeeli F36 Shirmohamadi M20 Sima HR
Sobhani A17,37,57 Sobhani M
12,25 Sundquist J15 Taba taba Vakili S37 Tabaraii A41 Tabatabae SV44 Tadayon M54,55 Taher Eftekharsadat A
20,56 Taheri A

Tavakkoli H.....7,31,46,59

Tavalaei A45
Tavallaie M54
Tavasoli R54
Teimoori M45
Telkabadi M28
Tofangchiha S8
Toghiani A32,57
Vaez Javadi M33,40
Vahedi H25,31
Vahedi M26
Vahhabi Moghaddam M
Velayati A54
Villar S15
Vossoughinia H47
Watkins JL50
Wijmenga C28
Yaghmaei B51,52
Yahoo N46
Ye W18
Yourdkhani F9
Zahedi MJ23,28
Zakeri Z26
Zali MR26,28
Zamani F12
Zare A37,38
Zargar SA15
Zarghami N25
Zendehdel N25
Zobeiri M59
Zojaji H28,60

#### Author Index (Persian Abstracts)

۱۰،۷	مجيد آزادگان
۳۹	امیر ضیائی
امحمدی۳۹	على اكبر حاج آق
کبار۳۹	يوسف محمدى



### نشريه علمي انجمن متخصصين گوارش وكبد ايران

شاپا: ۷۱۸۶-۱۵۶۰ (چاپی)، ۷۵۶-۲۰۰۸ (آنلاین)، ۷۵۷۸-۲۰۰۸ (الکترونیک) شماره پیاپی:۱-۷۲ دوره ۱۵، ویژه نامه ، پاییز ۱۳۸۹ موسس ومدير مسئول: صاحب امتياز: انجمن متخصصين گوارش و كبد ايران دكتر سيدحسين ميرمجلسي سردبير: ناشر: انجمن متخصصين گوارش و كبد ايران دكتر صادق مسرت هيئت تحريريه (به ترتيب الفبا): دکتر رحیم آقازاده: استاد، فوق تخصص بیماریهای گوارش وکبد، دانشگاه علوم پزشکی شهید بهشتی دکتر ناصر ابراهیمی دریانی: استاد، فوق تخصص بیماریهای گوارش وکبد، دانشگاه علوم پزشکی تهران دکتر سیدمحمدحسن امامی نجفی دهکردی: دانشیار، فوق تخصص بیماریهای گوارش و کبد، دانشگاه علوم پزشکی اصفهان دکتر صادق مسرت: استاد، فوق تخصص بیماریهای گوارش وکبد، دانشگاه علوم پزشکی تهران دکتر رضا ملک زاده: استاد، فوق تخصص بیماریهای گوارش وکبد، دانشگاه علوم پزشکی تهران دکتر جواد میکائیلی: استاد، فوق تخصص بیماریهای گوارش وکبد، دانشگاه علوم پزشکی تهران

دکتر محسن نصیری طوسی: دانشیار ، فوق تخصص گوارش و کبد، دانشگاه علوم پزشکی تهران

#### اعضای بین المللی هیئت تحریریه:

دكتر گويدوآدلر (آلمان)، دكتر ايرج سبحاني (فرانسه)، دكتر على كشاورزيان (ايالات متحده آمريكا)، دكتر دتلف شوپان (ايالات متحده آمريكا)

#### شورای سردبیری:

دکتر اکرم پورشمس، دکتر نسرین زنده دل، دکتر غلامحسین فلاحی، دکتر مهدی محمدنژاد، دکتر قدرت ا... منتظری

ويرايش علمي :

دکتر مهدی محمدنژاد

ويرايش ادبي متن فارسي:

دکتر امیر حسین سجادیه، دکتر حمیدرضا نمازی، دکتر اسماعیل انصاری

ویرایش ادبی متن انگلیسی:

كيم وقارفرد

صفحه آرایی :

فرزانه اتحاد

نشانی پستی مجله:

تهران، خیابان کارگر شمالی، جنب مرکز قلب تهران، کوچه شهریور، شماره ۱۳، واحد ۱ صندوق پستی ۱۶۳– ۱۴۳۹۵ دکتر صادق مسرت تل**فن و نمابر: ۳– ۸**۸۳۳۵۰۶۱

مدیر اجرایی:

دکتر سید محمدمهدی میرناصری

#### امور دفتری:

مارال صیاد، آزادہ ولی زادہ

#### نشانی ناشر :

تهران، خیابان کارگر شمالی، جنب مرکز قلب تهران، کوچه شهریور، شماره ۱۳، واحد ۱ دکتر سیدحسین میرمجلسی تلفن و نمابر: ۳ - ۸۸۳۳۵۰۶۱ پست الکترونیک: info@iagh.org

> این نشریه مورد حمایت مالی انجمن متخصصین گوارش وکبد ایران می باشد. هرگونه استفاده از مطالب نشریه با ذکر منبع بلامانع است. Web Site: www.iagh.org E-mail: govaresh@iagh.org