8th Annual Congress of Iranian Rheumatology Association

ABSTRACT BOOK

15th–17th October 2014

Tehran, Iran

Table of Contents

WELCOME MESSAGE

In The Name of Allah

Dear Members and Colleagues:

On behalf of Rheumatology Research Center (RRC), supported by The Tehran University of Medical Sciences (TUMS), we would like to express our heartfelt gratitude to all of the participants at the 8th Annual Congress of Iranian Rheumatology Association in Tehran. The meeting program includes 3 special lectures, 2 scientific sessions selected from the scientific topics submitted to us from throughout Iran, and 6 scientific sessions including important challenging topics of Rheumatology which is conducted by Rheumatologist and related specialist from Iran and other countries (UK, Italy), and 3 intensive workshops. We are proud to say that for the first time in our congress we are having a "Meet the Professor session" on Behcet's disease conducted by Professor Davatchi, and also a "patient training session" on lupus.

Leading experts and scientists will be joining us in Tehran and the Scientific Committee is compiling an attractive program to bring you all the latest clinical developments and cutting-edge translational science in the rapidly developing field of Rheumatology.

We expect many of you will participate in active discussion throughout these meetings. Your participation and subsequent ideas and results will lay the foundation for the future of advances in the study and treatment of Rheumatic disease.

In addition, the vicinity of Tehran has many attractive places, including Pahlavi palaces, The Carpet Museum, Milad Tower and so on.

We wish all participants a gratifying stay in Tehran and would be quite pleased if you could thoroughly enjoy Tehran.

Professor Ahmadreza Jamshidi
President of Iranian Rheumatology Association
President of the 8th Annual Congress of
Iranian Rheumatology Association

COMMITTEES

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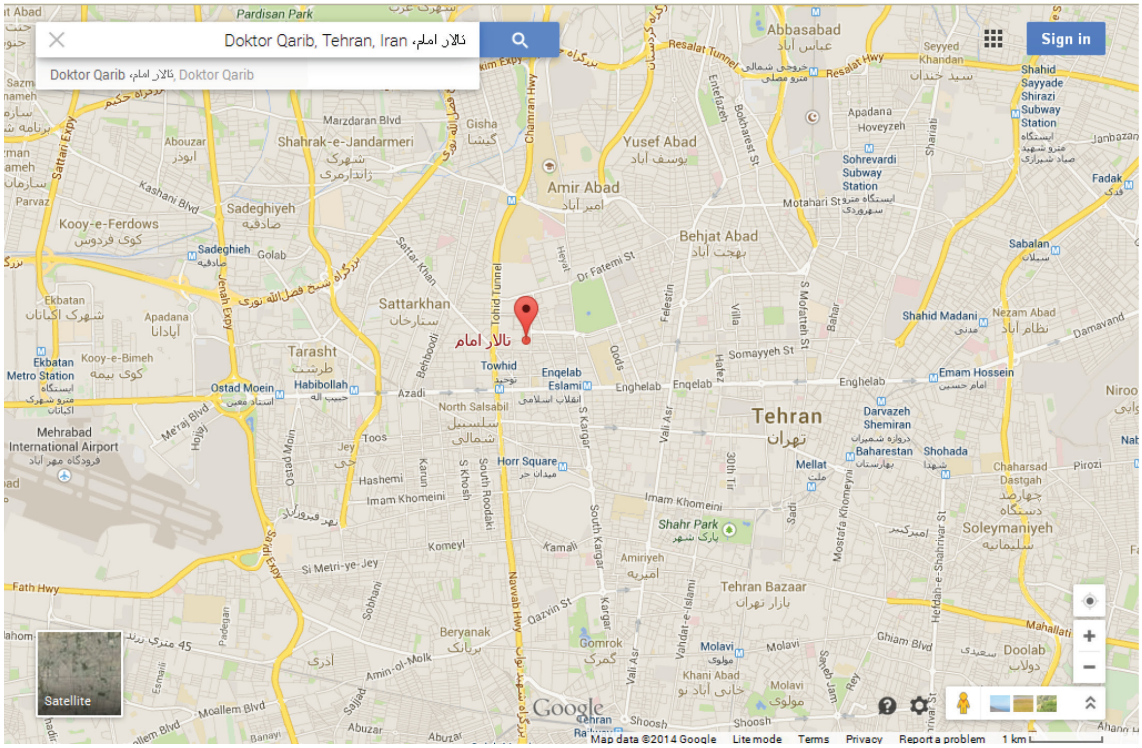
ACCESS MAP



FLOOR MAP

TIME TABLE

		7:00	8:00	9:00	10:00	11:00	12:00	13:00
October 14 (Tues.)	Pre-Congress Course			**Workshop 1 – Scientific Communication Seminar For Rheumatologist** Dr. Armen Yuri Gasparyan				
	Place			Laleh Hall (First Floor)				
October 15 (Weds.)	Scientific Program	**Registration**	**Opening Ceremony**	**Special Lecture - New Treatments for Osteoarthritis Chair:** Dr. Fereydoun Davatchi **Lecturer:** Dr. Asghar Hajiabbasi	**Scientific Session 1 - Oral Presentations Co-Chairs:** Dr. Ahmadreza Jamshidi, Dr. Akbar Fotouhi (6 presentations - each presentation 10 minutes)	**Poster presentation**	**Coffee Break**	**Scientific Session 2 - Large Vessel Vasculitides Co-Chairs:** Dr. Mohammadmahdi Emam, Dr. Ali Javadzadeh, Dr. Aliasghar Ebrahimi, Dr. Mehrdad Bakhshayesh Karam, Dr. Zargham Hossein Ahmadi **S2-1:** Pathogenesis of Large-Vessel Vasculitides – Dr. Aliasghar Ebrahimi **S2-2:** Takayasu's Arteritis – Dr. Mohammadmahdi Emam **S2-3:** Giant Cell Arteritis – Dr. Ali Javadzadeh Panel for Questions and Answers
	Place	Registration Desk (Ground Floor)	Aghigh Hall (Ground Floor)	Aghigh Hall (Ground Floor)	Aghigh Hall (Ground Floor)	First Floor	Break Room (Ground Floor)	Aghigh Hall (Ground Floor)
October 16 (Thurs.)	Scientific Program	Annual Meeting of Iranian Rheumatology Association	**Special Lecture - Shoulder Pain Chair:** Dr. Mohammadreza Hatef **Lecturer:** Dr. Abdolhadi Nadji	**Scientific Session 4 - Oral Presentations Co-Chairs:** Dr. Mohammadreza Shakibi, Dr. Alireza Khoshdel (6 presentations - each presentation 10 minutes)		**Poster presentation**	**Coffee Break**	**Scientific Session 5 - Upper Limb Surgery in Rheumatoid Arthritis Co-Chairs:** Dr. Farhad Shahram, Dr. Mohammadreza Giti, Dr. Reza Shahriar Kamrani, Dr. Ali Movafegh, Dr. Alireza Khabazi, Dr. Alireza Sadeghi **S5-1:** Indications of Upper Limb Surgery in RA – Dr. Alireza Khabazi **S5-2:** Hand Surgery in RA – Dr. Reza Shahriar Kamrani **S5-3:** Shoulder and Elbow Surgery in RA – Dr. Mohammadreza Giti **S5-4:** Surgery Care for RA (Anesthesiologist's Perspective) – Dr. Ali Movafegh **S5-5:** Surgery Care for RA (Rheumatologist's Perspective) – Dr. Alireza Sadeghi Panel for Questions and Answers
	Place		Aghigh Hall (Ground Floor)	Aghigh Hall (Ground Floor)	Aghigh Hall (Ground Floor)	First Floor	Break Room (Ground Floor)	Aghigh Hall (Ground Floor)
October 17 (Fri.)	Scientific Program		**Special Lecture - Fibromyalgia Chair:** Dr. Akbar Rajaee **Lecturer:** Dr. Jafar Forghanizadeh	**Scientific Session 7- Rheumatology and Lymphoma Co-Chairs:** Dr. Farhad Gharibdoost, Dr. Mohammadali Nazarinia, Dr Nasrin Moghimi, Dr. Kamran Ali Moghadam **S7-1:** Secondary Lymphoma in Rheumatic Diseases – Dr. Mohammadali Nazarinia **S7-2:** Rheumatologic Manifestations in Lymphoma – Dr Nasrin Moghimi Panel for Questions and Answers		**Coffee Break**		**Scientific Session 8 - Juvenile Idiopathic Arthritis (JIA) Co-Chairs:** Dr. Gholamali Naseh, Dr. Yahya Aghighi, Dr Nahid Shafaee, Dr. Mohammadhasan Moradinejad, Dr. Reza Shiari **S8-1:** What is JIA?- Dr. Alberto Martini **S8-2:** How to treat JIA?- Dr. Nicolino Ruperto **S8-3:** How to measure JIA?- Dr. Angelo Ravelli Panel for Questions and Answers
	Place		Aghigh Hall (Ground Floor)	Aghigh Hall (Ground Floor)		Break Room (Ground Floor)		Aghigh Hall (Ground Floor)

13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00

Prayers and Lunch Break	**Scientific Session 3 - Hematological involvement in SLE** **Co-Chairs:** Dr. Mahmoud Akbarian, Dr. Zahra Rezayi Yazdi, Dr. Ali Dehghan, Dr. Mohammad Mousavi, Dr. Mohammad Jahani **S3-1:** Leukopenia in SLE – Dr. Mohammad Mousavi **S3-2:** Anemia in SLE – Dr. Zahra Rezayi Yazdi **S3-3:** Thrombocytopenia in SLE – Dr. Ali Dehghan Panel for Questions and Answers	**Coffee Break**	**Workshop 2 - Ultrasonography of Joints (I)** Dr. Jafar Forghanizadeh, Dr. Nahid Kianmehr, Dr. Anoosheh Haghighi
Dining Hall (Underground Floor)	Aghigh Hall (Ground Floor)	Break Room (Ground Floor)	Laleh Hall (First Floor)
Prayers and Lunch Break	**Scientific Session 6 - Psoriatic Arthritis** **Co-Chairs:** Dr. Maryam Moghadasi, Dr. Noushin Bayat, Dr. Alimohammad Fatemi, Dr. Parvin Mansouri **S6-1:** Epidemiology and Pathogenesis of psoriatic Arthritis– Dr. Alimohammad Fatemi **S6-2:** Clinical Manifestations and Diagnosis of psoriatic Arthritis – Dr. Nooshin Bayat **S6-3:** Treatment of psoriatic Arthritis – Dr. Maryam Moghadasi Panel for Questions and Answers	**Coffee Break**	**Workshop 3 - Ultrasonography of Joints (II)** Dr. Jafar Forghanizadeh, Dr. Nahid Kianmehr, Dr. Anoosheh Haghighi
	Meet the Professor session - Behçet's Disease Dr. Fereydoun Davatchi		**Patients Education Session – Systemic Lupus Erythematosus (SLE)** **Chair:** Dr. Mahmoud Akbarian **E1-1:** Diet in Lupus - Dr. Niaz Mohammadzadeh **E1-2:** Coping in Lupus - Dr. Masoud Arzaghi Panel for Questions and Answers
Dining Hall (Underground Floor)	Aghigh Hall (Ground Floor)	Break Room (Ground Floor)	Laleh Hall (First Floor)
	Bostan Hall (First Floor)		Aghigh Hall (Ground Floor)
Prayers and Lunch Break	**Workshop 4 - Bone mineral Densitometry (BMD)** Dr. Ahmad Salimzadeh		
Dining Hall (Underground Floor)	Laleh Hall (First Floor)		

PRE-CONGRESS COURSE

Tuesday October 14

9:00-13:00 **Workshop 1- Science Communication Seminar For Rheumatologists**

Armen Yuri Gasparyan, MD, PhD

Associate Professor of Medicine, Departments of Rheumatology and Research & Development, Dudley Group NHS Foundation Trust, Teaching Trust of The University of Birmingham, UK

Associate Editor, Rheumatology International (IF 2.2), Guest Editor, Current Medicinal Chemistry (IF 4.0), Chief Editor, European Science Editing Council Member, European Association of Science Editors Member, Academy of Medical Sciences, B&H

W1-1: Writing an article for indexed rheumatology journals

W1-2: Individual and journal impact metrics in Rheumatology

W1-3: Ethical considerations for Rheumatology journals

W1-4: Auto-Inflammatory disorders in the digitization age
Q&A, Certificate awarding

SCIENTIFIC PROGRAM

Wednesday, October 15

7:00-8:00 **Registration**

8:00-8:30 **Opening Ceremony**

8:30-9:30 **Special Lecture**

Chair: Fereydoun Davatchi *(Emeritus Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Iran)*

New Treatments for Osteoarthritis

Asghar Hajiabbasi *(Assistant Professor of Rheumatology, Department of Rheumatology, Guilan Medical University, Iran)*

9:30-10:30 **Scientific Session 1- Oral Presentations**

Co-chairs: Ahmadreza Jamshidi *(Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Iran),* Akbar Fotouhi *(Professor of Epidemiology, Tehran University ofMedical Sciences)*

S1-1 The Effects of Probiotic Supplementation On Symptoms, EULAR Response, Inflammatory Biomarkers, Oxidative Stress Indices and Lipid Profile In Women with Rheumatoid Arthritis.

Elnaz Vaghef-Mehrabany[1], Sakineh-Khatoun Sharif[2], Beitullah Alipour[1], Aziz Homayouni-Rad[1], Leila Vaghef-Mehrabany[3], Mohammad Asghari-Jafarabadi[4]

1-School of Nutrition, Tabriz University of Medical Sciences, Tabriz, Iran 2- School of Medicine, Tabriz University of Medical Sciences,Tabriz, Iran 3- School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran 4- School of Health, Tabriz University of Medical Sciences, Tabriz, Iran

S1-2 Lacritin Level in Tear Film of Patients with Rheumatoid Arthritis

alireza khabbazi[1], Rana Sorkhabi[2], Amir Ghorbanihaghjo[2]

1-Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences,Tabriz, Iran 2-Tabriz University of Medical Sciences, Tabriz, Iran

S1-3 Association Between Butyrylcholinesterase Activity And Phenotypes, Paraoxonase 192 rs662 Gene Polymorphism And Their Enzymatic ActivityWith Severity of Rheumatoid Arthritis: Correlation With SystemicInflammatory Markers And Oxidative Stress, Preliminary **Report**

Asad Vaisi-Raygani[1,2], Shiva Shahmohamdnejad[1,2], Yadola Shakiba[1,2], Amir Kiani[1,2], Zohreh Rahimi[1,2], Tayehbeh Pourmotabbed [3]

1- Department of Clinical Biochemistry, School of Medicine, Kermanshah University of Medical Sciences, Kermanshah, Iran 2- Molecular Diagnostic Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran 3- Department of Microbiology, Immunology and Biochemistry, University of Tennessee Health Science Center, U.S.A

S1-4 Superantigens Assessment in Synovial fluid of Rheumatoid arthritis Patients

Ramezan Ali Ataee[1], Gholam Hossein Alishiri[2]

1- Department of Medical Microbiology, School of Medicine, Baqiyatallah University of Medical Sciences, Tehran, Iran 2- Department of Rheumatology, School of Medicine, Baqiyatallah University of Medical Sciences, Tehran, Iran

S1-5 Helicobacter pylori infection in patients with Sjögren's syndrome. A case control study

Massaud Saghafi[1], nafiseh Abdolahi[2], Reza Orang[1], Mohammad Reza Hatef[1]

1-Rheumatic Diseases Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran, 2- Rheumatic Diseases Research Center, School of Medicine, Golestan University of Medical Sciences,Golestan, Iran

S1-6 Celiac disease in rheumatoid arthritis: A cross-sectional study in Iran

Habib Zayeni[1], Afshin Shafaghi[2], Alireza Gharib Pour[1], Mohammad Reza Naghi Pour[2], Alireza Jafari Nezhad[1], Amir assankhani[3], Alireza Amir Maafi[3], Siamak Geranmayeh

1- Rheumatology Research Center, Guilan University of Medical Sciences, Rasht, Iran, 2- Gastrointestinal and Liver Diseases Research Center (GLDRC), Guilan University of Medical Sciences, Rasht, Iran, 3- Medical student, Student Research Committee, Guilan University of Medical Sciences, Rasht, Iran

10:30-11:00 **Poster presentation and Coffee Break**

11:00-13:00 **Scientific Session 2 - Large Vessel Vasculitides**

Co-Chairs: Mohammadmahdi Emam, Ali Javadzadeh, Aliasghar Ebrahimi, Mehrdad Bakhshayesh Karam *(AssociateProfessor of Radiology, Shahid Beheshti University of Medical Sciences, Iran)*, Zargham Hossein Ahmadi *(Assistant Professor of Cardiac Surgery, National Research Institute of Tuberculosis and Lung disease,Shahid Beheshti University of Medical Sciences, Iran)*

S2-1 Pathogenesis of Large-Vessel Vasculitides

Aliasghar Ebrahimi

Associate Professor of Rheumatology, Tabriz Medical Science University, Iran

S2-2 Takayasu's Arteritis

Mohammadmahdi Emam

Associate Professor of Rheumatology, Department of Rheumatology, Shahid Beheshti University of Medical Sciences, Iran.

S2-3 Giant Cell Arteritis

Ali Javadzadeh

Assistant Professor of Rheumatology, Iran University of Medical Sciences, Iran

S2-4 Panel for Questions and Answers

13:00-14:00 **Prayers and Lunch Break**

14:00-16:00 **Scientific Session 3 - Hematological involvement in Systemic Lupus Erythematosus (SLE)**

Co-Chairs: Mahmoud Akbarian *(Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Iran)*, Zahra Rezayi Yazdi, Ali Dehghan, Mohammad Mousavi, Mohammad Jahani *(Professor of Hematology-Oncology, Tehran University of Medical Sciences, Iran)*

S3-1 Leukopenia in SLE

Mohammad Mousavi

Assistant Professor of Rheumatology, Shahrekord University of Medical Sciences, Iran

S3-2 Anemia in SLE

Zahra Rezayi Yazdi

Professor of Rheumatology, Mashad University of Medical Sciences, Iran

S3-3 Thrombocytopenia in SLE

Ali Dehghan

Assistant Professor of Rheumatology, Shahid Sadughi University of Medical Sciences, Iran

S3-4 Panel for Questions and Answers

16:00-16:20 **Coffee Break**

16:20-18:20 **Workshop 2 - Ultrasonography of Joints (I)**

Jafar Forghanizadeh *(Professor of Rheumatology, Iran University of Medical Sciences, Iran),* Nahid Kianmehr *(Associate Professor of Rheumatology, Iran University of Medical Sciences, Iran),* Anoosheh Haghighi *(Associate Professor of Rheumatology, Iran University of Medical Sciences, Iran)*

Thursday, October 16

8:00-9:00 **Special lecture**

Chair: Mohammadreza Hatef *(Professor of Rheumatology, Rheumatic Diseases Research Center, Faculty of Medicine, Mashhad University of Medical Sciences, Iran)*

Shoulder Pain

Abdolhadi Nadji *(Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Iran)*

9:00-10:00 **Scientific Session 4 - Oral Presentations**

Co-Chairs: Dr. Mohammadreza Shakibi *(Associate Professor of Rheumatology, Kerman University of Medical Sciences, Iran)*, Alireza Khoshdel *(Associate Professor of Epidemiology, AJA University of Medical Sciences, Iran)*

S4-1 Evaluation of Adherence To Treatment In Patients With Systemic Lupus Erythematous In Outpatient Clinic of Rheumatology, Imam Khomeini Hospital Complex

Taraneh Dormohammadi Toosi, Omid Eslami, Shafieh Movassaghi, Neda Naderi, Fatemeh Shahbazi, Ali Khalvat

Rheumatology Research Center, Vali-asr Hospital, Imam Khomeini Hospital Complex,Tehran University of Medical Sciences

S4-2 Related Factors And Outcomes of "Diagnosis Delay" InIranian Patients With Ankylosing Spondylitis

Sasan Fallahi[1], Ahmad Reza Jamshidi[2]

1- Internal Medicine Division, Baharloo Hospital, Tehran University of Medical Sciences, International Campus (TUMS-IC), Tehran, Iran 2- Rheumatology Research Center, Tehran University of Medical Sciences, Tehran, Iran

S4-3 Correlation between quadriceps muscle strength and serum vitamin D in patients with knee osteoarthritis

Mansour Babaei[1,2], Yahya Javadian[2,3], Marzieh adabi[1], Behzad heidari[1,2], alireza Firouzjahi[4], behnaz Yousef Ghahari [1,2]

1- Department of Internal Medicine, Division of Rheumatology, Rouhani Hospital Babol University of Medical Sciences, Babol, Iran, 2-Mobility Impairment Research Center, Babol University of Medical Sciences, Babol,Iran. 3- Department of Physiotherapy, Rouhani Hospital, Babol University of Medical Sciences, Babol, Iran. 4- Department of Laboratory Medicine, Rouhani Hospital Babol University of Medical Sciences, Babol, Iran.

S4-4 Are general practitioners well informed about Fibromyalgia?

Nahid Kianmehr, Yaser Sharafian, Ali Bidari, Anousheh Haghighi

Department of Internal Medicine, School of Medicine, Iran University of Medical Sciences, Tehran, Iran

S4-5 APN/CD13 Gene Expression Level And Serum Activity In Systemic Lupus Erythematosus Patients

Musa Behzadi[1], Arman Ahmadzadeh[2], Maryam Valizadeh[1], Mandana Sattari[1], Mostafa Haji Molla Hoseine[1], Farshid Yeganeh[1]

1- Department of Immunology, Shahid Beheshti University of Medical Sciences, Tehran, Iran., 2- Department of Rheumatology, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

S4-6 Differences In Clinical Presentation of Ankylosing Spondylitis In Men And Women

Hossein Soleymani Salehabadi, Mohammad Bagher Owlia, Ali Dehghan, Saeed Salehinejad Kouvei

Rheumatology Department, School of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

10:00-10:30 **Annual Meeting of Iranian Rheumatology Association**

10:30-11:00 **Poster presentation and Coffee Break**

11:00-13:00 **Scientific Session 5 - Upper Limb Surgery in Rheumatoid Arthritis**

Co-Chairs: Farhad Shahram *(Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Iran)*, Mohammadreza Giti, Reza Shahriar Kamrani, Mostafa Sadeghi, Alireza Khabazi, Alireza Sadeghi

S5-1 Indications of Upper Limb Surgery in RA

Alireza Khabazi

Assistant Professor of Rheumatology, Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Iran

S5-2 Hand Surgery in RA

Reza Shahriar Kamrani

Associate Professor of Orthopedic, Department of Orthopedic, Tehran University of Medical Sciences, Iran

S5-3 Shoulder and Elbow Surgery in RA

Mohammadreza Giti

Associate Professor of Orthopedic, Department of Orthopedic, Tehran University of Medical Sciences, Iran

S5-4 Surgery Care for RA (Anesthesiologist's Perspective)

Ali Movafegh

Professor of Anesthesiology, Tehran University of Medical Sciences, Iran

S5-5 Surgery Care for RA (Rheumatologist's Perspective)

Alireza Sadeghi

Assistant Professor of Rheumatology, Zanjan Medical University, Iran

S5-6 Panel for Questions and Answers

13:00-14:00 **Prayers and Lunch Break**

14:00-16:00 **Scientific Session 6 - Psoriatic Arthritis**

Co-Chairs: Maryam Moghadasi, Noushin Bayat, Alimohammad Fatemi, Parvin Mansouri *(Professor of Dermatology, Skin and StemCell Research Center, Tehran University of MedicalSciences, Iran)*

S6-1 Epidemiology and Pathogenesis of psoriatic Arthritis

Alimohammad Fatemi

Assistant Professor of Rheumatology, Isfahan University of Medical Sciences, Iran

S6-2 Clinical Manifestations and Diagnosis of psoriatic Arthritis

Nooshin Bayat

Associate Professor of Rheumatology, Baqyiatallah University, Iran

S6-3 Treatment of psoriatic Arthritis

Maryam Moghadasi

Assistant Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Iran

S6-4 Panel for Questions and Answers

14:00-16:00 **Meet the Professor session - Behçet's Disease**

Fereydoun Davatchi

Emeritus Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Iran

16:00-16:20 **Coffee Break**

16:20-18:20 **Workshop 3 - Ultrasonography of Joints (II)**

Jafar Forghanizadeh *(Professor of Rheumatology, Iran University of Medical Sciences, Iran),* Nahid Kianmehr *(Associate Professor of Rheumatology, Iran University of Medical Sciences, Iran),* Anousheh Haghighi *(AssociateProfessor of Rheumatology, Iran University of Medical Sciences, Iran)*

Patients Education - Systemic Lupus Erythematosus (SLE)

Chair: Mahmoud Akbarian *(Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Iran)*

E1-1 Diet in Lupus

Niaz Mohammadzadeh

Assistant Professor of Nutrition, Faculty of Nutrition Sciences and Dietetics,Tehran University of Medical Sciences, Iran

E1-2 Coping in Lupus

Masoud Arzaghi

Assistant professor of Psychiatry, Elderly Health Research Center, Endocrinology and Metabolism Population Sciences Institute, Tehran University of Medical Sciences, Iran

E1-3 Panel for Questions and Answers

Friday, October 17

8:00-9:00 **Special Lecture**

Chair: Akbar Rajaee *(Professor of Rheumatology,Shiraz University of Medical Sciences, Iran)*

Fibromyalgia

Jafar Forghanizadeh *(Professor of Rheumatology, Iran University of Medical Sciences, Iran)*

9:00-10:30 **Scientific Session 7- Rheumatology and Lymphoma**

Co-Chairs: Farhad Gharibdoost *(Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Iran),* Mohammadali Nazarinia, Nasrin Moghimi, Kamran Ali Moghadam *(Professor of Hematology – Oncology, Tehran University of Medical Sciences, Iran)*

S7-1 Secondary Lymphoma in Rheumatic Diseases

Mohammadali Nazarinia

Associate Professor of Rheumatology, Shiraz University of Medical Sciences, Iran

S7-2 Rheumatologic Manifestations in Lymphoma

Nasrin Moghimi

Assistant Professor of Rheumatology, Kurdistan University of Medical Sciences, Iran

S7-3 Panel for Questions and Answers

10:30-11:00 **Coffee Break**

11:00-13:00 **Scientific Session 8- Juvenile Idiopathic Arthritis (JIA)**

Co-Chairs: Gholamali Naseh *(Professor of Pediatric Rheumatology, Rheumatology Research Center, Iran)*, Yahya Aghighi *(Professor of Pediatric Rheumatology, Tehran University of Medical Sciences, Iran)* Nahid Shafaee *(Associate Professor of Pediatri Rheumatology, Rheumatology Research Center, Iran)*, Mohammadhasan Moradinejad *(Professor of Pediatric Rheumatology, Tehran University of Medical Sciences, Iran)*, Reza Shiari *(Associate Professor of Pediatric Rheumatology, Shahid Beheshti University of Medical Sciences, Iran)*

S8-1 What is JIA?

Alberto Martini

Professor of Pediatrics, University of Genova, Gaslini, Genova, Italy

S8-2 How to treat JIA?

Nicola Ruperto

MD, MPH, Istituto G. Gaslini, Pediatria II, Reumatologia, PRINTO, Genova, Italy

S8-3 How to measure JIA?

Angelo Ravelli

Associate Professor of Pediatrics, Department of Neuroscience, Rehabilitation, Ophthalmology, Genetics, Maternal and Child Health, University of Genoa, Gaslini, Genova, Italy.

S8-4 Panel for Questions and Answers

13:00-14:00 **Prayers and Lunch Break**

14:00-16:00 **Workshop 4 - Bone mineral Densitometry**

Ahmad Salimzadeh

Associate Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Iran

POSTER PROGRAM

Wednesday, October 15

P1-1 Evaluation of Relationship Between Parvovirus B19 and Rheumatoid Arthritis Disease

Zakieh Rostamzadeh, Zeinab Azimi, Tahereh Alizadeh

Department of Microbiology, School of Medicine, Medical university of Urmia

P1-2 XRCC1 Arg399Gln Polymorphismand Risk of Systemic Lupus Erythematosus in an Iranian population: a pilot study

Milad Mohamadookhorasani

Department of Clinical Biochemistry, School of Medicine, Zahedan University of Medical Sciences, Zahedan, Iran

P1-3 Arg194Trp Polymorphisms and Risk of Systemic Lupus Erythematosus in an Iranian population

Milad Mohamadookhorasani

Department of Clinical Biochemistry, School of Medicine, Zahedan University of Medical Sciences, Zahedan, Iran

P1-4 Cyclophosphamide-induced reversible posterior encephalopathy syndrome

Mozhdeh Zabihiyeganeh[1], Reza Rahmanzadeh[2]

Department of Rheumatology, Iran university of medical sciences, Tehran, Iran, Division of Neuroscience, Cellular and Molecular Research Center, Iran University of Medical Sciences, Tehran, Iran

P1-5 Effect of vitamin D on wide spread pain in fibromyalgia patients

Mozhdeh Zabihiyeganeh, Elnaz Khiabani

Department of Rheumatology, Iran university of Medical Sciences, Tehran, Iran

P1-6 Primary Vasculitides In Northeast of Iran

Mohammad Hassan Jokar, Zahra Mirfeizi

Department of Internal Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

P1-7 Rheumatic Diseases In Iranian Traditional Medicine

Mohammadhassan Jokar

Department of Internal Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

P1-8 Correlation between serum level of interleukin 17 and Disease activity in Rheumatoid arthritis patients referred to rheumatology clinic during 2012-2013

Batool Zamani, Said Ali Reza Moravejji, Marjane Shokrani

Department of Internal medicine, Kashan University of Medical Sciences, Kashan, Iran

P1-9 Comparison of IL17 level in differentiation of inflammatory & non inflammatory arthritis in patients with knee arthritis

Batool Zamani, Fateme Atoof, Maryam Tavasoli

Department of Internal medicine, Kashan University of Medical Sciences, Kashan, Iran

P1-10 Enterococcal-associated Respiratory Tract Infection in Dermatomyositis

Simin Almasi

Department of Rheumatology, Firoozgar Hospital, Iran University of Medical Sciences, Tehran, Iran

P1-11 Late-Onset Systemic Lupus Erythematosus

Simin Almasi, Nafiseh Ebrahimi

Department of Rheumatology, Firoozgar Hospital, Iran University of Medical Science, Tehran, Iran

P1-12 Association of 70 bp VNTR Polymorphism of IL-4 Gene With Rheumatoid Arthritis In Province Khuzestan

Foroozan ghorishvandy[1], Reza kazemi nezhad[1], Mohammad reza akhond[2], Elham rajaei[3]

1-Department of Genetics, School of Sciences, Shahid Chamran University, Ahvaz, Iran 2-Department of Statistics, School of Mathematical Sciences And Computer, Shahid Chamran University, Ahvaz, Iran 3-Department of Internal Medicine (Division of Rheumatology), School of Medicine, Ahvaz Jundishapur University of Medical Science, Ahvaz, Iran

P1-13 Vitamin D Deficiency Is Associated With Nonspecific Low Back Pain In Women, a Case-Control Study

Behzad Heidari[1]

1- Department of internal medicine, Rouhani hospital, Babol university of medical sciences, Babol, Iran, 2- Mobility impairment research center, Babol university of medical sciences, Babol, Iran,

P1-14 A Randomized, Double-blind, Placebo-controlled Pilot Study of the Efficacy of Alendronate on the Prevention of Bone Loss in Patients with Early Ankylosing Spondylitis

Alireza Khabbazi, Mehrzad Hajialiloo, Sousan Kolahi

Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

P1-15 Pentoxifylline in rheumatoid arthritis treatment as an adjuant to synthetic DMARDs and glucocorticoids

Ali Afshari, Shafieh Movaseghi, Ali Khalvat, Seyed Reza Najafizadeh, Taraneh Dormohammadi

Department of Rheumatology, Tehran University of Medical Sciences, Tehran, Iran

P1-16 Alendronate the Prevent and Treat Osteoporosis in Patients with Autoimmune Disease

Nayyereh Saadati[1], Bahram Naghibzadeh[1]

1- Department of Internal Medicine, Ghaem Medical Centre, Mashhad University of Medical Sciences, Mashhad, Iran 2- Rheumatic Diseases Research Centre (RDRC), Mashhad University of Medical Sciences, Mashhad, Iran

P1-17 The Necessity of Recognition, Diagnosis And Treatment of Chronic Active Subclinical Infections In Rheumatic Patients

Mohammadreza Sadeghian

P1-18 The Effect of Oral Royal Jelly on Clinical Disease Activity Index (CDAI) and Morning Stiffness in Patients with Rheumatoid Arthritis (RA); A Randomized Double-Blind, Placebo-Controlled Trial

Zahra Mobedi

Department of Internal Medicine, Shahrekord University of Medical Sciences, Shahrekord, Iran

P1-19 Evaluation of Various Presentations of Vasculitis in Iranian Patients with Systemic Lupus Erythematosus: Frequency and Clinical Manifestations

Zhaleh Shariati-Sarabi[1], Kamila Hashemzadeh[1], Mohsen Ebrahimi[2], Mohammad Reza Ranjbar[2]

1- Rheumatic Disease Research Center (RDRC), School of Medicine, Mashhad University of Medical Sciences (MUMS), Mashhad, Iran 2- Department of Emergency Medicine, Mashhad University of Medical Sciences(MUMS), Mashhad, Iran

P1-20 Detection of Synovial Fluid Anti-CCP Antibody is Helpful in Diagnosis of Rheumatoid Arthritis, Particularly in Early and Monoarticular Cases

Massaud Saghafi, Kamila Hashemzadeh, Maryam Sahebari

Rheumatic Diseases Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

P1-21 The Assessment of Health-Related Quality of Life in Scleroderma-Interstitial Lung Disease

Seyedeh Zahra Mirfaeizi[1], Shahrzad M Lari[2], Zhaleh Shariati[1], Davood Attaran[2], Maryam Salehi[3], Maryam Rezazadeh[4]

1- Rheumatic Diseases Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran 2- Cardio-Thoracic Surgery & Transplant Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran, 3- Community Medicine Specialist, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran 4- COPD Research Center, Ghaem Hospital, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

Thursday, October 16

P2-1 Association of The Angiotensin Converting Enzyme (ACE) Gene And The Angiotensinii Receptor TypeI (AGTR1) Gene Genotyping With Systemic Lupus Erythmatusus(SLE) Patients In Western Iran Population

Hossein Baniamerian, Asad Veysi Raygani, Fariborz Bahremand

Department of Biochemistry, School of Medicine, Kermanshah University of Medical Sciences, Kermanshah, Iran

P2-2 The Effect of omega-3 fatty acids in patients with active rheumatoid arthritis receiving DMARDs therapy: double-blind randomized controlled trial

Elham Rajai[1], Mohammad Bahadoram[2], Karim Mola[1], Sara Bahadoram[2]

1- Department of Rheumatology, School of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, 2- Medical Student Research Committee, School of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

P2-3 Prevalence of Human Papilloma Virus Infections and Cervical Cytological Abnormalities among South Iranian Women with Systemic Lupus Erythematosus

Saeedeh Shenavandeh[1], Bahareh Hamedi[2], Poopak Mohaghegh[1], Akbar Safaei[3], Mohammadali Nazarinia[1], Elaham Aflaki[1], Zahra Habibagahi[1]

1- Department of Internal Medicine, Division of Rheumatology, Shiraz University of Medical Sciences, Shiraz, Iran, 2- Department of Gynecology, Shiraz University of Medical Sciences, Shiraz, Iran, 3- Department of Pathology, Shiraz University of Medical Sciences, Shiraz, Iran

P2-4 Treatment compliance in patients with Behcet's disease

Farid Karkon Shayan, Alireza Khabbazi, Hadise Kavandi

Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

P2-5 Clinical Manifestations of Systemic Lupus Erythematosus In Children

Farid Karkon Shayan, Sousan Kolahi, Alireza Khabbazi, Hadise Kavandi

Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

P2-6 The evalution of pentoxifylline efficacy on chronic disease anemia induced by systemic lupus erytheromatous

Zahra Zakeri[1], Seyed Mehdi Hashemi[2], Mahnaz Sandoughi[3]

1- Department of Internal Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran, 2- Department of Internal Medicine, Hematology Division, Zahedan University of Medical Sciences, Zahedan, Iran 3- Department of Internal Medicine, Rheumatology Division, Zahedan University of Medical Sciences, Zahedan, Iran

P2-7 His447 His polymorphism of PPARγ Gene and Risk of Osteoporosis in Postmenopausal Women

Mehdi sahmani[1], Leila Azizi Jadidoleslami[2], Amir Javadi[3], Mahnaz Abbasi[2]

1- Department of Clinical Biochemistry and Genetic, Cellular and Molecular Research Center, School of Medicine Qazvin University of Medical Sciences, Qazvin, Iran, 2- Department of Internal Medicine, Qazvin University of Medical Sciences, Qazvin, Iran, 3- School of Allied Medical Sciences, Tehran University of Medical Sciences, Tehran, Iran

P2-8 Association Between The Serum Levels of Zinc, Copper and Lipid Profile With Osteoporosis in Iranian Postmenopausal Women

Mehdi Sahmani[1], Shideh Omidian[2], Amir Javadi[2], Majid Sirati Sabet[1], Mahnaz Abbasi[2]

1- Department of Clinical Biochemistry, Cellular and Molecular Research Center, Qazvin University of Medical Sciences, Qazvin, IR Iran, 2- Department of Internal Medicine, Metabolic Diseases Research Center, Qazvin University of Medical Sciences, Qazvin, IR Iran

P2-9 Skin reaction to Capsaicin in rheumatoid arthritis (RA) patients compared with healthy controls

Maryam Sahebari, Danial Zirachi, Houshang Rafatpanah, Zahra Rezaieyazdi

Rheumatic Diseases Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

P2-10 Anti-inflammatory Activity of Citrus Aurantium Essential Oil (Neroli) in Experimental Models of Acute and Chronic Inflammation

Pariya Khodabakhsh, Hamed Shafaroodi, Jinous Asgarpanah

Department of Pharmacology And Toxicology, Pharmaceutical Sciences Researches Center, Islamic Azad University, Tehran, Iran,

P2-11 Association Study MTHFR Gene Single Nucleotide Polymorphisms of rs1801133 and risk of Rheumatoid Arthritis in Khuzestan Province

Mehdi Shahvali koohshori[1], Seyed Reza Kazemi Nezhad[1], Elham Rajaei[2], Mohammad Reza Akhoond[3]

1- Department of Genetics, School of Sciences, Shahid Chamran University of Ahvaz, Ahvaz, Iran 2-Department of Internal Medicine (Division of Rheumatology), School of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran 3- Department of Statistics, School of Mathematical Sciences and computer, Shahid Chamran University of Ahvaz, Ahvaz, Iran

P2-12 Rituximab in Takayasu arteritis

Mohammad Bagher Owlia, Ali Dehghan, Hossein Soleimani

Rheumatology Department, School of Medicine, ShahidSadoughi University of Medical Sciences, Yazd, Iran

P2-13 Evaluation of MEFV Gene Frequency In Patients With Rheumatoid Arthritis (RA)

Sousan Kolahi

Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

P2-14 A good response to infliximab in a patient with persistent reactive arthritis: a case report

Sakinehkhatoun Sharif[1], Zahra Jalali[2]

1-Department of internal medicine, Tabriz university of medical sciences, Tabriz, Iran, 2-School of Medicine, Tabriz university of medical sciences, Tabriz, Iran

P2-15 Relationship between Urinary and Serum Level of Adiponectin with Disease Activity in Patients with Lupus in Comparison with Control Group

Sima Sedighi[1], Mehrdad Aghaee[1], Maryam Faghani[2], Mahmmod Fatemi[2], Mohammad Vakili[3]

1-Department of Rheumatology, School of Medicine, Joint, Bone And Connective Tissue Research Center (JBCRC), Golestan University of Medical Sciences, Gorgan, Iran 2- Clinical student research committee, School of Medicine, Golestan University of Medical Sciences, Gorgan, Iran 3- Department of Statistics, School of Medicine, Golestan University of Medical Sciences, Gorgan, Iran

P2-16 Case Report of Eosiniphilic Granulomatosis With Poly Angitis Coexistent With Systemic Sclerosis

Maryam Alavi

Department of Rheumatology, School of Medicine, Yasuj University of Medical Sciences

P2-17 Hearing dysfunctions in rheumatoid arthritis, What is the relation with RA activity?

Habib Zayeni[1], Mirmohammad Jalali[2], Ensieh Rjabpur Nikoo[1], Asghar Haji Abbasi[1], Irandokht shenavar[1], Banafsheh Ghavidel Parsa[1], Amir Hassankhani[3], Alireza Amir Maafi[3]

1- Rheumatology Research Center, Guilan University of Medical Sciences, Rasht, Iran, 2- Otolaryngology Department, Amiralmomenin Hospital, School of Medicine, Guilan University of Medical Sciences, Rasht, Iran 3- Medical student, Student Research Committee, School of Medicine, Guilan University of Medical Sciences, Rasht, Iran

P2-18 Clinical Characteristics of 27 Patients with Granulomatosis with Polyangiitis, A Retrospective Study in Yazd, Iran

Hossein Soleymani Salehabadi[1], Amirbehnam Kharazmi[2], Ali Dehghan[1]

1- Rheumatology Department, School of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran 2- School of Medicine, ShahidSadoughi University of Medical Sciences, Yazd, Iran

P2-19 Comparison of serum profiles of cytokines in Behcet\'s disease with or without uveitis

Masoud Asadi-Khiavi

Zanjan Applied Pharmacology Research Center, Zanjan University of Medical Sciences, Zanjan, Iran

P2-20 No Evidence of Association Between CTLA-4 Polymorphisms and Systemic Lupus Erythematosus in Iranian Patients

Mehedad Aghaie[1], Mahdieh Shojaa[3, 4], Nader M.Samaei[2], Sima Sedighi[1], Mahsa Amoli[5], Naemeh Javid[3], Fatemeh Shakeri[3], Patrichia Khashayar[4], Sedigheh Livani[3]

1- joint, Bone And Connective Tissue Research center (JBCRC), Golestan University of Medical Science, Gorgan, Iran 2- Department of Genetics, Congenital Malformations Research Center, OMICS Research Center, Hematology And Oncology Research Center, Golestan University of Medical Sciences, Gorgan, Iran 3- Department of Microbiology, School of Medicine, Golestan University of Medical Sciences, Gorgan, Iran 4- Osteoporosis Research Center, Endocrinology And Metabolism Clinical Science Institute, Tehran University of Medical Sciences, Tehran, Iran 5- Endocrinology And Metabolism Research Center (EMRC), Endocrinology And Metabolism Research Center Clinical Science Institute, Tehran University of Medical Sciences, Tehran Iran

P2-21 Vasculitis Like Presentation of Laryngeal Large Cell Neuroendocrine Carcinoma./ A Case Presentation

Shahrzad Rahmani[1], Fatemeh Shirani[1], Ali Bidari[1], Nasrin Shayanfar[2]

1- Department of Rheumatology, School of Medicine, Iran University of Medical Sciences, Tehran, Iran 2- Department of Pathology, School of Medicine, Iran University of Medical Sciences, Tehran, Iran

ORAL PRESENTATIONS

S1-1

The Effects Of Probiotic Supplementation On Symptoms, EULAR Response, Inflammatory Biomarkers, Oxidative Stress Indices And Lipid Profile In Women With Rheumatoid Arthritis

Elnaz Vaghef-Mehrabany[1], Sakineh-Khatoun Sharif[2], Beitullah Alipour[1], Aziz Homayouni-Rad[1], Leila Vaghef-Mehrabany[3], Mohammad Asghari-Jafarabadi[4]

1-School of Nutrition, Tabriz University of Medical Sciences, Tabriz, Iran 2- School of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran 3- School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran 4- School of Health, Tabriz University of Medical Sciences, Tabriz, Iran

Aim: Rheumatoid arthritis (RA) is an inflammatory autoimmune disease in which the gut microbiota is altered. Oxidative stress has a role in the pathogenesis of the disease, and antioxidant enzymes are reduced in the subjects. On the other hand, lipid profile is impaired in the patients, which increases the risk for cardiovascular diseases. Probiotics are live microorganisms with many health benefits. Regulating immune system function, reducing oxidative stress and improving lipid profile are some of the health effects claimed for probiotics. The objective of the present study was to assess the effects of probiotic supplementation on disease activity, inflammatory cytokines, oxidative stress indices and lipid profile in RA women.

Methods: In a randomized, double-blind, placebo-controlled clinical trial, forty-six RA patients were assigned into two groups; patients in the probiotic group received a daily capsule containing 108 colony forming unit (CFU) of Lactobacillus casei 01, and those in the placebo group took identical capsules containing maltodextrin, for eight weeks. A demographic questionnaire, international physical activity questionnaire (IPAQ), Spielberger state-trait anxiety inventory form Y (STAI-Y), 24-hour dietary recall questionnaire and three food record questionnaires were completed for the participants. Also, anthropometric measurements were done, global health (GH) of the participants was assessed by visual analogue scale (VAS) and eight ml of fasting blood sample was drawn. Tender and swollen joints of the patients were counted by a rheumatologist and disease activity score 28 (DAS28) was calculated. At the end of the study, the same assessments were performed. European league against rheumatism (EULAR) response state was evaluated based on the DAS28 changes through the study. Serum levels of hs-CRP and the cytokines, IL-1β, IL-6, IL-10, IL-12 and TNF-α were measured by immunoturbidometry and ELISA, respectively. Serum levels of malondialdehyde (MDA) and total antioxidant capacity (TAC), the activity of the erythrocyte antioxidant enzymes, superoxide dismutase (SOD), glutathione peroxidase (GPx) and catalase (CAT) as well as serum levels of total cholesterol (TC), HDL cholesterol (HDL-C) and triglycerides (TG) were measured by spectrophotometry. LDL cholesterol (LDL-C) level was calculated by Friedewald equation.

Results: There was no significant difference between the two groups for demographic characteristics, anthropometric parameters, physical activity and anxiety levels and dietary intakes at study baseline; no significant within-group changes were observed through the study. Serum hs-CRP, tender and swollen joint counts and DAS28 decreased significantly only in the probiotic group, while GH score significantly decreased in both groups by the end of the study. The between-group differences were significant for all these parameters at the end of the study ($P<0.05$). Regarding EULAR criteria, a significant difference was found between the groups in response level to the treatments ($P<0.01$). In the probiotic group, a significant decrease in serum levels of TNF-α and IL-12 and increase in serum IL-10 was observed ($P<0.05$). There was a significant difference between the two groups for TNF-α, IL-6, IL-12 and IL-10 at the end of the study ($P<0.05$). SOD activity decreased in the probiotic group and GPx activity decreased in both groups ($P<0.05$). Although serum MDA was lower in the probiotic group and TAC was higher in the probiotic group as compared to the placebo by the end of the study course, no significant difference was observed between the groups for any of the measured indices ($P>0.05$). Within-group changes and the between-group differences were statistically insignificant for lipid profile factors ($P>0.05$).

Conclusion: Probiotic supplementation may be an appropriate adjunct therapy for RA patients and help alleviate symptoms and improve inflammatory cytokines. No significant effects of probiotic supplementation were observed on oxidative status and lipid profile of the patients. Further studies are warranted.

Keywords: Rheumatoid arthritis; Probiotics; DAS28; EULAR criteria; Inflammatory cytokines; Oxidative stress; Lipid profile

Corresponding Author: Elnaz Vaghef Mehrabani; Department of Nutrition, Faculty of Nutrition, Tabriz University of Medical Sciences, Attar Neishabouri Ave., Golestan St., Tabriz, Iran.
Tel: +98914 9155631, E-mail: elnaz.vaghef@gmail.com

S1-2

Lacritin Level In Tear Film Of Patients With Rheumatoid Arthritis

Dr alireza khabbazi[1], Dr Rana Sorkhabi[2], Dr Amir Ghorbanihaghjo[2]

1-Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, 2-Tabriz University of Medical Sciences, Tabriz, Iran

Aims: The main ocular manifestation of rheumatoid arthritis is dry eye. Lacritin is a secreted glycoprotein of tear and when applied topically in rabbits, it increased the volume of basal tear secretion. So the aim of this study was to compare Lacritin level in rheumatoid arthritis (RA) and control group.

Methods: This cross-sectional study was done on 40 patients with RA and 48 healthy subjects as a control group. In all participants, tear break-up time (TBUT) and Schirmer test with anesthesia were accomplished. Tear samples were collected directly from the inferior lateral tear meniscus and were immediately stored at -80° C until use. Lacritin level of tears were assessed by enzyme- linked immunosorbent assay.

Results: The mean age of participants was 44.7±16.3 and 43.3±18 years, respectively (p=0.70). Lacritin level in RA group (19.6±23.1 ng/ml) was significantly lower (31.9±23.3 ng/ml) than control (p=0.008). Pearson correlation between Lacritin level and TBUT, Schirmer value, ESR, and high-sensitivity C-creative protein (hs-CRP) in RA patients were not significant with p=0.27, 0.67, 0.09 and 0.07 accordingly.

Conclusion: In early stages of RA in spite of normal tear production, Lacritin level decreased, however there is not any correlation between Lacritin level and TBUT, Schirmer value, ESR, and hs-CRP in these patients. E-mail: dr_khabbazi@yahoo.com

Keywords: Lacritin; Rheumatoid Arthritis; Tear Film

Corresponding Author: Alireza Khabbazi; Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran.
Tel: +98 914 3118916, E-mail: dr_khabbazi@yahoo.com

S1-3

Association Between Butyrylcholinesterase Activity And Phenotypes, Paraoxonase192 Rs662 Gene Polymorphism And Their Enzymatic Activity With Severity Of Rheumatoid Arthritis: Correlation With Systemic Inflammatory Markers And Oxidative Stress, Preliminary Report

Asad Vaisi-Raygani[1,2], Shiva Shahmohamdnejad[1,2], Yadola Shakiba[1,2], Amir Kiani[1,2], Zohreh Rahimi[1,2], Tayehbeh Pourmotabbed [3]

1-Department of Clinical Biochemistry, School of Medicine, Kermanshah University of Medical Sciences, Kermanshah, Iran, 2-Molecular Diagnostic Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran, 3-Department of Microbiology, Immunology and Biochemistry, University of Tennessee Health Science Center, U.S.A

Aim: Evidences indicate that oxidative stress and inflammation are an important processes in the development of destructive synovial tissue in rheumatoid arthritis(RA). The two major bioscavenger enzymes that are associated with inflammation and oxidative stress are human-butyrylcholinesterase (BuChE) and Paraoxonase-1(PON-1).

Methods: In this study, we examined association of BuChE-phenotypes and activity, PON192rs662 (Q192R) polymorphism and its arylesterase activity (ARE) with systemic-inflammatory-markers and oxidative stress. The present case-control study consisted of 419-RA patients and 398 gender-age-matched unrelated healthy controls from west population of Iran. PON192rs662 polymorphism was detected by Real-Time-PCR. BuChE phenotype, TAC level, serum BuChE and ARE activities were determined spectrophotometrically. Anti-CCP-antibody and CRP were measured by ELISA and neopterin level was detected by HPLC. We used the EULAR activity criteria to measure DAS28-CRP.

Results: We found that PON1-Q192R was associated with severity of RA[remission-to-low and moderate-to-high in dominant Q/Q+Q/R vs. R/R: OR=2.27, $P<0.001$; codominant Q/Q vs. R/R: OR=1.65, $P<0.001$ and Q/R vs. R/R: OR=2.12, $P=0.003$; recessive Q/Q vs. R/R+Q/R: OR=1.79, $P=0.032$; and allele Q vs. R: OR=1.68, $P<0.001$] and presence of anti-CCP-antibody (codominant model Q/Q vs. R/R: OR=1.28, $P=0.042$).The carriers of Q/Q genotype PON1-Q192R and BuChE non-UU-phenotype had a higher ARE activity, serum levels of neopterin, anti-cytroline circulated peptide (CCP)-antibody titer and number of tender-joint and lower activity of BuChE and serum level of TAC than that of R/R genotype and BuChE-UU-phenotype.

Conclusion: The current findings demonstrate for the first time that there is a link between systemic inflammatory markers, oxidative stress, the PON192rs662-Q allele and BuChE-non-UU-phenotype and their corresponding enzymatic activity which may be considered as a risk factor for the severity of RA for a population in Iran.

Keywords: Rheumatoid arthritis; paraoxonase1-192rs662; Butyrylcholinesterase; neopterin; anti-cytroline circulated peptide; Score of 28 joints DAS28-CRP of RA

Corresponding Author: Asad Vaisi-Raygani; Department of Biochemistry, School of Medicine, Kermanshah University of Medical Sciences, Kermanshah, Iran.
Tel: +98 918 3331207, E-mail: avaisiraygani@gmail.com

S1-4

Superantigens Assessment In Synovial Fluid Of Rheumatoid Arthritis Patients

Ramezan Ali Ataee[1], Gholam Hossein Alishiri[2]

1- Department of Medical Microbiology, School of Medicine, Baqiyatallah University of Medical Sciences, Tehran, Iran 2- Department of Rheumatology, School of Medicine, Baqiyatallah University of Medical Sciences, Tehran, Iran,

Aim: Rheumatoid arthritis is a chronic inflammation disease with unknown exact etiology. However, the role of superantigens to triggering inflammatory cytokines production is demonstrated. Thus, set up method for detection of the superantigens in Synovial fluid of patients is essential for treatment and cost effectiveness. The aim of this investigation was molecular and immunological seeks to identify most common superantigens gene in the synovial fluid of Rheumatoid arthritis patients. Materials and

Methods: In this study based on different reference Gene, the specific primer pairs were designed, and bioinformatically were evaluated. Then, set up the PCR protocol and 103 SF Samples of patients with Rheumatoid arthritis were assayed. In addition, by using a specific antibody against superantigens the ELISA method was designed, and the SF samples were assayed. The finding data were descriptively analyzed.

Results: The result of primer pairs designed was amplification the related amplicon. The overall results of the PCR assay indicated that more than 80% patients' SF samples at least one of the Staphylococcal superantigens gene or other superantigens were detected.

Conclusion: The result of this study showed that a high percentage of Rheumatoid arthritis patients have superantigens gene in their SF. But it is not clear why there is no growth of the bacteria in the synovial fluid, the superantigens gene were detected. However, this finding may be suggested the role of these superantigens on pathophysiology of RA is involved. Thus, it seems to be based on these results of the proposed new design for the diagnosis and treatment of RA.

Keywords: Rheumatoid arthritis; superantigens gene; Synovial fluid; PCR and ELISA

Corresponding Author: Ramezan Ali Ataee; Department of Medical Microbiology, School of Medicine, Baqiyatallah University of Medical Sciences, Tehran, Iran.
Tel**:** +98 912 2190418, E-mail: ataee@bmsu.ac.ir

S1-5

Helicobacter Pylori Infection In Patients With Sjögren's Syndrome: A Case-Control Study

Massoud Saghafi[1], Nafiseh Abdolahi[2], Reza Orang[1], Mohammad Reza Hatef[1]

1-Rheumatic Diseases Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran, 2-Rheumatic Diseases Research Center, School of Medicine, Golestan University of Medical Sciences, Golestan, Iran

Aim: Sjogren's syndrome (SS) is a chronic autoimmune disease characterized by lymphocytic infiltration and destruction of lacrimal, salivary, and other exocrine glands. SS is a disease of unknown etiology and associated with gastritis, and heightened risk for development of non- Hodgkin lymphoma. *Helicobacter pylori (H.Pylori)* is a gram-negative microorganism which colonizes the gastric mucosa for a long time. It is suggested that H. pylori may be of importance in SS, either as an etiological agent or by interacting with the clinical course and complications. The aim of this study was to identify whether or not there is a correlation between *H. pylori* infection and Sjogren's syndrome.

Method: We determined the prevalence of IgA and IgM anti-H.Pylori in subjects with and without Sjögren's syndrome. serum sample of 43 patients with SS (according to the international criteria) and 95 normal matched subjects were collected and checked by ELIZA method. Results were analyzed by sepsis software. *P*-value <0.05 were considered significant.

Results: IgM and IgA anti H.Pylori levels were significantly higher in the sera of patients with Sjogren's than the control group. (34.9% vs 10.5% pvalue: 0.001) and (67.4% vs 46.3% p value: 0.021). There was a significant positive correlation between age and H.Pylori infection. (r: 0.2 pvalue: 0.05)

Conclusions: Patients with SS are more prone to have H. pylori infection in comparison to the normal population. Assessment of *H. pylori* infection and its eradication is recommended in patients suffering from Sjogren's syndrome.

Keywords: Sjogren's syndrome; *H. pylori*; Gastritis; Lymphoma

Corresponding Author: Nafiseh Abdolahi; Rheumatic Diseases Research Center, School of Medicine, Golestan University of Medical Sciences, Golestan, Iran.
Tel: +98 911 3712041, E-mail: N_abdolahi2002@yahoo.com

S1-6

Celiac Disease In Rheumatoid Arthritis: A Cross-Sectional Study In Iran

Habib Zayeni[1], Afshin Shafaghi[2], Alireza Gharib Pour[1], Mohammad Reza Naghi Pour[2], Alireza Jafari Nezhad[1], Amir Hassankhani[3], Alireza Amir Maafi[3], Siamak Geranmayeh

1- Rheumatology Research Center, Guilan University of Medical Sciences, Rasht, Iran, 2- Gastrointestinal and Liver Diseases Research Center (GLDRC), Guilan University of Medical Sciences, Rasht, Iran, 3- Medical student, Student Research Committee, Guilan University of Medical Sciences, Rasht, Iran

Aim: Rheumatoid arthritis (RA) is a systemic autoimmune disease that has similar mechanisms with other autoimmune disorders. One of the autoimmune diseases that it's pathogenesis is similar to RA is Celiac disease (CD). Common features of RA and CD are included in a relationship of HLA molecules in these diseases. The aim of this study was to determine the prevalence of CD, screened by specific autoantibodies, in patients with RA.

Methods: In this Cross-sectional study 156 consecutive patients, diagnosed with RA according to the ACR-EULAR Classification Criteria for Rheumatoid Arthritis 2010, referred to the rheumatology clinic in Razi referral hospital of Rasht, Iran, from May 2012 to May 2013, were enrolled. Diagnosis of celiac disease was first based on screening of patients with IgA- TTG, IgG-TTG and serum IgA by ELISA method and Immunofluorescence. Positive serological tests were confirmed by endoscopic procedure and biopsy from a small intestine. Finally collected data were analyzed by Fisher Exact test, Mann-Whitney U, student *t*-test and *Chi*-square test.

Results: Patients included in this study, 19(12.2%) male and 137(87.8%) female, were 20-84 years old, and the mean age was 53.0 ± 13.78 years. Most of patients with RA did not have underlying diseases (51/3%) and only 1.3% of them have Celiac disease. Positive IgA TTG did not have a significant relation with clinically relevant disease, but IgG TTG positivity showed a significant relation (*P*=0.001). Other parameters were not significant.

Conclusion: Our study has shown that prevalence of CD in patients with RA is low. Despite of low prevalence of CD in RA, it is recommended to do celiac screening in patients with RA because they may have reciprocal effects on each other especially disease course. We suggest a prospective study with a larger sample size and more detailed assessments using more indicators as quantitative measurements of antibodies.

Keywords: Celiac Disease; Rheumatoid Arthritis; Transglutaminases

Corresponding Author: Habib Zayeni; Rheumatology Research Center, Razi Hospital, Sardar-e- Jangle avenue, Rash, Iran. Tel: +98 910 1080815, Fax: + 98 131 5530169, E-mail: amir.hassankhani91@gmail.com

S4-1

Evaluation Of Adherence To Treatment In Patients With Systemic Lupus Erythematosus In Outpatient Clinic Of Rheumatology, Imam Khomeini Hospital Complex

Taraneh Dormohammadi Toosi, Omid Eslami, Shafieh Movassaghi, Neda Naderi, Fatemeh Shahbazi, Ali Khalvat

Rheumatology Research Center, Vali-asr Hospital, Imam Khomeini Hospital Complex, Tehran University of Medical Sciences, Tehran, Iran

Aim: Systemic Lupus Erythematosus (SLE) is an autoimmune disorder with unknown etiology. Up to now there is not any definite treatment for this disease. However, proper use of medications can reduce mortality and morbidity of the disease. This study was aimed to determine the level of adherence to medication in patients with SLE and risk factors that influence the adherence to treatment. Correcting these factors can improve the prognosis of SLE.

Methods: In this cross-sectional study, 132 patients with SLE were enrolled. This study was done in rheumatology outpatient clinic of Imam Khomeini Hospital Complex during July, 2012- June, 2013. For the evaluation of adherence to treatment, all the patients completed the Compliance Questionnaire Rheumatology (CQR), which was validated for Iranian patients. We also assessed contributing factors that influence the adherence to treatment. Data analysis was performed using SPSS18 software.

Results: 122 patients (92.4%) out of 132(patients with SLE) were women and 10 patients (7.6%) were men. The mean adherence rate of drug use was 72.48 %. No correlation was found between adherence to treatment and age, marital status, salary, education, distance from the local clinic, disease duration and degree of patient's activity. There was no significant relationship between the different medications and adherence rate. Interestingly there was a significant association between adherence and the lack of Lupus complication rates ($P < 0.05$).

Conclusion: In this study, we found that more than half of patients with SLE have poor adherence to treatment that can cause progression of the disease and long-term financial and emotional costs for them and also the community. For better patient's adherence to treatment, we recommend patient education and family support.

Keywords: Systemic Lupus Erythematosus; adherence to treatment

Corresponding Author: Taraneh Dormohammadi Toosi; Rheumatology Research Center, Vali-asr Hospital, Imam Khomeini Hospital Complex, Tehran University of Medical Sciences, Tehran, Iran.
Tel: +989122068221, E-mail: dormohammadi@tums.ac.ir

S4-2

Related Factors And Outcomes Of "Diagnosis Delay" In Iranian Patients With Ankylosing Spondylitis

Sasan Fallahi[1], Ahmad Reza Jamshidi[2]

1-Internal Medicine Division, Baharloo Hospital, Tehran University of Medical Sciences, International Campus (TUMS-IC), Tehran, Iran, 2-Rheumatology Research Center, Tehran University of Medical Sciences, Tehran, Iran

Aim: Ankylosing spondylitis (AS) is one of the rheumatic diseases with the longest diagnostic delay. Improving knowledge about diagnostic delay status and related factors and outcomes may help clinicians diagnose AS in earlier stages. This survey was performed to assess the diagnostic delay, related factors and outcomes in an Iranian population with AS.

Methods: A total of 163 patients with AS diagnosed by modified New York 1984 were participated consecutively in a cross sectional survey. A pre-designed form was applied for gathering data. The measured outcomes were included: Bath AS functional index (BASFI), AS quality of life (ASQoL), Bath AS metrology index (BASMI), Bath AS disease activity index (BASDAI), chest expansion and sacroiliitis grading by pelvic radiography.

Results: The average (mean±SD) diagnostic delay was 7.88 ± 7.17 years. Diagnosis delay was longer in patients with enthesitis versus patients without enthesitis (P=0.007) and in B*27 negative versus B*27 positive ones (*P*=0.01). Educational level was inversely correlated with diagnosis delay (*P*=0.002, r= -0.24). Diagnostic delay was also correlated with following outcomes: BASMI (*P*<0.001, r=0.41), BASFI (*P*=0.003, r=0.23), ASQoL (*P*=0.008, r=0.21), BASDAI (P=0.03, r=0.18), chest expansion (*P*<0.001, r= - 0.38) and sacroiliitis grading (*P*=0.04, r=0.16).

Conclusion: Low education, negative HLA-B*27 and enthesitis are the factors affect the diagnosis delay in Iranian patients with AS. The grater delay in diagnosis of AS, the more likely that poorer QoL, worse function, higher disease activity and more severe limitation in spinal mobility would become apparent. National referral strategies for patients with enthesitis (particularly in patients with low educational level) should be provided to use by related physicians.

Keywords: Ankylosing spondylitis; delayed diagnosis

Corresponding Author: Sasan Fallahi; Internal Medicine Division, Baharloo Hospital, Tehran University of Medical Sciences, Tehran, Iran.
Tel: +98 913 3088242, E-mail: sfallahi@sina.tums.ac.ir

S4-3

Correlation Between Quadriceps Muscle Strength And Serum Vitamin D In Patients With Knee Osteoarthritis

Mansour Babaei[1,2], Yahya Javadian[2,3], Marzieh adabi[1], Behzad heidari[1,2], alireza Firouzjahi[4], behnaz Yousef Ghahari[1,2]

1-Department of Internal Medicine, Division of Rheumatology, Rouhani Hospital Babol University of Medical Sciences, Babol, Iran, 2-Mobility Impairment Research Center, Babol University of Medical Sciences, Babol, Iran. 3- Department of Physiotherapy, Rouhani Hospital, Babol University of Medical Sciences, Babol, Iran. 4- Department of Laboratory Medicine, Rouhani Hospital Babol University of Medical Sciences, Babol, Iran.

Aim: Quadriceps muscle weakness and vitamin D deficiency are associated with knee osteoarthritis (KOA). The present study was designed to investigate the correlation between vitamin D and Quadriceps muscle strength (QMS) in KOA.

Methods: The study population consisted of patients with KOA, who presented to a single outpatients rheumatology clinic affiliated to Babol university of medical sciences, Babol, Iran. QMS was measured by dynamometry method and serum 25-OHD was measured by ELISA method. Serum 25-OHD levels <20 ng/ml were considered deficiency. The intensity of knee pain was determined by Western Ontario and McMaster University Osteoarthritis (WOMAC) pain scale. In statistical analysis, the relations between QMS and serum 25-OHD as well as relation between QMS and knee pain was determined using Pearson correlation coefficient test and linear regression analysis. *Chi*-square test with calculation of odds ratio (OR) was used to determine the association.

Results: A total of 92 patients (females, 78.2%) with a mean age of 49.6 ± 11.7 years, and mean BMI of 28.3 ± 4.7 kg/m2 were studied. Median serum 25-OHD level was 14.7 ng /ml (3.5-81). Women had significantly lower serum 25-OHD than men (P=0.031). QMS was positively correlated with serum 25-OHD (r=0.304, P=0.005). In linear regression analysis, after adjustment for age, sex and BMI for every 1 ng/ml increase in serum 25-OHD, the value of QMS raised by 14.2 ± 3.5% (P=0.014). QMS correlated negatively with knee pain as assessed by WOMAC index (r= -0.232, P=0.034). Knee joint stiffness was significantly associated with serum 25-OHD deficiency (75% vs 51.9%, OR =2.78, P= 0.041)

Conclusion: These findings of this study indicated a positive relationship between serum 25-OHD and QMS. Based on findings of this study, vitamin D deficiency is expected to be associated with lower QMS and greater joint pain.

Keywords: Knee osteoarthritis; Quadriceps muscle strength; vitamin D

Corresponding Author: Mansour Babaei; Department of Internal Medicine, Division of Rheumatology, Rouhani Hospital Babol University of Medical Sciences, Babol, Iran
Tel: +98 911 313424, E-mail: internalmedbabol@gmail.com

S4-4

Are General Practitioners Well Informed About Fibromyalgia?

Nahid Kianmehr, Yaser Sharafian, Ali Bidari, Anousheh Haghighi

Department of Internal Medicine, School of Medicine, Iran University of Medical Sciences, Tehran, Iran

Aim: Fibromyalgia is a common rheumatologic disorder characterized by widespread musculoskeletal pain, fatigue and sleep disorder. In spite of its high prevalence, it seems that the awareness of general practitioners as the first primary care providers regarding fibromyalgia is limited. The aim of this study was to assess the knowledge of general practitioners on fibromyalgia and their clinical approach.

Methods: A detailed questionnaire (including questions about symptoms & signs, diagnostic criteria, and treatment) was completed by 190 general practitioners (54.7% male; mean age: 41 years). Data analysis performed with SPSS software (version15) and awareness about all aspects of fibromyalgia was reported as percent.

Results: Fifty-seven percent of participants claimed to know 1-6 tender points. Only 3.2% knew 16-18 points. The common proposed symptoms of fibromyalgia were widespread pain (72.6%), excessive fatigue (72.6%), weakness (60.5%), sleep disorder (36.3%), anxiety (34.7%), and depression (34.2%). Wrong items including elevated ESR and CRP, arthritis, weight loss, and abnormal radiologic studies were stated in 27.9%, 18.9%, 14.7%, 12.6%, and 2.1%, respectively. Selective serotonin re-uptake inhibitors, Tricyclic antidepressants and pregabalin for treatment were selected by 45.8%, 22.1%, and 15.3% of participants, respectively. 52.1% and 23.7% of physicians assumed NSAIDS and corticosteroids as a therapeutic modality.

Conclusion: Our general practitioners are not well informed about fibromyalgia. We suggest that Fibromyalgia should be specifically included in the continuous medical education programs as well as in undergraduate medical student training curriculum.

Keywords: Fibromyalgia; general practitioners; knowledge

Corresponding Author: Anousheh Haghighi; Hazrat Rasool akram Hospital, Niayesh Ave. Sattarkhan St. Tehran, Iran.
Tel: +98 912 4333673, E-mail: haghighi533@yahoo.com

S4-5

APN/CD13 Gene Expression Level And Serum Activity In Systemic Lupus Erythematosus Patients

Musa Behzadi[1], Arman Ahmadzadeh[2], Maryam Valizadeh[1], Mandana Sattari[1], Mostafa Haji Molla Hoseine[1], Farshid Yeganeh[1]

1- Department of Immunology, Shahid Beheshti University of Medical Sciences, Tehran, Iran, 2- Department of Rheumatology, Shahid Beheshti University of Medical Sciences, Tehran, Iran.,

Aim: Aminopeptidase N (APN/CD13) is a membrane-bound protease that has a costimulatory function in the immune responses. Additionally, APN digests several important proteins in plasma, including chemokines and pro-inflammatory cytokines. Elevated and abnormal concentration of this enzyme is correlated with many pathological disorders such as cancer, leukemia and malaria. The aim of the present study was to investigate the value of the serum APN activity and gene expression in white blood cells (WBCs) in patients with systemic lupus.

Methods: Serum APN activity and relative mRNA expression of APN in PBMCs were determined in serum of 91 subjects, including 17 patients with lupus nephritis, 30 lupus patients without nephritis, and 44 healthy control subjects. APN activity was evaluated using spectrophotometry to measure specific substrate digestion. mRNA expression level was determined using quantitative real-time PCR, and the level of APN mRNA was normalized against GAPDH mRNA level in WBCs.

Results: Significantly higher aminopeptidase activity was detected in serum from patients with SLE than from control subjects ($P \leq 0.028$). Additionally, the expression level of APN was increased 6.12 times in patients with SLE in comparison to controls ($P \leq 001$). Although, APN serum activity and relative mRNA expression were higher in patients with nephritis than non-nephritis lupus patients, but it was not significant. APN mRNA level and its activity in serum were not correlated with SLE disease activity (SLEDAI) in patients.

Conclusion: The multifunctionality of CD13 can be responsible for controversial experimental finding. CD13 positive mononuclear cells are considered as activated cells that promote immune responses. Our results showed that CD13 expression level in white blood cells was significantly higher in lupus patients than controls. On the other hands, soluble form of APN cleaves several pro-inflammatory cytokines and chemokines, therefore, decreases inflammation. According to the results, APN activity in serum was significantly higher in lupus patients and could be considered as an effort of the immune system to modulate autoimmune response and inflammation. APN activity and mRNA expression were higher in SLE patients regardless of their disease activity. So, these parameters could be considered as a biomarker of disease.

Keywords: Systemic Lupus Erythematosus; Gene expression; Aminopeptidase N.; CD13 GEN

Corresponding Author: Arman Ahmadzadeh; Loghman Hospital, Rheumatology Ward, South Kargar Ave., Kamali St., Tehran, Iran Tel: +98 912 3212643, E-mail: arman319@yahoo.com

S4-6

Differences In Clinical Presentation Of Ankylosing Spondylitis In Men And Women

Hossein Soleymani Salehabadi, Mohammad Bagher Owlia, Ali Dehghan, Saeed Salehinejad Kouvei

Rheumatology Department, School of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Aim: Ankylosing spondylitis (AS) is an inflammatory disease that mainly affects the axial skeleton of the body, and its prevalence in men is 2 to 3 times more than that in women. The difference in clinical presentations of AS in men and women is indicative of potential effect of gender on severity of the disease. This study was conducted with the aim to investigate the effect of gender on severity of AS.

Methods: In this descriptive cross-sectional study, 115 patients with AS, comprising 88 men (76.5 %) and 27 women (23.4 %) were evaluated. Sampling was performed using non-random convenient method. The most important variables studied included clinical presentation, radiographic stage of sacroiliac involvement, and laboratory data extracted from patients' files and recorded in questionnaires. Data were analyzed using SPSS-16 software.

Results: No significant difference was seen between men and women in the age at diagnosis, entheses involvement (enthesitis), peripheral joint involvement, and laboratory data such as C-reactive protein (CRP), Erythrocyte Sedimentation Rate (ESR), and hemoglobin. Inflammatory neck pain was more prevalent in men than in women (77.2% against 51.8%; $P<0.05$). Sacroiliac radiographic study revealed stage 1 involvement in 11.3% of men and 37% of women ($P=0.009$), and stage 4 in 27.2% of men and 3.7% of women ($P<0.001$), with a significant difference.

Conclusion: According to the results, inflammatory neck pain and advance stage of sacroiliitis were more prevalent in men than women.

Keywords: Ankylosing spondylitis; Clinical Presentation; gender

Corresponding Author: Hossein Soleymani Salehabadi; Internal Medicine group, Shahid Sadoughi Hospital, Safaeieh, Yazd, Iran. Tel: +98 913 1547795, E-mail: dhsol33@yahoo.com

POSTER PRESENTATIONS

P1-1

Evaluation Of The Relationship Between Parvovirus B19 And Rheumatoid Arthritis Disease

Zakieh Rostamzadeh, Zeinab Azimi, Tahereh Alizadeh

Department of Microbiology, School of Medicine, Medical university of Urmia

Aim: Some of theviral infections are considered as the pathogenic factors for autoimmune diseases that one of them is parvovirus B19 and the infection caused by this agent can cause a broad spectrum of rheumatologicaldiseases. Rheumatoid arthritis is the most common systemic inflammatorydisease, and this is a long-term autoimmune diseaseinwhichtissues in proximity of joints are involved. The exact cause of that is unknown but family history of other autoimmune diseases, genetic factors, stress and some of infectious agents (for example the bacteria of septic sore throat and some viruses) are the main factors for this disease that are mentioned until now. 8 percent of children and 60 percent of adults infected with parvovirus B19 that are suffering from joint diseases and the ratio of infection between females and males is 60 percent to 40 percent.

Methods: Using of some methods such as ELISA, PCR, and synthesis of one peptide that includes 24-amino acid and immunization of eight BALB/c mice with the viral peptide were the methods that researchers used.

Results: Whatacknowledge this relationship are the transcend levels of serum antibodies against ParvovirusB19 in patients with rheumatoid arthritis which is refractory to treatment in comparison with mild RA in the ELISA method and the other one is positive results of this virus DNA in patients' synovial fluid by PCRmethod and also the more Anti-CCP in those who were infected lately and IgM-NS1 was positive in their serum.Thereafter theresearchers' synthesized a 24-amino acid immunodominant peptide that is belonging to a part of the virus protein 1 and virus protein 2 overlappingregions. The patients' immunoglobulin recognized the B19 peptide in both direct and competitive ELISA.Then the researchers found that antiviral antibodies can specifically recognized the keratin, collagen type II, ssDNA and cardiolipin between autoantigens and also they immunized eight BALB/c mice with the viral peptide coupled to a carrier protein that the autoantibodies activity was the same.

Conclusion: Although this relationship hasn't been described definitivelybut according to the significant number of these patients and disability of them finding the causes of these diseases in order to prevent and treat of these diseases can be one of the priorities of the investigative works.

Keywords: parvovirus B19; rheumatoid arthritis; antibodies; Anti-CCP; autoantigens

Corresponding Author: Zakieh Rostamzadeh; Department of Microbiology, School of Medicine, Medical university of Urmia, Urmia Iran.
Tel: +98 9141875386, E-mail: rostamzadehzakieh@yahoo.com

P1-2

XRCC1 Arg399Gln Polymorphismand Risk Of Systemic Lupus Erythematosus In An Iranian Population: A Pilot Study

Milad Mohamadookhorasani

Department of Clinical Biochemistry, School of Medicine, Zahedan University of Medical Sciences, Zahedan, Iran

Aim: Systemic Lupus Erythematosus (SLE) is an autoimmune and multisystem disease. Both genetic and environmental factors involved in SLE. Evidences are suggesting that DNA damage is implicated in the development of Systemic Lupus Erythematosus (SLE). Therefore we focused on one common XRCC1 polymorphisms (Arg399Gln) in SLE susceptibility in South East of Iran.

Methods: Peripheral blood DNA was extracted from 163 SLE patients and 180 healthy controls. PCR-restriction fragment length polymorphism method was used for genotyping of XRCC1 Arg399Gln polymorphism.

Results: The frequency of Arg/Gln genotype of the XRCC1 Arg399Gln polymorphism was significantly lower in SLE patients than controls. Moreover, lower frequency of Arg/Gln genotype was found in SLE patients with malar rash compared to patients without this manifestation..

Conclusion: These findings suggest that XRCC1 399 Arg/Gln heterozygous genotype plays a protective role for SLE.

Keywords: Systemic Lupus Erythematosus, XRCC1, Polymorphism, Malar Rash

Corresponding Author: Milad Mohamadookhorasani; Department of Clinical Biochemistry, School of Medicine, Zahedan University of Medical Sciences, Zahedan, Iran.
Tel: +98 9350641028, E-mail: miladkh24@yahoo.com

P1-3

Arg194Trp Polymorphisms And Risk Of Systemic Lupus Erythematosus In An Iranian Population

Milad Mohamadookhorasani

Department of Clinical Biochemistry, School of Medicine, Zahedan University of Medical Sciences, Zahedan, Iran

Aim: Evidences are suggesting that DNA damage is implicated in the development of Systemic Lupus Erythematosus (SLE). Therefore, we focused common XRCC1 polymorphisms in SLE susceptibility in South East of Iran.

Methods: In this case-control study, 163 patients affected with Systemic Lupus Erythematosus and 180 healthy controls with no close relative relationships were chosen. Genomic DNA was extracted from whole blood by salting out method. PCR-restriction fragment length polymorphism method was used for genotyping of XRCC1 Arg194Trp polymorphisms.

Results: NO association was observed between XRCC1 Arg194Trp polymorphism and increased risk of SLE in studied population.

Conclusion: These findings suggest that XRCC1 Arg194Trp polymorphism not association with SLE susceptibility.

Keywords: Systemic Lupus Erythemtosus; Single nucleotide polymorphisms; XRCC1 polymorphism.

Corresponding Author: Milad Mohamadookhorasani; Department of Clinical Biochemistry, School of Medicine, Zahedan University of Medical Sciences, Zahedan, Iran.
Tel: +989350641028, E-mail: miladkh24@yahoo.com

P1-4

Cyclophosphamide-Induced Reversible Posterior Encephalopathy Syndrome

Mozhdeh Zabihiyeganeh[1], Reza Rahmanzadeh[2]

1- Department of Rheumatology, Iran university of medical sciences, Tehran, Iran, 2- Division of Neuroscience, Cellular and Molecular Research Center, Iran University of Medical Sciences, Tehran, Iran

Aim: Cyclophosphamide is a well-known immunosuppressive agent currently used in a wide spectrum of autoimmune disorders and cancers. Among severe adverse effects of Cyclophosphamide, reversible posterior encephalopathy syndrome (RPLS) is newly identified life-threatening one that timeous diagnosis and discontinuation of offending causative agents prevent subsequent abnormalities of central nervous system or death.

Beyond the exceptions, RPLS as a clinicoradiologic syndrome can be characterized by neurological impairments such as seizures, altered mental status, stupor, headache, visual disturbances accompanied with symmetric involvement of posterior white matter on magnetic resonance imaging.

From the standpoint of pathophysiology; RPLS is under debate. But, most theories focused on disrupted cerebrovascular autoregulation due to concurrent acute hypertension. Accordingly, cerebral vasodilation and following arteriole leakage leading to cerebral vasogenic edema.

This abstract reports a 25-year-old male wegener's granulomatosis patient showed RPLS during cyclophosphamide therapy.

Case presentation: A 25 year-old-man whose wegener's granulomatosis was diagnosed about 3 months prior to admission to our hospital. At the time of the diagnosis, patient presented polyarthritis, productive cough, CT-proven pulmonary nodules, chronic sinusitis, peripheral neuropathy elevated serum creatinine level and positive serologic tests, ESR=105, CRP=3+, anti- PR3=300 U/ml. Therefore methylprednisolone 500mg IV pulse therapy over three days was started that removed the manifestations and normalized serum creatinine level. Then patient was discharged with prednisolone 60mg/daily and oral cyclophosphamide 100mg/daily as maintenance therapy. After one month, Patient was brought to the emergency room for prolonged generalized tonic-colonic seizures that were controlled by antiepileptic drugs. Blood pressure was 180/130mm Hg, so, antihypertensive therapy was added. Magnetic resonance (MR) imaging showed areas of hyper signal intensities on T2-weighted images in subcortical white matter of parietooccipital lobes and frontal lobes. Also, evidences of gyra l ischemia in occipital lobes were existed. MRVenography and MR angiography was normal. Repeat brain MRI after two weeks indicated no abnormality. These clinical manifestations and radiologic abnormalities were consistent with PRES syndrome. Further evaluations revealed normal creatinine, anti-PR3 level and CT-proven resolution of pulmonary nodules that may exclude the importance of Wegener flare as a cause of the PRES development in this case.

Conclusion: Reversible posterior encephalopathy syndrome (RPLS) occurs in young patients with wegener's, especially in theearly stages of the disease. Many immunosuppressive drugsare implicated with this syndrome, associated with arterial hypertensionin almost all cases. Cyclophosphamide is one ofthe most widely used immunosuppressive drugs in Wegener, withmany well-described secondary effects, and posterior reversibleleukoencephalopathy syndrome could be one of them.Management is predominantly symptomatic treatment. Earlydiagnosis and management is lifesaving. Without any evidenceof infections or severe hypertension, cyclophosphamidemight well be considered one of the causesof RPLS.

Keywords: Reversible posterior encephalopathy syndrome; systemic lupus erythematosus; wegener's granulomatosis; cyclophosphamide

Corresponding Author: Mozhdeh Zabihiyeganeh; Firozgar Hospital, Behafarin Ave. Karimkhan Zand St. Tehran, Iran. Postal Code: 1593748771

Tel: +989123886541, E-mail: mozhdehzabihi@gmail.com

P1-5

Effect Of Vitamin D On Widespread Pain In Fibromyalgia Patients

Mozhdeh Zabihiyeganeh, Elnaz Khiabani

Department of Rheumatology, Iran university of Medical Sciences, Tehran, Iran

Aim: Various studies have reported hypervitaminosis D in fibromyalgia patients.In the present study, we have evaluated the effect of vitamin D supplements on widespread pain (WPI)of fibromyalgia patients.

Methods: The present study was done from October 2012 to March 2014 in Rheumatology clinic of Firoozgar Hospital, Tehran, Iran. 108 patients with fibromyalgia were assessed and 74 patients who diagnosed as fibromyalgia according to American College of Rheumatology(ACR 2010) criteria and had hypervitaminosis D entered the study. Patients were randomized to two groups. Group A received oral vitaminD 50000IU weekly plus trazodone 25 mg at bedtime and group B received trazodone 25 mg at bedtime only. The patients were evaluated at baseline, at 4 and 8 weeks and 25(OH)vitD level was measured, Patients were examined and WPI score index were completed.

Results: 68.5% of patients with fibromyalgia had hypervitaminosis D. The mean 25(OH)vitD was 12.36±6.93ng/ml, group A(11.37±6.46) and group B (13.41±7.33ng/ml).There was no significant difference between two groups at baseline. A significant improvement was observed in WPI score.This study suggested that there was a statistically significant reduction in WPI score within each groups. WPI score in group A at week 8 was lower compared with group B and p value was significant.($P<0.05$).

Conclusion: The present study indicated that vitaminD supplements can improve physical symptoms of fibromyalgia and inattention to prevalence of hypervitaminosis D in FM patients, treating hypervitaminosis D should be recommended.

Keywords: Fibromyalgia; Vitamin D; widespread pain

Corresponding Author: Elnaz Khiabani; Firozgar Hospital, Behafarin Ave, KarimkhanZand St., Tehran, Iran.
Postal Code: 1593748771, Tel: +98 914 9155631, E-mail: khiabani_e@yahoo.com

P1-6

Primary Vasculitides In Northeast Of Iran

Mohammad Hassan Jokar, Zahra Mirfeizi

Department of Internal Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

Aim: We aimed to study the demographic characteristics of the primary vasculitides (PV) in northeast of Iran.

Methods: We retrospectively studied the medical records of patients diagnosed with any kind of primary vasculitis at the Department of Rheumatology of the Imam Reza Hospital, Mashhad, Iran between January 1, 2002, and December 31, 2012. Patients were classified according to the American College of Rheumatology 1990 criteria for the classification of vasculitis and the 2012 Revised International Chapel Hill Consensus Conference Nomenclature of Vasculitides.

Results: A total of 721 patients (51.5% male, 48.5% female) with a diagnosis of primary vasculitis (PV) were identified. The overall frequency of PV was nearly equal between males and females. The frequency distribution by PV type and frequency proportion for each diagnostic category were as follow:

Large vessel vasculitis 10% (Takayasu arteritis 6%, temporal arteritis 4%), medium vessel vasculitis 2.1% (polyarteritis nodosa 2.1%, Kawasaki disease 0%) small vessel vasculitis 33.3% [antineutrophil cytoplasmic antibody associated vasculitis 9.2%, (granulomatosis with polyangiitis 6.8%, eosinophilic granulomatosis with polyangiitis 1.8%, microscopic polyangiitis 0.6%), immune complex vasculitis 3.8% (anti-glomerular basement membrane disease 0%, cryoglobulinemic vasculitis 0.3%, IgA vasculitis 3.5%, hypocomplementemic urticarial vasculitis 0%)], variable vessel vasculitis 66.2% (Behcet's disease 66.2%, Cogan's syndrome 0%), single-organ vasculitis 9.1% (cutaneous leukocytoclastic angiitis 8.2, cutaneous arteritis 0%, primary central nervous system vasculitis 0%, isolated aortitis 0% and OTHERs 0.6).

For comparison, the frequency distributions of vasculitic disorders in our study and three other populations are shown below:

Takayasu'sarteritis: Iran 6.3%, American college of Rheumatology (ACR) study 6%, India 20.2% Denmark 1%. Giant cell arteritis: Iran 4%, ACR 22.3%, India 3.3%, Denmark 14.4%. Polyarteritis nodosa: Iran 2.1%, ACR 12.3%, India 8.83%, Denmark 2%. Wegener's granulomatosis: Iran 6.8%, ACR 8.7%, India 13.8%, Denmark 27.8%. Churg-Strauss syndrome: Iran 1.8%, ACR 2.1%, India 1.7%, Denmark 2%. Microscopic polyangiitis: Iran 0.6%, ACR -, India 3.9%, Denmark 12.3%. IgA vasculitis (Henoch-Schonlein): Iran 3.5%, ACR 8.7%, India 21.8%, Denmark 2%. Kawasaki's disease: Iran 0%, ACR 5.4%, India 0.4%, Denmark 0%. Behcet's disease: Iran 63.3%, ACR 0%, India 13.6%, Denmark 0%. Cryoglobulinemic vasculitis: Iran 0.3%, ACR 0%, India 0%, Denmark 0%. Cutaneous leucocytoclastic angiitis: Iran 8.2%, ACR-, India-, Denmark 38.1%.

Conclusion: The most common form of vasculitis in our study was Behcet's disease (BD). About 63% of our patients diagnosed with vasculitis had BD. The other most common forms of vasculitis were cutaneous leukocytoclastic angiitis and granulomatosis with polyangiitis (Wegener's).

Keywords: vasculitides; vasculitis; vasculitic disorder

Corresponding Author: Mohammad Hassan Jokar; Internal Medicine Department. Emamereza Hospital, Mashhad, Iran.
Tel: +98 9155178351, E-mail: jokarmh@mums.ac.ir

P1-7

Rheumatic Diseases In Iranian Traditional Medicine

Mohammadhassan Jokar

Department of Internal Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

Aim: Traditional Medicine that was introduced mostly by the ideas and experiences of Hippocrates, Galen and Avicenna, is popular in our community yet. The field of rheumatology is relatively new and young in comparison to other related medical fields. I decided to do this study because, there was not any study regarding the Rheumatic diseases in Iranian Traditional Medicine.

Methods: The Iranian Traditional Medicine opinions regarding the rheumatic diseases were obtained and summarized from the following books: the Canon of Medicine, Zakhireh-i Kharazmshahi, Al-Aghraz al- Tibbiaval Mabahess al-Alaii, Ghanooncheh, , Hidayat al- Mutialimin, KhafiAlayee.

Results: Traditional Medicine is mostly based on thetheory of four cardinal humors (blood, phlegm, bile choler and black bile or melancholy) and temper that is known as warm and cool. In articulardiseases, it was believed that the cause is humors and dripping the drop in painful joints, sexual excesses, and so on predisposed to joint involvement. In traditional medicine, the bone and joint diseases were divided to limited types (table 1), such as pain in joints, gout, back pain, sciatica and kyphosis and other rheumatic diseases was not known that time. Management of musculoskeletal disorders was based on consumption of plants to stop humors and evacuation methods such as purging, vomiting, diuresis and some procedures such as bleeding and dietetics.

Conclusion: In Iranian Traditional medicine, rheumatic diseases were divided into limited types, and most of these disorders were unknown.

Table 1. types, causes, symptoms and treatment of the most common rheumatic diseases in traditional medicine.

Disease	Causes	Symptoms and signs	Treatment
Aching joints & gout	Simple bad temper, bad temper with waste material, overeating and drinking (alcohol)	Pain and deformity of joints	Cathartic, vomiting, abstaining from alcohol, exercise, abstaining from meet, abstaining from sexual contact, phlebotomy
Sciatica	Stretching and shortening of sciatica	Pain in the thigh, calf and heel, atrophy legs and thighs	Cauterize, cathartic, phlebotomy, Rubbing something soft and oils, Colchicum, Cool syrups
Back pain	Cool temper, overworking, sexual excesses, internal organs disorders	Back pain	Oral and topical drugs, mixture of tallow and Citrullus, Bitter melon (colocynthis), monten tablet, Phlebotomize
Kyphosis	Dislocation of vertebrae due to: trauma, internal organs disorders, excessive accumulation of gas, hysterogenic wet material, abscess and furuncle	Kyphosis and sometime fever	Purging, topical drugs, enema and some plants such as fruit of cypress, Acacia, kelp and Damask rose

Keywords: Rheumatic diseases; Traditional medicine; Medicinal plants

Corresponding Author: Mohammad Hassan Jokar; Internal Medicine Department. Emamereza Hospital, Mashhad, Iran.
Tel: +98 9155178351, E-mail: jokarmh@mums.ac.ir

P1-8

Correlation Between Serum Level Of Interleukin 17 And Disease Activity In Rheumatoid Arthritis Patients Referred To The Rheumatology Clinic During 2012- 2013

Batool Zamani, Said Ali Reza Moravejji, Marjane Shokrani

Department of Internal medicine, Kashan University of Medical Sciences, Kashan, Iran

Aim: Rheumatoid arthritis (RA) is a chronic systemic autoimmune inflammatory disease of synovial joints. Cytokines such as IL-17 have an important role in the pathogenesis of RA. The aim of this study was to find out the correlation between the serum level of IL-17 and disease activity.

Methods: In this cross-sectional study 60 patients fulfilled the ACR criteria for RA was accepted. The patients consented to participate in this study and their demographic data such as age, gender, and disease duration and treatment were recorded in thequestionnaire then one serum samples were taken and analyzed for IL-17 level in one laboratory. The DAS28 was calculated for all patients, and scores lower than 2.6 were considered as inactive RA and higher scores were considered as active.Results analyzed by descriptive statistical test and *Chi*-Square, *t*-test.

Results: From 60 patients studied, 23 patients were identified to have controlled RA based on DAS-28 score, with mean disease duration of 75.37 month and mean IL-17 serum level of 144.81± 47.83 ng/l. Furthermore, 37 patients were diagnosed with active disease with mean disease duration 101.78 months and mean serum level was 237±93.08 ng/l. There is a significant correlation between serum IL-17 level and DAS- 28 in both groups ($P<0.0001$). In addition, there is a significant correlation between the level of serum IL-17 and numbers of inflamed and tender joints, ESR and VAS. There is a strong correlation between IL-17 and disease activity in patients with active RA, level of serum IL-17 was significantly higher in patients with severe RA activity (DAS28>5) as opposed to mild and moderate activity (DAS28<5).

Conclusion: This study showed there is a substantial correlation between serum levels of IL-17and disease activity score. The observation suggests that theIL-17 is a good indicator of the disease activity and severity of RA and can be used in follow up.

Keywords: disease activity score (DAS28); Rheumatoid arthritis; serum IL-17 level

Corresponding Author: Batool Zamani; Ghotberavandi Blv., Pezeshk Blv., Beheshti Hospital, Internal Department, Kashan, Iran. Tel: +98 9133623293, E-mail: batol_zamani2007@yahoo.com

P1-9

Comparison Of IL-17 Level In Differentiation Of Inflammatory And Noninflammatory Arthritis In Patients With Knee Arthritis

BatoolZamani, FatemeAtoof, Maryam Tavasoli

Department of Internal medicine, Kashan University of Medical Sciences, Kashan, Iran

Aim: Arthritis is one of the most common and significant medical problems in patients suffering from joint disorders and is divided into two categories of inflammatory and non-inflammatory according to White blood cell and polymorphonuclear count. The IL-17 is an important cytokine in inflammation of thesynovium and joint fluid. This study intends to compare IL-17 level in inflammatory with non-inflammatory joint fluid.

Methods: In this Case-control study, 40 patients with knee arthritis including 20 inflammatory and 20 non-inflammatory arthritis based on the number of white blood cells and polymorphonuclear were studied. The demographic information of the patients, including age, gender, and duration of the arthritis have been recorded on the questionnaires. For studying the levels of IL-17 of joint fluid, joints fluid have been taken from all patients after they filled consent inform and then sent to one unit laboratory. White blood cells above 2000 per ml were considered inflammatory and below 2000 per ml were considered as non-inflammatory. The IL-17 level evaluated by Sandwich ELISA method by KOMA BIOTECH kit. Then obtained data have been submitted to SPSS software for statistical analysis.

Results: In this study conducted on 40 patients, 18 (45%) were female & 22(55%) were male. Mean of age andduration of arthritis was 48±15.96 and 8±4.8 respectively. In female 40.9% andmale 61.1% have noninflammatory arthritis and 59.1% and 38.9% in female and male have inflammatory arthritis respectively that there is not meaningful statistical difference (P=0.2). Mean age of patients was 57.5±12.24 & 38.45± 13 in noninflammatory and inflammatory respectively that was meaningful statistical difference (P=0.001). Mean duration of arthritis was 7.1 ± 3.44 & 8.95 ± 5.84 weeks in noninflammatory and inflammatory respectively (P=0.23). Average level of IL-17 in patients with inflammatory arthritis was 16.04 ± 5.74 pg/ml and in patients with non-inflammatory arthritis was 8.83±1.86 pg/ml that there exists a meaningful relation between the IL-17 levels and the type of arthritis (P<0.001). To find a cut-off point for interleukin-17 for differential diagnosis of inflammatory arthritis of non-inflammatory in patients with knee arthritis ROC curve was used, and the value of 10.5 pg/ml of IL-17 is a shear point for patients with inflammatory arthritis from non-inflammatory arthritis can separate. At this point, sensitivity, specificity, positive predictive value and negative predictive value, respectively were 95/0, 9/0, 9/0 and 95/0.

Conclusion: In the present study it was shown that IL-17 levels in inflammatory arthritis synovial fluid is significantly higher and in differentiating inflammatory from non-inflammatory arthritis may be helpful.

Keywords: inflammatory arthritis; non-inflammatory arthritis; IL-17; Knee arthritis

Corresponding Author: Batool Zamani; Ghotberavandi Blv., Pezeshk Blv., Beheshti Hospital, Internal Department, Kashan, Iran. Tel: +98 9133623293, E-mail: batol_zamani2007@yahoo.com

P1-10

Enterococcal-Associated Respiratory Tract Infection In Dermatomyositis

Simin Almasi

Department of Rheumatology, Firoozgar Hospital, Iran University of Medical Sciences, Tehran, Iran

Abstract I reported a rare case of enterococcal pneumonia and pleural effusion in a 32-year white woman with Dermatomyositis. she presented with 12-days history of right- sided pleuritic chest pain, dyspnea, fever, chills, cough and tachypnea. The patient was known case of severe dermatomyositis from 10 months ago and she received high dose of corticosteroid, hydroxychloroquine and azathioprine and IVIG. Chest X-ray showed increased density of the right hemi thorax, indicative of pleural effusion and consolidation with air bronchogram. Culture pleural drainage revealed growth of Enterococcus faecalis.As Enterococcus faecalis is an unusual cause of pneumonia and pleural effusion, further investigations to determine the primary focus undertaken, therefore CT scan of the abdomen done and was normal.The patient was treated with imipenem and repeated CT scan of lung 3 weeks later showed that pleural effusion and consolidation had resolved. Conclusions: Enterococci are gram-positive cocci, which may play a pivotal role in a variety of community- and hospital-acquired infections, The main cause of bacterial infection is urinary tract infection, primary bacteremia, endocarditis and post abdominal surgery and lower respiratory tract infections caused by enterococci are very rare therefore this case is interesting in this regard. Incidence of pleural empyema due to enterococci is only 4% of all enterococcus infections, most cases were patients who had undergone recent abdominal surgery or suffering from liver cirrhosis.physicians should consider their occurrence in severe or non-resolving cases of pneumonia.our patients don't have this routine risk factors except immune suppressive and therefore we must consider that enterococcus is one of respiratory infection in this patients.

Keywords: Dermatomyositis; enterococcal pneumonia

Corresponding Author: Simin Almasi; Department of Rheumatology, Firoozgar Hospital, Iran University of Medical Sciences, Tehran, Iran
Tel: +98 912 1870312, E-mail: simin_almasi@yahoo.com

P1-11

Late-Onset Systemic Lupus Erythematosus

Simin Almasi, Nafiseh Ebrahimi

Department of Rheumatology, Firoozgar Hospital, Iran University of Medical Science, Tehran, Iran

A 78-year-old woman was referred to our hospital because of polyarthritis in upper and lower limbs, generalized myalgia, chest pain, dyspnea (functional class 3), , pitting edema in lower limbs and malar rash from 3 weeks ago. Because In laboratory test she has mild thrombocytopenia and leukopenia we evaluated patient for lupus and we found that FANA and Anti ds-DNA are positive with high titer. This clinical symptom and laboratory test let us to a diagnosis late-onset SLE after roll out malignant diseases. Late-onset systemic lupus erythematosus (SLE) is the rare type of SLE whose manifestations reportedly begin after the age of 50 and may constitute a specific subgroup of SLE. As late-onset lupus is rare and patients tend to show the typical symptoms less frequently but our patient contrary to what we see in patients in this age group, show malar rash and other acute prsentation. Conclusion: SLE occurs rarely in patients of advanced age Since our patient was very old and Review in literature shown that the incidence of the disease is extremely rare in this age and we were reported this patient because disease is very rare in this age. Therefore, careful attention needs to be paid to latent symptoms and laboratory findings.

Keywords: Late-Onset SLE; malar rash; thrombocytopenia

Corresponding Author: Simin Almasi; Department of Rheumatology, Firoozgar Hospital, Iran University of Medical Sciences, Tehran, Iran.
Tel: +98 912 1870312, E-mail: simin_almasi@yahoo.com

P1-12

Association Of 70 Bp VNTR Polymorphism Of IL-4 Gene With Rheumatoid Arthritis In Province Khuzestan

Foroozan ghorishvandy[1], Reza kazemi nezhad[1], Mohammad reza akhond[2], Elham rajaei[3]

1-Department OF Genetics, School of Sciences, Shahid Chamran University, Ahvaz, Iran, 2-Department of Statistics, School of Mathematical Sciences and Computer, Shahid Chamran University, Ahvaz, Iran, 3- Department OF Internal Medicine (Division of Rheumatology), School of Medicine, Ahvaz Jundishapur University of Medical Science, Ahvaz, Iran

Aim: Rheumatoid arthritis (RA) is a complex multifunctional disease in which both genetic and environmental factors contribute to susceptibility and severity. Cytokines with polymorphic gene sequences are potential marker of disease severity since then gene products are involved in RA pathogenesis. The aim of this study was to investigate the IL-4 gene 70 bp VNTR polymorphism in Khuzestan patient with rheumatoid arthritis (RA).

Methods: The study included 120 RA patient and 120 healthy control individuals. PCR method genotyped two groups for determining gene polymorphism of IL-4 gene. The PCR products were then analyzed via a 2% (w/v) Agars Gel Electrophoresis (AGE). PCR product was of 183 bp for p1 allele and 253 bp for p2 allele. Data were analyzed by SPSS software, using x2 test. A p-value that is less than 0.05 was considered statistically significant.

Results: Genotypes and allelic frequencies in each group were compared. The frequency p1p2 and p2p2 genotypes in patient groups was 28(23/3%) and 92(76/7%) and in control groups 18(15%) and 102(85%) respectively. The frequency p1 and p2 alleles in patient group were 28(11/66%) and 212(88/33%) and in control groups 18(7/5%) and 222(92/5%) respectively. The frequency of IL-4 p1p2 genotype and p1 allele was higher in patient group than thecontrol group. The frequency p2p2 genotype and p2 allele was higher in thecontrol group than patient group. But there was no statistically significant difference in genotypes and allele frequencies of VNTR polymorphism of the IL-4 gene between RA patient and healthy control (P>0.05). The p1p1genotype was not found in both patient and control group.

Conclusion: We conclude that there is no association between IL-4 gene 70 bp VNTR polymorphism and rheumatoid arthritis among Khuzestan's. Result obtained is similar to a previous study carried out on RA Chinese patient in Taiwan.

Keywords: Rheumatoid arthritis; IL-4; Gene polymorphism; VNTR

Corresponding Author: Reza kazemi nezhad; Department OF Genetics, School of Sciences, Shahid Chamran University, Golestan Blv., Ahvaz, Iran.
Tel: +98 9163188499, E-mail: kazemi_reza@yahoo.com

P1-13

Vitamin D Deficiency Is Associated With Nonspecific Low Back Pain In Women, A Case-Control Study

Behzad Heidari

Mobility Impairment Research Center, Babol University of Medical Sciences, Babol, Iran

Aim: Vitamin D deficiency is linked to several musculoskeletal conditions including nonspecific low back pain(LBP), autoimmune diseases. Data regarding to vitamin D deficiency and LBP are not consistent across various studies. The objective of this case-control study was to determine association of vitamin D deficiency and LBP in women.

Methods: Eighty-one women with nonspecific LBP defined as pain without an identifiable cause limited to the area between the bottom of the rib cage and the buttock creases entered to study. The intensity of LBP pain was assessed based on Likert pain scale. (0 = no pain; 1= mild pain; 2= moderate pain; 3= severe pain). The severity of LBP ranged from 1 to 3. Serum vitamin D was assessed by quantitative determination of serum 25-hydroxyvitamin D (25-OHD) by electerochemiluminecence method, and levels <20 ng/ml were considered as vitamin D deficiency. The primary objective of the study was to compare serum 25-OHD level and frequency of deficiency between patients and 101 age-matched subjects witout LBP as controls using Mann-Whitney U test. The secondary objective was to determine the association between serum 25-OHD deficiency and LBP using chi-square and Spearman correlatation test.

Results: Mean age of patients and controls was 35.1±8.14 and 37.4±7.9 years respectively(0=0.054). Serum 25-OHD had a right skewed distribution particularly in the patients group. Median serum 25-OHD level in patients was 14.4 (rang 4-130) ng/ml and in the control group was 21 (range 3-120) ng/ml. The difference was statistically significant (p=0.003). Serum 25-OHD deficiency was observed in 57(70.4%) patients versus 47(46.5%) controls (p=0.001).There was a significant association between serum 25-OHD deficiency and LBP (OR=2.72, 95% CI, 1.47-5, p=0.001). Serum 25-OHD deficiency was significantly correlated with LBP (Spearman's correlation coefficient= 0.239, p=0.001).

Conclusion: This study indicates a significant association between vitamin D deficiency and nonspecific LBP in women and justifies serum 25-OHD assessment in women with low back pain.

Keywords: Vitamin D; Deficiency; Low back pain; Women

Corresponding Author: Behzad Heidari; Mobility Impairment Research Center, Babol University of Medical Sciences, Babol, Iran. Tel: +989111241639, E-mail: bheidari6@gmail.com

P-14

A Randomized Double-Blind Placebo-Controlled Pilot Study Of The Efficacy Of Alendronate On The Prevention Of Bone Loss In Patients With Early Ankylosing Spondylitis

Alireza Khabbazi, Mehrzad Hajialiloo, Sousan Kolahi

Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

Aim: The aim of this study was the considering the efficacy of alendronate on the prevention of bone loss in patients with early ankylosing spondylitis.

Methods: In a randomized double-blindplacebo-controlled study in Emam Reza hospital of Tabriz University of Medical Sciences, 24 patients with early ankylosing spondylitis was recruited to the study. The early ankylosing spondylitis criteria were: Schober index≥5; normal hip joint in pelvic radiography; absence or rarity of syndesmophytes in spine radiography (Taylor index≤1). They randomized with Randlist software to the treatment and control groups. Treatment and control groups received alendronate 70mg/week and placebo respectively for 12 months. Before and 12 months after intervention bone densitometry by the DEXA method and Hologic QRD model instrument from lumbar and pelvic area was performed. Patients, assessing physicians and densitometry technician were blinded. Both groups received calcium 1000mg/d and vitamin D 400mg/d supplement.

Results: The differences in the bone mineral density after 12 months in the treatment and control groups were non-significant. No case of clinically apparent vertebral and non-vertebral fracture was observed in the treatment and control groups.

Conclusions: The results of our study suggest that alendronate is ineffective for prevention of bone loss in patients with early ankylosing spondylitis.

Keywords: ankylosing spondylitis; bone mineral density; alendronate

Corresponding Author: Alireza Khabbazi; Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran.
Tel: +98 914 3118916, E-mail: dr_khabbazi@yahoo.com

P1-15

Pentoxifylline In Rheumatoid Arthritis Treatment As An Adjuvant To Synthetic DMARDS And Glucocorticoids

Ali Afshari, Shafieh Movaseghi, Ali Khalvat, Seyed Reza Najafizadeh, Taraneh Dormohammadi

Department of Rheumatology, Tehran University of Medical Sciences, Tehran, Iran

Aim: Rheumatoid arthritis is a chronic inflammatory disease with relatively high prevalence and if uncontrolled can lead to high morbidity. Biological agents –especiallyanti-TNFs- have an important role in controlling disease activity in rheumatoid arthritis today, but in practice, high price makes many patients not able to use them. It seems especially in countries that biological agents are unavailable to many patients for different reasons, finding alternative drugs will be of high value. One of the drugs that can be raised in this regard is pentoxifylline that shows anti-TNF-alpha effects in vitro and vivo. This study evaluates the effect of adding pentoxifylline to the routine treatment of rheumatoid arthritis with synthetic DMARDs and glucocorticoids as an adjuvant therapy.

Methods: Pentoxifylline was added to treatment regimen of 16 patients with rheumatoid arthritis who had active disease despite receiving synthetic DMARDs and glucocorticoids and disease activity was compared before and after the addition of pentoxifylline.

Results: The patient and the physician global assessment of disease activity and the number of tender joints were significantly improved after receiving thepentoxifylline. Also, measures of disease activity - DAS28, SDAI and CDAI- significantly improved. Changes in swollen joints counts, ESR, CRP, hemoglobin and platelet count were not significant.

Conclusion: Pentoxifylline may have a role in controlling disease activity in rheumatoid arthritis.

Keywords: Rheumatoid arthritis; treatment; anti tumor necrosis factor; Pentoxifylline

Corresponding Author: Ali Afshari; EmamKhomeiny Hospital Complex, Vali Asr Hospital, Department of Rheumatology, Tehran University of Medical Sciences, Tehran, Iran.
Tel: +98 920 3629210, E-mail: ali.nader.afshari@gmail.com

P1-16

Alendronate The Prevent And Treat Osteoporosis In Patients With Autoimmune Disease

Nayyereh Saadati[1,2], Bahram Naghibzadeh[2]

1- Department of Internal Medicine, GhaemMedical Centre, Mashhad University of Medical Sciences, Mashhad, Iran 2- Rheumatic Diseases Research Centre (RDRC), Mashhad University of Medical Sciences, Mashhad, Iran

Aim: Prescription of glucocorticoids inpatients suffering from various rheumatic diseases may result in osteopenia, osteoporosis and eventually lead tofragility fractures.Measurement of bone mineral density (BMD) by dual-energy X-ray absorptiometry (DXA) is a reliable way to assess the risk of anticipating fracture in these patients. Bisphosphonates are considered as the most widely prescribed drugs to prevent and treat osteoporosis. The objective of this study was to evaluate the effect of alendronate on prevention and treatment of steroid-induced osteoporosisin rheumatic patients.

Methods: During a two-year period, in a prospective study, 130 patients with steroid-induced osteoporosis who suffered from various autoimmune diseaseswere randomly assigned into 2 groups. Group 1 (n=60) was treated with Calcium; 500 milligrams twice daily and VitaminD, while Group 2 (n=70) was treated with Calcium, VitaminD and Alendronate, 70 milligramsweekly. We followed these patients for two years, both clinicallyand by measuring the density of the spine and hip area with DXA.

Results: While BMD in the lumbar spine region decreased by 2.3% in group 1, it increased by 2.7% in group 2. BMD decreased by 2.6% in the femoral neck region of group 1, whilst it increased by 1.6% in group 2.

Conclusion: The prescription of alendronate, as well as vitamin D and calcium, was more effective in preventing bone loss due to steroid-induced osteoporosis with rheumatic patients than vitamin-D and calcium alone.

Keywords: Steroid-induced osteoporosis; Autoimmunedisease; Bisphosphonate; Alendronate

Corresponding Author: Nayyereh Saadati; Department of Internal Medicine, Ghaem Medical Centre, Mashhad University of Medical Sciences, Mashhad, Iran.
Tel: +98 915 5090408, E-mail: saadatin@mums.ac.ir

P1-17

The Necessity Of Recognition, Diagnosis And Treatment Of Chronic Active Subclinical Infections In Rheumatic Patients

Mohammadreza Sadeghian

Aim: Since 23 years ago I have gradually noticed there is close correlation between chronic active subclinical infections and disease activities in rheumatic patients who have been followed for sufficient periods of time. Because suppressing the infectious processes along with confronting other risk factors, remarkably and deeply improves their rheumatic manifestations, without any morbidities and mortalities. In recent years several observations in the field of cellular and molecular immunology are in accordance with my clinical findings which presented in this paper. To familiarize healthcare providers with the importance of chronic active subclinical infections and its pivotal role in etiopathogenesis of most common rheumatic conditions.

Methods: Thorough history taking, review of systems, physical examination, use of paraclinical facilities for each patient and intensive outpatient care.

Results: With this approach to rheumatic patients, in addition to the significant regression of the disease activities, patients are not exposed to the serious side effects of current therapy strategies.

Conclusion: There are atleast some subsets of rheumatic patients need not to be treated with steroid and immunosuppressive agents since in the presence of infections they may be exposed to disastrous consequences.

Corresponding Author: Mohammadreza Sadeghian; No.2, Shad Ave., Mollasadra St., Vanak Sq., Tehran, Iran.
Tel: +98 912 2027113, E-mail: dr.mrsadeghian@gmail.com

P-18

The Effect Of Oral Royal Jelly On Clinical Disease Activity Index And Morning Stiffness In Patients With Rheumatoid Arthritis: A Randomized Double-Blind, Placebo-Controlled Trial

Zahra Mobedi

Department of Internal Medicine, Shahrekord University of Medical Sciences, Shahrekord, Iran

Aim: Rheumatoid arthritis (RA) is a chronic inflammatory disease which can cause articular destruction and disability in patients. Current therapies are relatively effective and sometimes harmful. Royal Jelly with anti-inflammatory and anti-oxidative properties may be used as an adjunct therapy. The aim of this study was to assess the effect of Royal Jelly on Clinical Disease Activity Index (CDAI) and morning stiffness in patients with rheumatoid arthritis.

Methods: According to American College of Rheumatology (ACR) 1987 classification criteria, 80 patients with RA, who had active disease (CDAI>2.8), were randomly assigned to receive Royal Jelly or placebo beside background treatment for 3 months. Morning stiffness, tender joint count (TJC), swollen joint count (SJC), evaluator global assessment (EGA) and patient's global assessment (PGA) [based on visual analogue scale (VAS)] were determined before and after 3 months of intervention. The changes in aforementioned indexes were analyzed by SPSS software.

Results: 65 patients completed the study (35 in Royal Jelly and 30 in theplacebo group). The sex, age, residence, disease duration and drug consumption had no significant changes (P>0.050). In the first group, CDAI (P=0.012), SJC (P=0.024), TJC (P=0.027), and morning stiffness (P=0.004) had significant statistical changes; but only changes in morning stiffness were statistically different between the two groups (P<0.05).

Conclusion: Royal Jelly has good effect on morning stiffness but not on CDAI and may be a suitable adjunct therapy. Further studies may demonstrate more significant results.

Keywords: Inflammation; Morning Stiffness; Rheumatoid Arthritis; Treatment Efficacy

Corresponding Author: Zahra Mobedi; No.8, Shekoofe Ave, Saadatabad St., Azadi Sq. Esfahan, Iran.
Tel: +98 913 3003207, E-mail: z_mobedi@yahoo.com

P1-19

Evaluation Of Vasculitis–Related Systemic Lupus Erythematosus In Iranian Patients

Zhaleh Shariati-Sarabi[1], Kamila Hashemzadeh[1], Mohsen Ebrahimi [2], Mohammad Reza Ranjbar[2]

1- Rheumatic Disease Research Center (RDRC), School of Medicine, Mashhad University of Medical Sciences (MUMS), Mashhad, Iran 2- Department of Emergency Medicine, Mashhad University of Medical Sciences(MUMS), Mashhad, Iran

Aim: Systemic Lupus Erythematosus (SLE) is known as heterogeneous autoimmune chronic disease characterized by a waxing and waning clinical course. Lupus patients may suffer from various complications of all organs. Vasculitis is one of the most common and potentially serious manifestations of this disease with diverse clinical manifestations. In this study, we evaluated correlation between Systemic Lupus Erythematosus various presentations specifically vasculitis, with Systemic Lupus Erythematosus Damage Index (SLEDAI) and Systemic Lupus International Collaborating Clinics/ American College of Rheumatology Damage Index (SDI).

Methods: Sixty-five Patients with Systemic Lupus Erythematosus according to 1997 ACR revised criteria that had been referred to Mashhad Imam Reza hospital were analyzed in an inception cohort study during 2012-2013.The Systemic Lupus Erythematosus Disease Activity Index (SLEDAI) and Systemic Lupus International Collaborating Clinics/American College of Rheumatology Damage Index (SDI) and laboratory data were obtained within 10 days after admission.

Results: Sixty women (92.3%) and five men (7.7%) were studied. Eleven (16.9%) patients suffered from vasculitis. Ten of them were women. According to our results, complications such as neuropsychiatric damage, peripheral vascular damage, skin damage, renal damage, seizure and rash were considerably more common in patients with vasculitis comparing to those without vasculitis. Data analysis also showed a close relation between SLEDAI and SDI scores with vasculitis. (P=0.008) and (P=0.017) respectively.

Conclusion: We found a close correlation between disease activity, as measured with SLEDAI scoring system, and cumulative damage, as measured with SDI scores with vasculitis. In other words, those SLE patients with high SLEDAI and SDI scores are more prone to vasculitis and consequently psychiatric disorders, brain diseases, cardiovascular problems, visual disturbances may appear afterwards.

Keywords: Systemic Lupus Erythematosus; Vasculitis; SLEDAI; SDI

Corresponding Author: Zhaleh Shariati-Sarabi; Rheumatic Diseases Research Center, Mashhad University of Medical Sciences, Mashhad, Iran.
Tel: +98 915 1101664, E-mail: jshariati@yahoo.com

P1-20

Detection Of Synovial Fluid Anti-Ccp Antibody Is Helpful In Diagnosis Of Rheumatoid Arthritis, Particularly In Early And Monoarticular Cases

Massoud Saghafi, Kamila Hashemzadeh, Maryam Sahebari

Rheumatic Diseases Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

Aim: Anti-cyclic citrullinated peptide (anti-CCP) antibodies directed against citrulline-containing proteins, are of importance for the diagnosis and severity of rheumatoid arthritis (RA). These autoantibodies that are specific for RA are produced locally from inflamed synovium. Early and accurate diagnosis and treatment of RA by use of these autoantibodies improves disease outcome. In this study, we aimed to investigatethe levels of anti-CCP in synovial fluid and serum of patients with early (duration of disease equal or less than 2 years) and late (more than 2 years) RAto assess the diagnostic performance of synovial fluid anti-CCP in RA.

Methods: A total of 45 patients consisting of 36 women and 9 men (age between18 and 70 years) with rheumatoid arthritis according to the ACR criteria were enrolled the study. 26 patients had late RA, and 19 patients had early RA. Questionnaire that included history, physical examination, disease duration, disease activity according to DAS28, medications during the past three months, extra-articular manifestations, number of tender and swollen joints for measuring disease activity, laboratory studies (CBC, CRP, ESR, anti- CCP and RF levels in serum and synovial fluid) were collected. Three mililiter of joint fluid and 3 cc of serum of patients was centrifuged and stored in – 20^{oC}. The levels of serum and synovial fluid anti CCP were measured by Euroimmune® ELISA device. The results were analyzed by SPSS software, and *P*-value ≤ 0.05 was considered significant.

Results: In this study, the mean age, mean disease duration, mean DAS28, mean ESR and mean of VAS were 43.6 ± 13.73, 69.05 ± 77.94 months, 6.03 ± 1.32, 43.11 ± 27.53 and 57.81 ± 24.66 respectively. Levels of serum and synovial fluid anti-CCP and RF were significantly increased in patients with rheumatoid arthritis. The mean levels of serum and synovial fluid anti- CCP were 89.49 ± 97.08 and 100.21 ± 103.86 respectively. The mean serum and synovial fluid levels of RF were 133.2 ± 101.21 and 128.4 ± 98.68 respectively.

The mean levels of serum and synovial fluid anti- CCP in patients with early RA were 103.73 ± 104.92 and 100.54 ± 105.48, respectively and in patients with late RA were 81.27 ± 93.40 and 99.98 ± 104.76, respectively. There is no statistical difference between serum and synovial fluid anti-CCP levels in early and late RA. After performing correlation tests, there was a significant correlation between serum and synovial fluid anti-CCP levels (*P*=0.001). Also, a significant correlation was found between serum RF and anti-CCP levels (*P*=0.04), between the levels of RF in synovial fluid and serum and the level of anti-CCP in synovial fluid levels (*P*=0.02, *P*=0.02, respectively). This correlation was also found between the number of tender joint and synovial fluid anti-CCP level (*P*=0.03). There was also a significant correlation between serum RF and disease duration and disease activity (*P*=0.01, *P*=0.03, respectively).

Conclusion: These findings indicate that anti-CCP in synovial fluid has a diagnostic ability as serum anti-CCP for RA. Since there was a significant correlation between serum and synovial fluid anti-CCP and with respecting to local production of synovial fluid anti-CCP prior to disease onset, its determination in synovial fluid may offer earlier as well as additional diagnostic information as a specific marker for RA. It can be more helpful particularly in the diagnosis of recent onset arthritis and monoarticular cases of RA.

Keywords: Rheumatoid arthritis; Synovial fluid; Anti cyclic citrullinated peptide; Rheumatoid factor

Corresponding Author: Kamila Hashemzadeh; Rheumatic Diseases Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
Tel: +989155162667, E-mail: k.hashemzadeh@yahoo.com

P1-21

The Assessment Of Health-Related Quality Of Life In Scleroderma-Interstitial Lung Disease

Seyedeh Zahra Mirfaeizi[1], Shahrzad M Lari[2], Zhaleh Shariati[1], Davood Attaran[2], Maryam Salehi[3], Maryam Rezazadeh[4]

1- Rheumatologist, Rheumatic Diseases Research Center, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran 2- Pulmonologist, Cardio-Thoracic Surgery & Transplant Research Center, Emam Reza Hospital, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran 3- Community Medicine Specialist, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran 4- COPD Research Center, Ghaem Hospital, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

Aim: Pulmonary involvement is the most common cause of mortality and disability in patients with systemic sclerosis and it significantly affects the quality of life in these patients. Therefore, early diagnosis and treatment of pulmonary involvement seems necessary in patients with SSc. In this study, we aimed to assess the health-related quality of life (HRQoL) in patients with Scleroderma-Interstitial Lung Disease (SSc-ILD) and its relationship with pulmonary function parameters.

Methods: Considering the inclusion and exclusion criteria, 25 patients with SSc-ILD were enrolled in this cross-sectional study from April 2012 to June 2013. Full tests of lung function, including body plethysmography and diffusing capacity of the lungs for carbon monoxide (DLCO), 6-minute walk distance (6MWD), and pulse oximetry were performed. The HRQoL was assessed using St. George's and CAT questionnaires; also, dyspnea was evaluated for all the patients, using modified medical research council (MMRC) scale. Afterwards, the relationship between the total scores of HRQoL questionnaires and the severity of lung disease was analyzed, based on the recorded variables.

Results: The mean age of the patients was 40.36±9.50 years and the mean duration of the disease was 7.16±4.50 years. A statistically significant inverse correlation was observed between 6MWD (r=-0.50, P=0.01), DLCO (r=-0.67, P<0.001), and CAT total score. In addition, there was a statistically significant negative association between CAT score and total lung capacity (r=-0.46, P=0.01). Finally, a significant direct relationship was observed between the total scores of CAT and St. George's questionnaires (r=0.75, P<0.001).

Conclusion: The results of this study showed that CAT questionnaire is a suitable tool for assessing the quality of life in SSc patients; moreover, it is significantly related to the factors associated with pulmonary function. Therefore, the CAT questionnaire may be used to track pulmonary function in SSc patients.

Keywords: Health-related; quality of life; interstitial lung disease; Scleroderma

Corresponding Author: Seyedeh Zahra Mirfaeizi; Internal Medicine Department. Emamereza Hospital, Mashhad, Iran. Tel: +98 915 1562868, E-mail: mirfeiziz@mums.ac.ir

P2-1

Association Of The Angiotensin Converting Enzyme Gene And The AngiotensinII Receptor TypeI Gene Genotyping With Systemic Lupus Erythmatusus Patients In Western Iran Population

Hossein Baniamerian, Asad Vaisi-Raygani, Fariborz Bahremand

Department of Biochemistry, School of Medicine, Kermanshah University of Medical Sciences, Kermanshah, Iran

Aim: It has been reported that some single nucleotide polymorphisms (SNPs) of the angiotensin converting enzyme (ACE) gene and the angiotensin type 1 receptor (AGTR1) gene are associated with some events of systemic lupus erythematosus (SLE) disease including the development and its progression. The aim of this study was to evaluate the possible association between two SNPs (insertion/deletion of the ACE gene and A-1166C of the AGTR1 gene) with some parameters including serum level of lipids as cardiovascular disease (CVD) markers and neopterin (Neo) as cellular immunity marker and malondialdehyde (MDA) as oxidative stress marker with SLE disease in western Iran population.

Methods: In this study, 107 patients with SLE were compared to 110 healthy controls, matched by gender, age and ethnicity. Following the extraction of genomic DNA from the peripheral blood leukocytes, the genotypes of the two selected SNPs were determined by the method of PCR-RFLP. The associations between the SNPs and the risk of SLE were analyzed by using Chi-square test and Logistic regression with SPSS16.0 software.

Results: Our study indicated that there is no association between the risk of SLE and the sequence variations of both the ACE gene and the AGTR1 gene, although in lipid profile. The serum triglyceride (TG) level in SLE patients was higher than healthy control (225 ± 118 vs 139 ± 56, *P*=0.03), which may play as a risk factor in SLE and CVD development. The level of two other biomarkers, neopterin (24 ± 30 vs 6.4 ± 2, *P*=0.03) and malondialdehyde (25 ± 9.6 vs 9.6 ± 2.5, *P*=0.01) in SLE patients were higher than these in the control group.

Comparing SLE patients and healthy controls who had at least one D allele (mutant form, ACE: DD or ID), indicated the serum level of total cholesterol in SLE patients was higher than that in controls (158 ± 58 vs 116 ± 34, *P*=0.0001), and HDL-cholesterol serum level in patients with the same genotype was lower than that in controls(44 ± 11.6 vs 41 ± 19.5, *P*=0.04).

Comparing individuals with ACEII genotype (wild-type) and the carriers with at least one D allele indicated the latter group had a higher risk for SLE. We found that the susceptibility toSLE disease in an individual with wild type genotype is twofold lower than individual with mutant genotype (OR=0.642, 95%CI=0.306-1.347, *P*=0.241).

Comparingindividuals with AA genotype(wild-type) of AGTR1 gene and the carriers with at least one C allele a (mutant form), the level of serum TG was lower in the presence of wild genotype (P=0.02), so this may suggest that patients with C allele are at higher risk of developing SLEdisease. Also the comparison all patients and controls which had mutant C allele (AC or CC genotype) versus individuals with wild-type alleles (AA genotype), the concentration of neopterin and malondialdehyde (MDA) was higher, and differences were significant(*P*=0.02).

Conclusion: Statistically no significant differences of the allele and genotype frequency distribution of two SNPs (ACE: I/D Alu and AGTR1: A-1166-C) between cases and controls was observed, although the level of triglyceride (TG) in SLE patients was higher than healthy controls, this may suggest that patients with C allele are at high risk of developing SLE disease. The level of two other biomarkers of neopterin andmalondialdehyde in SLE patients were higher than the control group.Therefore, determination this markers can augury to immunity system disorders in SLE patients.These results might be useful in diagnostic and planning therapeutic strategies for SLE patients. So as conclusion individuals with ACEI/D and AGTR1: A-1166-C SNPs are more susceptible for SLE diseasecomplications.

Keywords: Single nucleotide polymorphisms; Angiotensin converting enzyme; Angiotensin type 1 receptor-genotyping

Corresponding Author: Hossein Baniamerian; Department of Biochemistry, School of Medicine, Kermanshah University of Medical Sciences, Kermanshah, Iran.
Tel: +98 9183595894, E-mail: hosseinbani@gmail.com

P2-2

The Effect Of Omega-3 Fatty Acids In Patients With Active Rheumatoid Arthritis Receiving DMARDS Therapy: Double-Blind Randomized Controlled Trial

Elham Rajaei[1], Mohammad Bahadoram[2], Karim Mowla[1], Sara Bahadoram[2]

1- Department of Rheumatology, School of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran 2- Medical Student Research Committee, School of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

Aim: This study was designed to investigate the therapeutic effects of Omega-3 fatty acids on improving the clinical and laboratory manifestations in newly diagnosed patients with rheumatoid arthritis receiving standard DMARDs as treatment.

Methods: this study was performed during a 12-week period on 60 patients (49 females and 11 males) who had active rheumatoid arthritis based on (ACR) criteria. Eligible patients were selected randomly after selections made on the basis of age, sex, medication, and disease duration. Throughout the study, the standard treatment of rheumatoid arthritis in both groups continued. Patients took two capsules of Omega-3 daily that included 1.8 g of EPA and 1.2 g of DHA. Subsequently patients evaluated every four weeks for 3 months in terms of laboratory findings and clinical symptoms using a visual analogue scale (VAS). Patients' activity classification was made according to ACR criteria and disease activity score index (DAS-28).

Results: the placebo group consisted of 24 females and 6 males and Omega-3 group, 25 females and 5 males. At the end of the study, the mean morning stiffness duration in Omega-3 group was reduced from 128 min to 40 min, the average number of painful joints from 21 to 5, and the number of swollen joints from 10 to 3, the mean ESR from 39 to 16, and both patient and physicians' overall assessment showed a dramatic reduction in pain intensity. Comparison of weight changes in Omega-3 group at the beginning and end of the study showed no significant differences. The need for analgesics in Omega-3 group was reduced from 25 patients at the beginning of the study to 7 patients at the end of the study, and 18 subjects (72%) of Omega-3 patients had reduced consumption of analgesics. of these 18 subjects, 8 patients (32%) stopped analgesic use completely, and 10 patients (40%) used lower doses of analgesics.

Conclusion: according to the study results, it seems that early consumption of Omega-3 supplement simultaneous with DMARDS medication in newly diagnosed rheumatoid arthritis patients may be effective in reducing symptoms, as well as, reducing the need for concomitant use of analgesics.

Keywords: Rheumatoid Arthritis, Omega-3 Fatty Acids, Disease Activity Score, DMARDs, Analgesic

Corresponding Author: Mohammad Bahadoram; Department of Rheumatology, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.
Tel: +98 938 0115943, E-mail: mohammadbahadoram@yahoo.com

P2-3

Prevalence Of Human Papilloma Virus Infections And Cervical Cytological Abnormalities Among South Iranian Women With Systemic Lupus Erythematosus

Saeedeh Shenavandeh[1], Bahareh Hamedi[2], Poopak Mohaghegh[1], Akbar Safaei [3], Mohammadali Nazarinia[1], Elaham Aflaki[1], Zahra Habibagahi[1]

1- Department of Internal Medicine, Division of Rheumatology, Shiraz University of Medical Sciences, Shiraz, Iran 2- Department of Gynecology, Shiraz University of Medical Sciences, Shiraz, Iran 3- Department of Pathology, Shiraz University of Medical Sciences, Shiraz, Iran

Aim: Systemic lupus erythematosus (SLE) is a disease caused by an aberrant autoimmune response. The prevalence of human papillomavirus (HPV) infection was shown to increase in patients with autoimmune diseases. Therefore, SLE should be regarded as a risk factor for cervical malignancy and high-risk HPV infection.

However, there is a scarcity of data about the prevalence of high-risk HPV infection and cervical cytological abnormalities in patients with lupus with different ethnicity and regions. In order to define strategies for cancer prevention and future vaccination, each country needs to know the prevalence rate of HPV.

A series of prevalence surveys of HPV infection was prepared by the International Agency for Research on Cancer (IARC). Unfortunately, Iran was not listed among the seven Asian countries.

Therefore in this study we decided to determine the prevalence of HPV infections and cervical cytological abnormalities among south Iranian women with SLE.

Methods: Fifty Patients with SLE from SLE clinic in Hafez Hospital, Shiraz University of Medical Sciences (completing the ACR criteria for SLE disease) were selected by convenient and sequential method. Fifty healthy control women from healthy married candidates in the Shiraz city referring to Gynecology clinic were selected as a control group too. Both groups (matched for age) were examined and sampled. Routine Pap smears were obtained, and the endocervical side of the spatula was swirled in 1 ml of sterile phosphate buffered saline for analysis of DNA of HPV. Frozen samples processing was done for polymerase chain reaction for HPV.

Results: SLE patients and controls were all ethnically Iranian. There was no significant deference between patients and controls. HPV infection was detected in 4% (2/50) of lupus patients but was not seen in the controlgroup. Typing of HPV showed type 16 and 18 in these two patients. One of them had received cyclophosphamide, in her disease course, but another was not on immunosuppressive drugs. Therefore, there was no relation between HPV infection and immunosuppressive medication in our study.

Compared with the control group there was no statistically significant difference between patients and control group in HPV prevalence (P=0.495).

Conclusion: Result of this study shows that, SLE is not as a risk factor for HPV infection in our area.

Keywords: SLE; HPV

Corresponding Author: Poopak Mohaghegh; Department of Internal Medicine, Division of Rheumatology, Shiraz University of Medical Sciences, Shiraz, Iran.
Tel: +98 917 3037442, E-mail: mohaghp@yahoo.com

P2-4

Treatment Compliance In Patients With Behcet's Disease

Farid Karkon Shayan, Alireza Khabbazi, Hadise Kavandi

Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

Aims: Behcet's disease (BD) is a chronic, inflammatory disease with multisystem involvement. Although drug compliance is an essential component of treatment effectiveness in chronic diseases, it has never been investigated in patients with BD. The purpose of this study was to determine the treatment compliance rate in patients with BD and to identify risk factors for noncompliance in these patients.

Methods: In a cross-sectional study, all patients with BD, who visited in the connective tissue diseases research center in Tabriz University of Medical Sciences were included. BD was diagnosed according the International criteria of Behcet's disease (ICBD). A compliance questionnaire was used to determine patient compliance. The relationships between compliance rate and demographic and clinical characteristics, educational state, income, cost of treatment, number of medications and type of medications were examined.

Result: A total of 67 patients (41 men and 26 women) were included. Forty percent of patients had not any delay for regular visits, and 23.9% had less than 20% delay. But, 17.9% of patients had 20-50% and 17.9% had more than 50% delays for regular visiting. Forty-three percent of patients used the medication with the correct dose and on time. But, 23.9% of patients did not use the medication on time, 6% did not use the medication with the correct dose, 14.9% forget the use of some doses and 6% did not use the drug because of ineffectiveness. Side effects of treatment and high cost of treatment were the most frequent cause of incompliance. No relationships were found between various demographic, educational and clinical characteristics of patients and compliance rate. In patients with higher age and shorter disease duration incompliance was significantly more common. Patients who were satisfied with treatment results significantly had better compliance. Incompliance in patients who were on methotrexate and interferon significantly was more common than patients who did not receive.

Conclusion: Many noncompliant patients were identified, but except unawareness about potential complications of the disease no common risk factors for noncompliance were discovered.

Keywords: Behcet's disease; compliance; treatment; drug

Corresponding Author: Farid Karkon Shayan; Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran.
Tel: +98 914 2195428, E-mail: faridkarkonshayan@yahoo.com

P2-5

Clinical Manifestations Of Systemic Lupus Erythematosus In Children

Farid Karkon Shayan, Sousan Kolahi, Alireza Khabbazi, Hadise Kavandi

Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

Aim: Systemic lupus erythematosus (SLE) is a chronic inflammatory disease with unknown etiology. Clinical manifestations of SLE are extremely variable so this disease can involve any organ and may lead to significant morbidity and even mortality. Clinical picture of childhood SLE is different with adult. The purpose of this study was to evaluate the clinical manifestations of childhood SLE in the rheumatology clinic of Tabriz University of Medical Sciences.

Methods: In a cross-sectional study, 20 children with SLE, who were visited in the connective tissue diseases research center in Tabriz University of Medical Sciences during 2012 and 2013 were included. Children ages were 2 to 18 years. SLE was diagnosed according expert opinion.

Results: Mean age of the patients was 11.65. Male to female ratio was 1: 4. The most common clinical feature of SLE was arthritis (45%). Other frequent clinical manifestations were hemolytic anemia (40%), leukopenia (35%), thrombocytopenia (30%), fever (25%), nephritis (20%), malar rash (10%), discoid rash (10%), hematological disorder (10%), photosensitivity (5%) and oral ulcer (5%). Laboratory abnormalities at presentation of SLE were antinuclear antibodies (85%), high erythrocyte sedimentation rate (60%), high C-reactive protein (60%), anti-streptolysin O (55%), rheumatoid factor (40%), anti-double-stranded DNA (20%) and anti-cardiolipin antibodies (5%). There were some differences between the clinical and laboratory features of SLE in this study compare to other studies.

Conclusion: Clinical manifestations of SLE in children are diverse, musculoskeletal involvement, hematological involvement and cutaneous rash and nephritis are the most common.

Keywords: systemic lupus erythematosus; autoimmune disease; clinical manifestations; clinical presentation

Corresponding Author: Farid Karkon Shayan; Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran.
Tel: +98 914 2195428, E-mail: faridkarkonshayan@yahoo.com

P2-6

The Evalution Of Pentoxifylline Efficacy On Chronic Disease Anemia Induced By Systemic Lupus Erytheromatous

Zahra Zakeri[1], Seyed Mehdi Hashemi[2], Mahnaz Sandoughi[3]

1- Department of Internal Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran, 2- Department of Internal Medicine, Hematology Division, Zahedan University of Medical Sciences, Zahedan, Iran 3- Department of Internal Medicine, Rheumatology Division, Zahedan University of Medical Sciences, Zahedan, Iran

Aim: Systemic lupus erythematous is an autoimmune disease. This study aimed to evaluation of pentoxifylline efficacy on chronic disease anemia induced by rheumatoid arthritis.

Methods: This Clinical trial study was performed on 70 patients with systemic lupus erythematous and anemia in Zahedan in 1391 year. The sampling was randomized permutation of the blocks in the two groups of patients. The case group receiving pentoxifylline and hemoglobin levels, iron profile and TNFα was compared between the two groups after 4 months. Data were analyzed using *t*-test.

Results: The mean patient age was 28.9 ± 5.6 years. Hemoglobin levels increase in case group 0.2 mg/dl and in control group 0.26 mg/dl. (P=0.745) Changes of serum ferritin, serum iron and SI/TIBC in the pentoxifylline group were -3.6 ± 58.4 µg/dl, 1.6 ± 28.8 µg/dl and 0.02 ± 0.1 and in the placebo group were 2.0 ± 59.1 µg/dl, 0.6 ± 28.5 µg/dl and 0.01 ± 0.1, respectively. (P>0.05) levels of TNFα changes in the pentoxifylline group -1.5 ± 8.8 pg/dl and placebo group 0.2 ± 4.0 pg/dl, which didn't show a statistically significant difference. (P=0.343)

Conclusions: The results of this study suggest that anemia in patients with systemic lupus erythematous receiving the pentoxifylline has no effect on hemoglobin and iron profiles of these patients.

Keywords: Pentoxifylline; Chronic disease anemia; Efficacy

Corresponding Author: Zahra Zakeri; Labbafi Nejad Hospital, 9th Boustan Ave., Pasdaran St., Tehran, Iran.
Tel: +98 915 1410570, E-mail: zah_zakeri@yahoo.com

P2-7

His447 His Polymorphism Of PPARγ Gene And Risk Of Osteoporosis In Postmenopausal Women

Mehdi sahmani[1], Leila Azizi Jadidoleslami[2], Amir Javadi[3], Mahnaz Abbasi[2]

1- Department of Clinical Biochemistry and Genetic, Cellular and Molecular Research Center, School of Medicine Qazvin University of Medical Sciences, Qazvin, Iran, 2- Department of Internal Medicine, Qazvin University of Medical Sciences, Qazvin, Iran, 3- School of Allied Medical Sciences, Tehran University of Medical Sciences, Tehran, Iran

Aim: Genetic factors have an important role in the incidence of osteoporosis in postmenopausal women. The purpose of this study was to investigate the effect of the His 447 His polymorphism of PPARγ gene on BMD and subsequently the rate of osteoporosis in postmenopausal women.

Methods: Blood samples were obtained from 224 postmenopausal women who referred to the Buali hospital, Qazvin, Iran, between January 2011 and February 2013. One hundred and seven of these women had osteoporosis (osteoporosis group) with a mean age of (61.03 ± 4.54 years) whereas 117 postmenopausal women were healthy (control group) with a mean age of (55.7 ± 2.08 years). Samples were analyzed for polymorphism of the PPARγ gene using restriction fragment length polymorphism (RFLP) polymerase chain reaction—based methods. Multivariate analysis was used to investigate the relationship between the risk of osteoporosis and the PPARγ gene polymorphism.

Results: Correlation analysis showed that there is no significant association between with homozygous wild-type genotype and susceptibility to osteoporosis (P=0.60). Logistic regression analysis showed that the risk of osteoporosis was not significantly (P=0.99) higher in homozygous wild-type genotype than carriers of the rare alleles. Furthermore, the associations were not strengthened in homozygous wild-type genotype after adjustment for HDL-C and LDL-C and BMI (P=0.99).

Conclusion: The present study suggests that His 447 His polymorphism of PPARγ gene has no significant association with the risk of osteoporosis in postmenopausal women.

Keywords: Bone mineral density; His 447 His; Proliferator-activated receptor-gamma (PPARγ); postmenopausal women; osteoporosis

Corresponding Author: Mahnaz Abbasi; Qazvin University of Medical Sciences, Bahonar Blv., Qazvin, Iran.
Tel: +98 912 1821084, E-mail: dr.mabbasi@yahoo.com

P2-8

Association Between The Serum Levels Of Zinc, Copper And Lipid Profile With Osteoporosis In Iranian Postmenopausal Women

Mehdi Sahmani[1], Shideh Omidian[2], Amir Javadi[2], Majid Sirati Sabet[1], Mahnaz Abbasi[2]

1- Department of Clinical Biochemistry, Cellular and Molecular Research Center, Qazvin University of Medical Sciences, Qazvin, Iran, 2- Department of Internal Medicine, Metabolic Diseases Research Center, Qazvin University of Medical Sciences, Qazvin, Iran

Aim: Trace elements and lipids have an important role in the development of osteoporosis that is a major health problem among postmenopausal women. The purpose of this study was to compare the serum levels of zinc (Zn), copper (Cu) and lipid profile between the postmenopausal women suffering from osteoporosis and the healthy controls. Furthermore, we aimed to determine whether there is an association between the parameters mentioned above and bone mineral density (BMD).

Methods: The study was conducted on 116 postmenopausal women; 58 with osteoporosis(age 60.6 ± 3.9 years) and 58 healthy controls(age 55.4 ± 1.7 years). The serum levels of Zn and Cu were measured by atomic absorption spectrophotometry and BMD was analyzed using DEXA scan.

Results: The serum levels of Zn and Cu were similar in both groups ($P > 0.05$).Serum levels of low density lipoprotein (LDL) and total cholesterol (TC) in osteoporosis group was statistically significant as compared to the controls ($P < 0.05$).Correlation analysis showed that there was a significant association between body mass index (BMI) and BMD values ($P < 0.05$). There was no correlation between serum Zn, Cu levels with lipid profile ($P > 0.05$). A negative significant correlation was, however, found between BMD with LDL ($r = -0.31$, $P = 0.001$) and total cholesterol levels ($r = -0.26$, $P = 0.006$).

Conclusions: This study suggested that dyslipidemia might be an independent risk factor of osteoporosis in Iranian postmenopausal women. Moreover, the trace elements did not directly and correlatively influence BMD.

Keywords: Osteoporosis; Postmenopause; Bone Density; Lipids; Zinc; Copper

Corresponding Author: Mahnaz Abbasi; Qazvin University of Medical Sciences, Bahonar Blv., Qazvin, Iran.
Tel: +98 912 1821084, E-mail: dr.mabbasi@yahoo.com

P2-9

Skin Reaction To Capsaicin In Rheumatoid Arthritis (RA) Patients Compared With Healthy Controls

Maryam Sahebari, Danial Zirachi, Houshang Rafatpanah, Zahra Rezaieyazdi

Rheumatic Diseases Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

Aim: Rheumatoid arthritis (RA) is the most prevalent autoimmune arthritis with symmetric involvement of small joints. The role of efferent sensory nerves in symmetrical joint inflammation and interaction of neural mediators in the autoimmunity and inflammation has been investigated in advance. It is proposed that transient receptor potential vanilloid 1 (TRPV1), a nonselective cation channel that is predominantly expressed by nociceptive neurons, exhibit a critical role in the neurogenic pathways of inflammation. The inflammatory action of TRPV1 is diagnosed after discovering that receptor in different cells all over the body, like synovial fibroblasts. Electrophysiological studies have revealed that capsaicin (the hot spicy component of chili peppers) sensitizes joint afferents via TRPV1 receptors. Capsaicin sensitive sensory nerve fibers also innervate joint capsules. In this study, we proposed that skin reaction to inspissated capsaicin solution in RA patients reflects the activity of TRPV1 related neurons compared with healthy controls.

Methods: In this study, 80 RA patients (according to ACR 1998 criteria) and 20 healthy volunteers were enrolled. Participants with hypersensitivity to red pepper, history of treatment with analgesic or sedative medications, diabetes, and neuropathy were excluded. All patients were treated with hydroxychloroquine, some of them by methotrexate or prednisolone or combination therapy. Capsaicin solution of 0.075% was prepared by capsaicin powder recruited from Sigma-Aldrich Company. For each participant, a 1x1cm2 blotting paper imbrued by 0.1 ml of the solution was putted on the volar forearm and covered by a plastic band to prevent evaporation during the skin test. Skin reaction to capsaicin, including time to start tingling (TST), redness area (cm2) and induration area (cm2) after 20 minutes were measured. Those reactions were compared between two mentioned groups.

Results: Seventy patients and fifteen controls were female (P=0.16). Mean age of patients and controls was 42.95 ± 14.79 and 43.9 ± 14.7 years respectively. It was a significant difference in the TST [patients: 9.54 ±8 vs controls: 6.65 ± 5 min, P=0.024, z=2.2]. The redness area was not different between two groups [patients: 20.28±14.3 vs controls: 24.9±21.7cm2, P=0.1, z=1.5]. The induration area was not different between aforementioned groups [patients: P=3.9, z=2.1 vs controls: 2.57±1cm2, P= 0.6, z=0.4]. It was a significant negative correlation between ESR and redness area (P=0.005, rp= -0.3), ESR and induration area (P=0.02, rp=-0.2). Among capsaicin response variables only TST positively correlates with prednisolone mg/d (P<0.001, rp= 0.5) and methotrexate mg/w dosage (P<0.001, rp=0.38). Disease duration positively correlated with TST (P=0.005, rp=2).

Conclusion: The time to start tingling by capsaicin solution was shorter in controls compared with patients. Other reactions were not different between groups. ESR and reaction areas were negatively correlated. Newly diagnosed patients responded later to capsaicin solution. The study suggested that skin reaction to capsaicin is not a good indicator of synovial inflammation; in addition, aforementioned drugs in the treatment regimen may affect those reactions. Moreover, healthy controls showed faster skin reaction to capsaicin. It may be hypothesized that, skin TRPV1 receptors work differently with joint ones in RA.

Keywords: Skin; Capsaicin; Rheumatoid Arteritis

Corresponding Author: Maryam Sahebari; Rheumatic Diseases Research Center, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.
Tel: +989155103124, E-mail: sahebarim@mums.ac.ir

P2-10

Anti-Inflammatory Activity Of Citrus Aurantium Essential Oil (Neroli) In Experimental Models Of Acute And Chronic Inflammation

Pariya Khodabakhsh, Hamed Shafaroodi, Jinous Asgarpanah

Department of Pharmacology and Toxicology, Pharmaceutical Sciences Research Center, Islamic Azad University, Tehran, Iran,

Aim: Several studies have shown that linalool, as a major component of the essential oils of several aromatic plant species, has analgesic and inflammatory effects. In the present study, the possible acute and chronic anti-inflammatory effects of essential oil of *Citrus aurantium* flowers (Neroli) have been investigated.

Methods: Fresh flowers of *Citrus aurantium L.* were collected from Sari suburb, Mazandaran province, North of Iran. The fresh flowers (2 kg) were submitted to hydrodistillation in a Clevenger-type apparatus. At the end of distillation, the oil (Neroli) was collected, dried and transferred to a clean glass vial and kept at a temperature of -18°C for further biological tests. Identification of the oil constituents was performed by GC/MS analysis. Acute inflammation was produced by injecting 0.1 ml of 2% carrageenan suspension in normal saline into the subplantar region of right hind paw. One hour prior to carrageenan injection, groups of five rats each were treated with Neroli at 5, 10, 20, 40 or 80 mg/kg and diclofenac sodium at 50 mg/kg. The control group received the vehicle alone (sweet almond oil). The paw volume was measure by using a plethysmometer at 0.5, 1, 2, 3, 4 and 5 h after carrageenan administration, and the percentage of edema inhibition was determined. Chronic inflammation was produced in male Wistar rats (180–200 g) by cotton pellett induced granuloma tissue model. Three groups of rats (n=6) were used. Sterile cotton (50 ±1 mg) soaked in 0.4 ml of 5% ampicillin solution was implanted subcutaneously bilaterally in scapular region under anesthesia. The following was administered daily: sweet almond oil (as vehicle; i.p.), indomethacin (5 mg/kg, *i.p.*) and Neroli (40mg/kg, *i.p.*). On the 8th day, the animals were sacrificed. The granulomatous tissue with cotton pellet was removed and freed from extraneous tissues. The pellets were weighed immediately for wet weight. Then, pellets were dried at 60°C for 24 hours. The exudates amount (weight of exudates in mg) was calculated by subtracting the constant dry weight of pellets from the immediate wet weight of pellets. The granulation tissue formation (dry weight of granuloma) was calculated after deducting the weight of cotton pellet from the dry weight of pellet.

Results: The essential oil significantly reduced carrageenan-induced paw edema in rats. The inhibitory activity of different doses (20, 40, 80 mg/kg) is very close to standard diclofenac sodium (50 mg/kg). In cotton pellet induced granuloma, Neroli was found to be effective at exudatory and granulatory phases of inflammation. Indomethacin (5 mg/kg) and Neroli (40 mg/kg) was found to inhibit granuloma wet weight by 13.91 and 13.37% respectively. Indomethacin at 5 mg/kg was found to inhibit granuloma formation by 18.01% while Neroli at 40 mg/kg inhibition was found to be 17.27%.

Conclusion: In this study, Neroli showed anti-inflammatory activity against acute and especially chronic inflammation. The essential oil of Citrus aurantium flowers could be considered as promising anti-inflammatory agents against diseases such as rheumatoid arthritis.

Keywords: chronic inflammation; acute inflammation; Citrus Aurantium Essential Oil; Neroli

Corresponding Author: Pariya Khodabakhsh; Department of Pharmacology and Toxicology, Pharmaceutical Sciences Research Center, Islamic Azad University, Tehran, Iran.
Tel: +98 921 3618026 E-mail: khodabakhsh.pariya@gmail.com

P2-11

Association Study Of *MTHFR* Gene Single Nucleotide Polymorphisms (rs1801133) And Risk Of Rheumatoid Arthritis In Khouzestan Province

Mehdi Shahvalikoohshori[1], Seyed Reza Kazemi Nezhad,[1] Elham Rajaei[2], Mohammad Reza Akhoond[3]

1- Department of Genetics, School of Sciences, Shahid Chamran University of Ahvaz, Ahvaz, Iran 2- Department of Internal Medicine (Division of Rheumatology), School of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran 3- Department of Statistics, School of Mathematical Sciences and computer, Shahid Chamran University of Ahvaz, Ahvaz, Iran

Aim: Rheumatoid arthritis (RA) is an autoimmune disease in which the body's immune system mistakenly attacks the membranes that line the body's joints. The result is inflammation and pain in the joints. RA is a chronic disease that can cause periods of intense activity called flare-ups. Some people experience periods of remission in which symptoms go away. RA affects between 0.5 to 1% of adults in the developed world and between 5 to 50 per 100,000 people newly developing the condition each year. Abnormal folate metabolism and common variants of folate metabolizing enzymes have been described as possible risk factors for RA. *MTHFR* polymorphism may be associated with RA susceptibility. In this study, the functional single nucleotide polymorphism (SNP) of *MTHFR* gene (C677T) was investigated in Khouzestan province, Iran.

Methods: The study included 240 persons (patients with RA and healthy controls). Genomic DNA was isolated and genotyped by PCR-RFLP assay for the *MTHFR* gene C677T polymorphisms. Polymorphic region was amplified using PCR and digested with *HinfI* enzyme.

Results: Our data included 240 included cases (120 RA patients and 120 controls) suggested that the distributions of alleles and genotypes were statistically different between RA patients and healthy controls. CC SNP indicated approximately equal distribution in patients and controls. But the CT & TT SNPs indicated more prevalence in patients.

Conclusion: In this study, we examined the prevalence of the C677T polymorphisms in the *MTHFR* gene among Khouzestan adults. According to statistical analyses, frequency of C and T alleles were 168C and 72T in patients & 195C and 45T in controls respectively. The percentage of genotypes was 69.2% CC, 24.2% CT and 6.7% TT in controls and 50.8% CC, 38.3% CT and 10.8% TT in case group, which indicates a significant association with RA and the P-alue=0.015 approves this. But by considering the number of cases further studies are needed. The presented association is limited to Khouzestan samples without separation of populations. In further studies comparing with global results and separation of population for acute results, is needed.

Keywords: *MTHFR*, Rheumatoid Arthritis, rs1801133, PCR-RFLP

Corresponding Author: Mehdi Shahvalikoohshori; Department of Genetics, School of Sciences, Shahid Chamran University of Ahvaz, Ahvaz, Iran.
Tel: +98 916 1900817, E-mail: izeh2012@gmail.com

P2-12

Rituximab In Takayasu Arteritis

Mohammad Bagher Owlia, Ali Dehghan, Hossein Soleimani

Rheumatology Department, School of Medicine, ShahidSadoughi University of Medical Sciences, Yazd, Iran

Aim: Takayasu Arteritis (TAK) is a subgroup of large vessel vasculitis involving major branches of the aorta. Corticosteroids are the mainstay of treatment. Some biologic agents are used as new targeted agents. Several reports denote clinical efficacy of tumor necrosis factor- alpha (TNF) and interleukin 6 (IL-6) blocking agents in the management of TA. However, little studies devoted to reporting B cell depletion in handling the inflammation in TA. Herein we report a 34-years-old woman with refractory Takayasu arteritis treated with Rituximab.

Case presentation: A 34-year-old woman a known case of Takayasu arteritis from 9 years ago presented with headache and epistaxis from 6 months ago. She was on oral/ intramuscular methotrexate and oral prednisolone for years. She had never experienced complete clinical and/ or laboratory remissions until a year ago. She was complaining occasional epistaxis and daily headache that bothered her from 6 months ago. On the last visit, she presented again with symptoms of throbbing headache and epistaxis accompanied by photophobia. She did not have fever nor nausea or vomiting. Her laboratory investigations revealed a hemoglobin level of 9.5 g/dl with a mean corpuscular volume (MCV) of 75.1 fL. Platelet and white blood cell counts were normal. Erythrocyte sedimentation rate (ESR) ranged from 74- 110 mm/hr, C-reactive protein (CRP) was consistently elevated.

Results: She was treated with 500 mg rituximab (MabThera, Roche, Switzerland) after single dose of 500 mg (*I.v.*) methylprednisolone. Subsequent follow-ups showed not only remarkable clinical but also laboratory improvement after two doses of rituximab with 14 day's interval. Her headache got improved to 2 episodes in a weak and epistaxis was also abolished. Her ESR decreased to 45 mm/hr and CRP to marginal positive titers four weeks after rituximab therapy.

Conclusion: Rituximab could be a good candidate biological in case of refractory TAK in selected cases.

Keywords: Takayasu arteritis, Treatment, Rituximab

Corresponding Author: Mohammad Bagher Owlia; Internal Medicine group, Shahid Sadoughi Hospital, Safaeieh, Yazd, Iran. Tel: +98 913 1532954, E-mail: bagherowlia@gmail.com

P2-13

Evaluation Of MEFV Gene Frequency In Patients With Rheumatoid Arthritis

Sousan Kolahi

Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

Aim: Rheumatoid Arthritis (RA) is among the most common chronic unknown diseases and causes the majority of adult disabilities. Due to the high prevalence of Familial Mediterranean fever in patients and overlap of autoimmune diseases, we decided to study the molecular analysis of mutation of the MEFV gene in patients with rheumatoid arthritis in the northwest of Iran.

Methods: In a cross-sectional descriptive-analytic study carried out on patients with rheumatoid arthritis, the molecular analysis of mutation of the MEFV gene in rheumatoid arthritis patients in northwest of Iran was studied. A total of 50 patients with rheumatoid arthritis were selected, blood samples were taken from the participants and DNAs were extracted using the standard method. The samples were examined for common mutations and polymorphisms of exons 2 and 10 of the MEFV gene using the sequencing method.

Results: Mean age of patients with rheumatoid arthritis was 38.04 + 8.61 year. Mean of rheumatoid arthritis duration was 4.8 + 3.54 years. In patients suffering from rheumatoid arthritis, concerning exon 2 of the MEFV gene, the D102D mutation was in 58% of the patients and G138G mutation and A165A mutation were also in 38% of patients. Moreover, E148Q mutation and R202Q mutation were also observed in 18% and 30% of patients, respectively. In the evaluation of exon 10 of the MEFV gene, mutations A744A, M694V, R761H and V726A were observed in 2% of rheumatoid arthritis patients.

Conclusion: It seems mutation of MEFV gene in Rheumatoid arthritis is more than the normal population

Keywords: Rheumatoid Arthritis; MEFV gene; Iran; Exon 2; Exon 10

Corresponding Author: Sousan Kolahi; Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran.
Tel: +98 914 3104072, E-mail: susan.kolahi@gmail.com

P2-14

A Good Response To Infliximab In A Patient With Persistent Reactive Arthritis: A Case Report

Sakinehkhatoun Sharif[1], Zahra Jalali[1]

1- Department of internal medicine, Tabriz university of medical sciences, Tabriz, Iran, 2-School of Medicine, Tabriz university of medical sciences, Tabriz, Iran

Aim: The clinical manifestations of ReA constitute a spectrum that ranges from an isolated, transient enthesitis to severe multisystem disease, including constitutional symptoms, painful arthritis with tense joint effusions and extra articular involvement. Most patients benefit to some degree from high-dose NSAIDs, and some patients fail to respond at all. Multicenter trials have suggested that Patients with persistent ReA may respond to sulfasalazine, azathioprine, or methotrexate. Anecdotal evidence supports the use of anti-TNF agents in severe chronic cases of ReA.

Case presentation: Here we describe a 23-year-old unmarried man who 10 days after sexual contact was admitted in the hospital with severe constitutional symptoms, low back pain, dactylitis, and arthritis in his right elbow, right knee and both of ankles. On 2th week of admission, he showed hyperkeratotic lesions on his palms. He had no response to the full dose of NSAIDs, sulfasalazine and methotrexate. Constitutional symptoms relieved by corticosteroid pulse. But his arthritis persisted and were refractory to the local injection of triamcinolone too. His arthritis responded well to infliximab. He was HIV negative.

Conclusion: Our experience is one more evidence to support the use of infliximab in patients with persistent Reactive Arthritis.

Keywords: Reactive Arthritis; Infliximab

Corresponding Author: Sakinehkhatoun Sharif; No.17, Sorourbakhsh St., Azadi Ave., Tabriz, Iran.
Tel: +98 914 413 5495, E-mail: sakinehkhatoun@yahoo.com

P2-15

Relationship Between Urinary And Serum Level Of Adiponectin With Disease Activity In Patients With Lupus In Comparison With Control Group

Sima Sedighi[1], Mehrdad Aghaee[1], Maryam Faghani[2], Mahmmod Fatemi[2], Mohammad Vakili[3]

1- Department of Rheumatology, School of Medicine, Joint, Bone and Connective Tissue Research Center (JBCRC), Golestan University of Medical Sciences, Gorgan, Iran 2- Clinical student research committee, School of Medicine, Golestan University of Medical Sciences, Gorgan, Iran 3- Department of Statistics, School of Medicine, Golestan University of Medical Sciences, Gorgan, Iran

Aim: Systemic lupus erythematosus (SLE) is a connective tissue disease with chronic and recurrent and inflammatory progression. Anti inflammatory cytokines such as adiponectin change in this disease like other inflammatory diseases, so this study aimed to evaluate the relationship between urinary and serum level of Adiponectin with disease activity in patients with SLE.

Methods: In this case-control study, 80 women referred to the rheumatology clinic of 5 Azar Hospital in Gorgan, divided to case and control group. Then urinary and serum level of adiponectin measured by ELISA kit and disease activity evaluated by SLE disease activity index were Blood samples were taken from both groups and serum levels of interleukin -2 measured by AviBion human IL-2. Data analysis conducted by SPSS software (version 16) and by using descriptive statistics and statistical tests.

Results: Mean serum level of adiponectin in the case group had statistically significant association with the control group (P<0.001) and meant urinary adiponectin level in the case group had statistically significant correlation with the control group too (P<0.035). Only serum level of adiponectin was significantly associated with SLE disease activity index in case group (r= 0.63, P<0.0001), and urinary level of adiponectin was significantly associated with renal involvement (r=0.59, P<0.0001).

Conclusion: Findings of the present study showed a relationship between serum level of Adiponectin with disease activity in patients with SLE. So this biomarker can be used for effective treatment and decrease of complications.

Keywords: Systemic Lupus Erythematosus; Adiponectin; SLEDAI

Corresponding Author: Sima Sedighi; Department of Rheumatology, School of Medicine, Joint, Bone and Connective Tissue Research Center (JBCRC), Golestan University of Medical Sciences, Gorgan, Iran.
Tel: +98 915 3104966, E-mail: surgery_department68@yahoo.com

P2-16

Case Report Of Eosiniphilic Granulomatosis With Poly Angitis Coexistent With Systemic Sclerosis

Maryam Alavi

Department of Rheumatology, School of Medicine, Yasuj University of Medical Sciences

Aim: Systemic sclerosis (SSc) is a connective tissue disease that causes fibrosis and vasculopathy in multiple organs system. The aim of this case presenting is that SSc may present coexistent with ANCA associated vasculitis (AAV) as rarely, and when SSc patients came with atypical features, AAVs should be consider.

Case presentation: This case was a 27 years old woman that was admitted in Faghihi hospital in Shiraz in 2012. She was a known case of diffuse systemic sclerosis with interstitial lung disease, but eventually she was presented with clinical features of vasculitis, and was detected MPO-ANCA positive and eosinophilia. Histopathology of skin biopsy demonstrated necrotizing vasculitis compatible with epidermal and superficial dermal necrosis with eosinophilia. She was treated with high dose corticosteroid and cyclophosphamide. She was remitted without sequel. Result: The patient had MPO-ANCA positive, eosinophilia and histopathologically evidence of vasculitis compatible with eosinophilic granulomatosis with poly angiitis (EGPA).

Conclusion: AAVs occur in the setting of SSc, rarely. Previous case report showed especially PR3-ANCA positive than MPO-ANCA in SSc patients. It seems SSc with EGPA is very rare. It is necessary to distinguish between scleroderma vasculopathy and inflammatory vasculitis damage that shows the different clinical prognosis and therapeutic regimens for these patients.

Keywords: Eosiniphilic Granulomatosis With Poly Angitis; Systemic Sclerosis

Corresponding Author: Maryam Alavi; Department of Rheumatology, School of Medicine, Yasuj University of Medical Sciences. Tel: +98 917 7107561, E-mail: sm_alavi77@yahoo.com

P2-17

Hearing Dysfunctions In Rheumatoid Arthritis: What Is The Relation With RA Activity?

Habib Zayeni[1], Mirmohammad Jalali[2], Ensieh Rjabpur Nikoo[1], Asghar Haji Abbasi[1], Irandokht shenavar[1], Banafsheh Ghavidel Parsa[1], Amir Hassankhani[3], Alireza Amir Maafi[3]

1- Rheumatology Research Center, Guilan University of Medical Sciences, Rasht, Iran 2- Otolaryngology Department, Amiralmomenin Hospital, School of Medicine, Guilan University of Medical Sciences, Rasht, Iran 3- Medical student, Student Research Committee, School of Medicine, Guilan University of Medical Sciences, Rasht, Iran

Aim: Rheumatoid Arthritis (RA) is an autoimmune disease that causes multiple joints involvement and chronic inflammation of the soft tissue around the joints. RA also affects the hearing system with various ways. Investigations have shown that there is a possible relation between severity of RA with hearing disorders. So we aimed to investigate whether there is a link between levels of hearing loss and markers of disease activity in RA patients compared with a person without RA.

Methods: In this cross-sectional study, 72 consecutive patients with RA referred to the rheumatology clinic of Razi hospital of Rasht, Iran, from May 2009 to May 2010 were enrolled. RA patients diagnosed by an expert rheumatologist according to the ACR-EULAR Classification Criteria for Rheumatoid Arthritis 2010. Also, 72 age-sex matched healthy peoples had considered as a control group. Patients with a history of ear disease, ear trauma, ototoxic drugs consumption and occupational exposure to noise pollution were excluded from the study. Then activity of RA evaluated in all patients by DAS28 (Disease Activity Score 28) and SDAI (Simplified Disease Activity Index). One ENT specialist visited all patients, and Conducting hearing loss (by audiometry and tympanometry), sensorineural hearing loss (SNHL) (by audiometry and tympanometry), acoustic reflex, acoustic reflex decay and tympanometry tests were performed for both study and control groups. Finally collected data were analyzed by using *Chi*-square test.

Results: Patients included in this study, 6(8.3%) male and 66(91.7%) female, were 19-70 years old, and the mean age was 44.54 ± 12.47 years that was approximately equal with the control group. Based on the SDAI there was no significant relation between disease activity in RA patients and SNHL, abnormal acoustic reflex, acoustic reflex decay and grades of tympanometry but conductive hearing loss (uni or bilateral) had statically significant relation with disease activity (P=0.044). According to the DASH28, disease activity had no significant relation with conductive hearing loss, SNHL and grades of tympanometry but abnormal acoustic reflex and acoustic reflex decay had a significant correlation with RA activity, respectively (P=0.025, P=0.017).

Conclusion: This study indicates conductive hearing loss is higher in patients with RA compared with healthy persons and severity of RA is relation with this type of hearing loss (based on SDAI). Finally, it is recommended that further studies should be conducted with a larger sample size and longer follow-up period to evaluate hearing loss in patients with RA.

Keywords: Hearing Disorder; Rheumatoid arthritis; RA Activity

Corresponding Author: Habib Zayeni; Rheumatology Research Center, Razi Hospital, Sardar-e- Jangle avenue, Rash, Iran. Tel: +98 910 1080815, Fax: + 98 131 5530169, E-mail: amir.hassankhani91@gmail.com

P2-18

Clinical Characteristics Of 27 Patients With Granulomatosis With Polyangiitis, A Retrospective Study In Yazd, Iran

Hossein Soleymani Salehabadi[1], Amirbehnam Kharazmi[2], Ali Dehghan[1]

1- Rheumatology Department, School of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran 2- School of Medicine, ShahidSadoughi University of Medical Sciences, Yazd, Iran

Aim: Granulomatosis with polyangiitis (GPA) is an uncommon disease with the same prevalence in men and women. It can be a life-threatening complication by diffuse alveolar hemorrhage (DAH) and renal failure. The aim of this study was the investigation of clinical presentation, demographic data in associated with response to treatment, recurrence and mortality rate in GPA patients.

Methods: This was a retrospective descriptive study. The data including Demographic characteristics, initial signs and symptoms, prevalence of involvement in various organs, laboratory finding, therapeutic regimen, response to treatment, recurrence and improvement. Twenty- seven patients with GPA were included in this study that ran from 2001 to 2011 according to clinicopathological findings.

Results: The mean of age was 35.42 years. Men to women ratio was 1.45. The lower and upper respiratory tract systems and joints involvement were the most presenting symptoms. The upper and lower respiratory and renal tract systems were the most commonly affected organs in the course of the disease. In one case the disease began during pregnancy. DAH was seen in 6 patients that was the first presentation in 4. C-ANCA was positive in 83.3%. ESR was high in 24 patients and more than 100 mm/h in 5 of 24 patients. Initiation therapeutic regimen includes prednisolone and cyclophosphamide (CYC) in 96.2% of patient and maintenance therapy was with a combination of prednisolone and methotrexate or prednisolone and azathioprine. 3 patients were treated with plasmaphersis due to DAH and rituximab was used for 3 patients who were resistant to treatment. 12 (44.4%) patients responded to treatment completely and 9 (33.3%) patients had partial response after 3 months, 20 (74%) and 4 (14.8%) cases after 12 months respectively. Recurrence occurred in 18 of 27 patients (66.7%). The median time of recurrence was 22.65 months. There was no significant correlation between C-ANCA and clinical manifestation, response to treatment and recurrence of disease ($P>0.05$).

Conclusion: Initially, the involvement of lower respiratory tract was more than upper, but on the course of disease involvement of upper respiratory tract was more. Most patients had complete remission during the first year of treatment. There was no significant correlation between positive C-ANCA and clinical manifestation, response to treatment and recurrence of disease.

Keywords: Granulomatosis with polyangiitis; Respiratory tracts; Diffuse Alveolar Hemorrhage; recurrence

Corresponding Author: Hossein Soleymani Salehabadi; Internal Medicine group, Shahid Sadoughi Hospital, Safaeieh, Yazd, Iran. Tel: +98 913 1547795, E-mail: dhsol33@yahoo.com

P2-19

Comparison Of Serum Profiles Of Cytokines In Behcet's Disease With Or Without Uveitis

Masoud Asadi-Khiavi

Zanjan Applied Pharmacology Research Center, Zanjan University of Medical Sciences, Zanjan, Iran

Aim: Behcet's disease (BD) is a chronic vasculitis demonstrates major protests as aphthous stomatitis and genital system as well as skin and eye lesions. Since cytokines have a role in regulating the inflammatory responses, making them is responsible for immunopathological conditions in Behcet's uveitis. Presented study was designed to comparison of cytokine profiles in BD with or without uveitis.

Methods: This survey as a descriptive analytical study was done on patients referred to a rheumatology clinic of Vali-e-Asr university hospital of Zanjan, Iran after informed consent obtaining at 2013-2014. Patients with confirmed BD were divided into three groups according to the ophthalmologic exam: with uveitis, without uveitis and recovered uveitis. Patients with a history of Behcet's uveitis recovery at least 3 to 6 months ago that confirmed by an ophthalmologist were placed in the group of recovered uveitis. The patients with infectious uveitis, other collagen vascular diseases and biological drugs users were excluded as well. Some biomarkers and cytokines were measured in serum of patients and results were followed by statistically analyses.

Results: IL-2 was the only cytokine with statistically different among all groups: 26 patients with active uveitis, 25 patients with recovered uveitis and 24 patients without uveitis (P=0.02). The pairwise comparison showed a significant difference between the patients with and without uveitis groups (P=0.004) as well as patients with uveitis and recovered uveitis groups (P=0.002).

Conclusion: Significant elevation of IL-2 in patients with uveitis (in comparing with recovered or without uveitis cases) shows its probably main role in the pathophysiology of Behcet's uveitis and provides a new target for refractory disease modulation. Studies with larger samples can help to obtain more accurate conclusions.

Keywords: Behcet's disease; uveitis; cytokines

Corresponding Author: Masoud Asadi-Khiavi; Zanjan Applied Pharmacology Research Center, Zanjan University of Medical Sciences, Zanjan, Iran.
Tel: +98 914 4827480, E-mail: makhiavi@gmail.com

P2-20

No Evidence Of Association Between CTLA-4 Polymorphisms And Systemic Lupus Erythematosus In Iranian Patients

Mehrdad Aghaie[1], Mahdieh Shojaa[4], Nader M.Samaei[2], Sima Sedighi[1], Mahsa Amoli[5], Naemeh Javid[3], Fatemeh Shakeri[3], Patrichia Khashayar[4], Sedigheh Livani[3]

1- joint, Bone and Connective Tissue Research center (JBCRC), Golestan University of Medical Science, Gorgan, Iran 2- Department of Genetics, Congenital Malformations Research Center, OMICS Research Center, Hematology and Oncology Research Center, Golestan University of Medical Sciences, Gorgan, Iran 3- Department of Microbiology, School of Medicine, Golestan University of Medical Sciences, Gorgan, Iran 4- Osteoporosis Research Center, Endocrinology and Metabolism Clinical Science Institute, Tehran University of Medical Sciences, Tehran, Iran 5- Endocrinology and Metabolism Research Center (EMRC), Endocrinology and Metabolism Research Center Clinical Science Institute, Tehran University of Medical Sciences, Tehran Iran

Aim: Cytotoxic T lymphocyte-associated antigen-4 (CTLA-4) is an important negative regulator of T-cell responses. CTLA-4 polymorphisms have been confirmed to be associated with several autoimmune diseases such as systemic lupus erythematosus (SLE). We analyzed the role of CTLA-4 polymorphism at positions −1661 and −1722 in Iranian patients suffering from SLE.

Methods: One hundred and eighty SLE patients and 304 ethnically and age-matched healthy controls were studied. Polymerase chain reaction-restriction fragments length polymorphism (PCR-RFLP) was used to analyze the genotype and allele frequencies of these polymorphisms.

Results: There was no significant association between the studied genotypic and allelic frequencies between SLE patients and the controls. Although the TC genotype in 1722TC polymorphism was more common among the control group, the correlation was not statistically significant.

Conclusion: Our results suggest that the −1661AG and −1722TC polymorphisms in the promoter region of the CTLA-4 gene does not play any role in genetic susceptibility to SLE. However, further studies on larger sample sizes are needed to approve our results.

Keywords: CTLA-4; polymorphism; promoter; systemic lupus erythematosus

Corresponding Author: Mehrdad Aghaie; Department of Rheumatology, School of Medicine, Joint, Bone and Connective Tissue Research Center (JBCRC), Golestan University of Medical Sciences, Gorgan, Iran.
Tel: +98 911 1754556, E-mail: mehrdadaghaie@yahoo.com

P2-21

Vasculitis Like Presentation Of Laryngeal Large Cell Neuroendocrine Carcinoma: A Case Presentation

Shahrzad Rahmani[1], Fatemeh Shirani[1], Ali Bidari[1], Nasrin Shayanfar[2]

1-Department of Rheumatology, School of Medicine, Iran University of Medical Sciences, Tehran, Iran, 2- Department of Pathology, School of Medicine, Iran University of Medical Sciences, Tehran, Iran

Aim: laryngeal large cell neuroendocrine carcinoma (LCNEC) of the larynx is the rarest neuroendocrine carcinoma of the larynx. Objectives: laryngeal neuroendocrine carcinomas usually present with dysphonia or other local symptoms. A presentation that mimics vasculitis has not been reported.

Case presentation: A 60-year-old man presented with a complaint of diplopia, left eye blurred vision, weight loss, headache, recurrent oral aphthous ulcers, multiple subcutaneous soft tissue lumps in the limbs and trunk and severe polyarthralgia involving small and large peripheral joints. The symptoms had been developed over the 6 m before admission and associated with 3 h morning stiffness. The initial laboratory studies were only significant for mild anemia. The medical consultations after hospital admission confirmed left 6th nerve palsy as well as Lt posterior ischemic optic neuritis. A brain MRI revealed multiple small high T2 signal abnormalities in the periventricular white matter and pons suggestive of vasculitis. Giant cell arteritis was suspected but was not confirmed by a normal temporal artery biopsy. More work-up including thoracic, abdominal and pelvic CT studies, radionuclide whole body bone scan, upper and lower GI endoscopies and bone marrow biopsy were not significant. Eventually, a biopsy from a subcutaneous nodule diagnosed an LCNEC. An indirect laryngoscopy demonstrated an epiglottic mass which later proved to be the primary origin of the LCENC. To the best knowledge of the authors this is the first report on such a rare tumor presenting like a systemic vasculitis.

Conclusion: neuroendocrine tumors cells are multipotent and have the ability to production of cytokines and stimulation of antibody formation that causes systemic symptoms and neurological paraneoplastic syndrome respectively. Therefore, laryngeal LCNEC as a malignancy may mimic vasculitis.

Keywords: Laryngeal Large Cell neuroendocrine Carcinoma**;** Paraneoplastic syndrome**;** Vasculitis

Corresponding Author: Shahrzad Rahmani; Hazrat Rasool akram Hospital, Niayesh Ave., Sattarkhan St., Tehran, Iran.
Tel: +98 912 6932246, E-mail: shzrahmani2014@gmailL.com

AUTHOR INDEX