

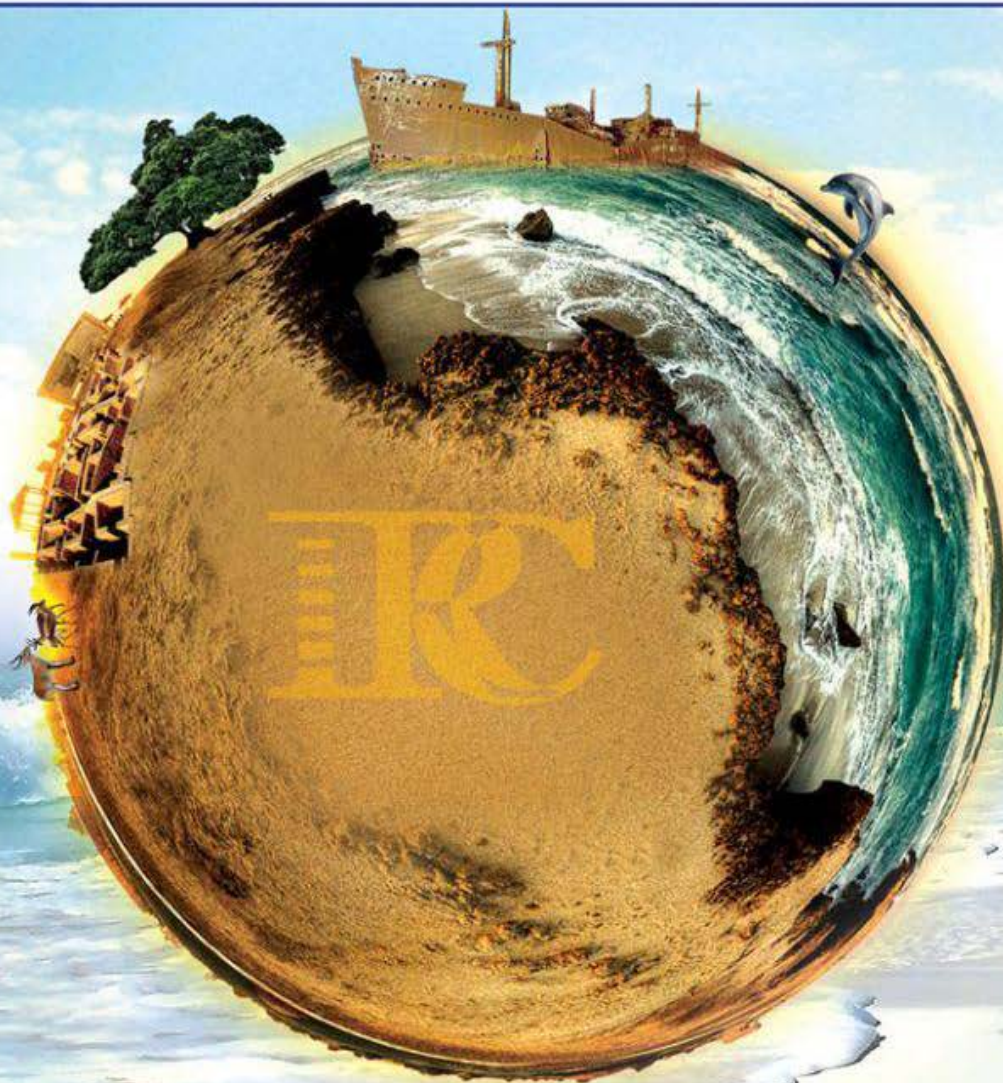
12<sup>th</sup> IR

# دوازدهمین کنگره سالیانه انجمن روماتولوژی ایران

12<sup>th</sup> Annual Congress of Iranian Rheumatology Association

مرکز همایش‌های بین‌المللی جزیره کیش / Kish International Convention Center

۷ الی ۹ آذرماه ۱۳۹۷ / 28-30 November 2018



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دبیرخانه: تهران - خیابان کارگر شمالی، بیمارستان دکتر شریعتی، مرکز تحقیقات روماتولوژی، انجمن روماتولوژی ایران

**12<sup>th</sup> Annual Congress  
of Iranian Rheumatology Association**

**ABSTRACT BOOK**



**28<sup>th</sup>–30<sup>th</sup> November 2018  
Kish, Iran**

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## WELCOME MESSAGE

### In The Name of Allah

It is my pleasure to welcome all my colleagues to beautiful Kish Island for 12<sup>th</sup> Congress of Iranian Rheumatology Association like later Congress this is a situation to have scientific discussions and visit each other.

This causes more union and affinity among our members and under the protection of this union, today our patients have better chances of diagnosis and more better treatments. Now a day we have a good scientific Journal (Rheumatology Research) is the second years of It's publication, and this achievement was not accessible without your valuable support. We need this support and cooperation in the continuation of our union Journal.

Please allow me to express my heartily thanks to the respectable secretary general of IRA, the scientific secretary of congress for their excellent engineering.

Welcome again to your own congress, and have a good time in beautiful Kish Island.



### Best Regards

Professor Ahmadreza Jamshidi, M.D  
President of Iranian Rheumatology Association  
President of the 12<sup>th</sup> Annual Congress of  
Iranian Rheumatology Association

## WELCOME MESSAGE

Dear colleagues,

On behalf of the organizing committee, it is my great pleasure to welcome you to the 12th Annual Congress of Iranian Rheumatology Association in Kish Island.

I hope that this event would provide a great opportunity and platform to share the latest knowledge and experiences and to exchange ideas through enriching and fruitful talks and discussions and state of the art articles and lectures with the aim of achieving the common goal of promoting the scientific and clinical research in the field of rheumatic diseases and improving medical care to our patients.

We look forward to welcoming all of you in the beautiful island of Kish



Dr. Abdollah Rostamian  
Scientific Secretary of the 12<sup>th</sup> Iranian  
Rheumatology Association congress  
Associate Professor of Rheumatology,  
Tehran university of medical sciences

## COMMITTEES

**Congress President:** Ahmadreza Jamshidi, M.D (*Iran*) - *Rheumatology*

**Secretary:** Abdolrahman Rostamian (*Iran*) - *Rheumatology*

### SCIENTIFIC COMMITTEE

Mahnaz Abbasi ( <i>Iran</i> ) – <i>Rheumatology</i>	Jamileh Moghimi ( <i>Iran</i> ) – <i>Rheumatology</i>
Yahya Aghighi ( <i>Iran</i> ) – <i>Pediatric Rheumatology</i>	Karim Mowla ( <i>Iran</i> ) – <i>Rheumatology</i>
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Samira Alle Saeed ( <i>Iran</i> ) – <i>Rheumatology</i>	Shafieh Movaseghi ( <i>Iran</i> ) – <i>Rheumatology</i>
Azam Amini ( <i>Iran</i> ) – <i>Rheumatology</i>	Seyed Reza Najafizadeh ( <i>Iran</i> ) – <i>Rheumatology</i>
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Mohammad Mahdi Emam ( <i>Iran</i> ) – <i>Rheumatology</i>	Alireza Rajaei ( <i>Iran</i> ) – <i>Rheumatology</i>
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Alimohammad Fatemi ( <i>Iran</i> ) – <i>Rheumatology</i>	Abdolrahman Rostamian ( <i>Iran</i> ) – <i>Rheumatology</i>
Faraneh Farsad ( <i>Iran</i> ) – <i>Rheumatology</i>	Masoumeh Sajjadi ( <i>Iran</i> ) – <i>Ophthalmology</i>
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Zahra Ghodsi ( <i>Iran</i> ) <i>Dermatology</i>	Alireza Sadeghi ( <i>Iran</i> ) – <i>Rheumatology</i>
Asghar Hajiabbasi ( <i>Iran</i> ) – <i>Rheumatology</i>	Maryam Sahebari ( <i>Iran</i> ) – <i>Rheumatology</i>
Ahmadreza Jamshidi ( <i>Iran</i> ) – <i>Rheumatology</i>	Hossein Soleimani Salehabadi ( <i>Iran</i> ) – <i>Rheumatology</i>
Ali Javadzadeh ( <i>Iran</i> ) – <i>Rheumatology</i>	Farhad Salehzadeh ( <i>Iran</i> ) – <i>Pediatric Rheumatology</i>
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Mohammad Hassan Jokar ( <i>Iran</i> ) – <i>Rheumatology</i>	Zhaleh Shariati Sarabi ( <i>Iran</i> ) – <i>Rheumatology</i>
Zahra Habibagahi ( <i>Iran</i> ) – <i>Rheumatology</i>	Hossein Shayanmoghadam ( <i>Iran</i> ) – <i>Rheumatology</i>
Anousheh Haghighi ( <i>Iran</i> ) – <i>Rheumatology</i>	Saeedeh Shenavandeh ( <i>Iran</i> ) – <i>Rheumatology</i>
Hadi Karimzadeh ( <i>Iran</i> ) – <i>Rheumatology</i>	Irandoht Shenavar ( <i>Iran</i> ) – <i>Rheumatology</i>
Nahid Kianmehr ( <i>Iran</i> ) – <i>Rheumatology</i>	Reza Shiari ( <i>Iran</i> ) – <i>Pediatric Rheumatology</i>
Alireza Khabbazi ( <i>Iran</i> ) – <i>Rheumatology</i>	Mohsen G. Soroush ( <i>Iran</i> ) – <i>Rheumatology</i>
Siavash Kooranifar ( <i>Iran</i> ) – <i>Pulmonologist</i>	Habib Zaieni ( <i>Iran</i> ) – <i>Rheumatology</i>
Zahra Mirfeizi ( <i>Iran</i> ) – <i>Rheumatology</i>	Zahra Zakeri ( <i>Iran</i> ) – <i>Rheumatology</i>
Mahdi Mahmoudi ( <i>Iran</i> ) – <i>Immunology</i>	Vahid Ziaee ( <i>Iran</i> ) – <i>Pediatric Rheumatology</i>
Maryam Moghadasi ( <i>Iran</i> ) – <i>Rheumatology</i>	

### ORGANIZING COMMITTEE

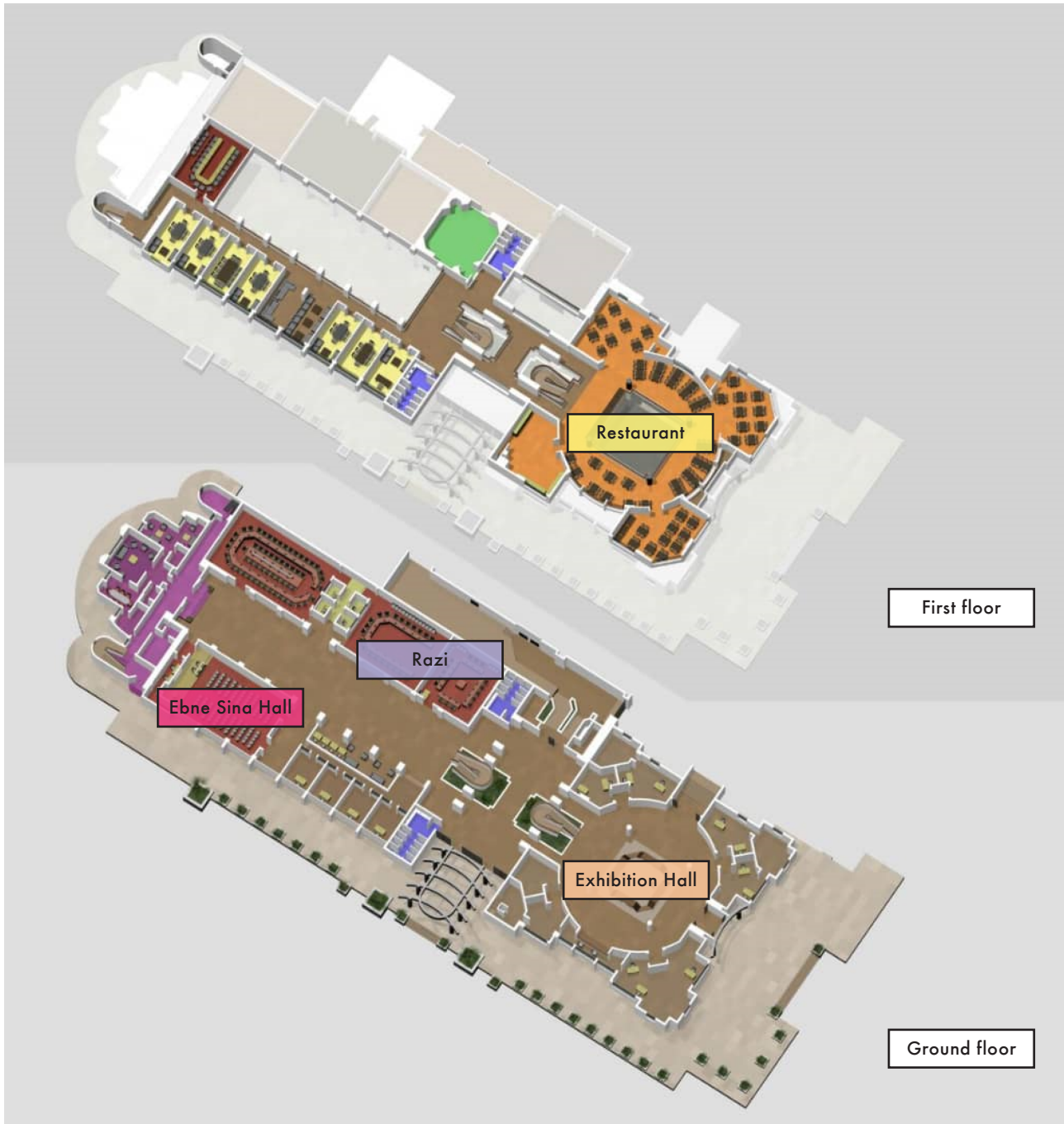
Mohsen G. Soroush, MD.

Marjan Khademian, Bsc.

## ACCESS MAP



## FLOOR MAP





## TIME TABLE

	7:30	8:00	9:00	10:00	11:00	12:00	13:00
Wednesday, November 28	Scientific Program	Registration	Opening Ceremony	<b>Scientific Session 1: Drug Monitoring and Pre-operation consultations</b> Co-Chairs: <u>Dr. Mohamadali Nazarinia</u> , Dr. Hadi Karimzadeh <b>S1-1: Monitoring of DMARDs:</b> Dr. Azam Amini <b>S1-2: Monitoring of Biologics:</b> Dr. Elham Rajaei <b>S1-3: Monitoring of NSAIDs and Steroids:</b> Dr. Alimohammad Fatemi <b>S1-4: Preoperative consultations:</b> Dr. Zahra Habibagahi <b>Panel for Questions and Answers</b>	Poster presentation	Coffee Break	<b>Scientific Session 2: Updates of Periarthritis</b> Chair: <u>Dr. Abdolhadi Nadji</u> , Dr. Karim Mowla <b>S2-1: Periarthritis of the hip:</b> Dr. Alireza Khabbazi <b>S2-2: Periarthritis of the Ankle joint:</b> Dr. Asghar Hajiabbasi <b>S2-3: Periarthritis of the foot:</b> Dr. Reza Najafizadeh <b>Panel for Questions and Answers</b>
	Place	Registration Pavilion (Exhibition hall)	Persian Gulf Hall		Exhibition Hall	Exhibition hall (second floor)	Persian Gulf Hall
Thursday, November 29	Scientific Program		<b>Scientific Session 4: Rheumatoid Arthritis</b> Co-Chairs: <u>Dr. Fatemeh Shirani</u> , Dr. Nahid Kianmehr, Zhale Shariati Sarabi <b>S4-1: Eraly RA:</b> Dr. Hosein Shayan Moghadam <b>S4-2: Lung Involvement in RA:</b> Dr. Siavash Kouranifar <b>S4-3: Eye involvement in RA:</b> Dr. Masoumeh Sajadi <b>S4-4: Management of RA in pregnancy and lactation:</b> Dr. Ali Javadzadeh <b>Panel for Questions and Answers</b>	Poster presentation	Coffee Break	<b>Scientific Session 5: Oral presentations</b> Dr. Maryam Sahebari, Dr. Mahdi Mahmoudi <b>6 Presentation, 7 Min. for everyone</b>	Annual Meeting of Iran Rheumatology Association
	Place		Persian Gulf Hall		Exhibition Hall	Exhibition hall (second floor)	Persian Gulf Hall
Friday, November 30	Scientific Program	Dr. Farhad Salehzadeh <b>S7-4: Special measures and assessments of the adult rheumatologist in the treatment of young people with rheumatologic diseases:</b> Dr. Mohamad Hasan Jokar <b>S7-5: Specific Considerations of Common Diseases ( JIA, SLE, Dermatomyositis) in Transition to Adult Services:</b> Dr. Peyman Sadeghi <b>Panel for Questions and Answers</b>	<b>Scientific Session 7: Management of Transmission of Children with Rheumatic Diseases from children's to adult care system</b> Co-Chairs: Dr. Vahid Ziaee, Dr. Gholamali Nasseh, Dr. Yahya Aghighi <b>S7-1: Difference in childhood and adolescent care in rheumatologic diseases:</b> Dr Reza Shiari <b>S7-2: time and type of transmission:</b> Dr. Vahid Ziaee <b>S7-3: Duties of adult and childhood rheumatologists in joint clinics:</b>	Coffee Break and poster presentation	<b>Scientific Session 8: Vasculitis and dermatologic manifestations</b> Co-Chairs: Dr. Fereydoun Davatchi, Dr. Farhad Shahram <b>S8-1: Introduction:</b> Dr. Farhad Shahram <b>S8-2: Differential diagnosis:</b> Dr. Zahra Ghodsi <b>S8-3: Diagnostic Approach:</b> Dr. Hossein Soleimani Salehabadi <b>S8-4: Therapeutic Approach:</b> Dr. Zahra Rezaieyazdi <b>Panel for Questions and Answers</b>	Closing Ceremony	
	Place		Persian Gulf Hall		Break Room (Ground Floor)	Persian Gulf Hall	

13:00	14:00	15:00	16:00	17:00
Prayers and Lunch Break	<b>Scientific Session 3: Sjogren &amp; IgG4 Related Disorders</b> <b>Co-Chairs:</b> <u>Dr. Mohammad Mahdi Emam</u> , Dr. Zahra Zakeri <b>S3-1: Sign and Symptoms of IgG4-related diseases:</b> Dr. Saeedeh Ariannia <b>S3-2: Treatment of IgG4-related diseases:</b> Dr. Mohammad Mahdi Emam <b>S3-3: Updates of Sjogren:</b> Dr. Alireza Rajaei <b>Panel for Questions and Answers</b>	<b>Workshop 1: Capillaroscopy</b> Dr. Saeedeh Shenavandeh  <b>Workshop 2: Registry</b> Dr. Mahdi Mahmoudi	Ebne Sina hall  Razi Hall	
Prayers and Lunch Break	<b>Scientific Session 6: Heart and Lung involvement in Scleroderma</b> <b>Co-Chairs:</b> Dr. Farhad Gharibdoost, Dr. Hadi Pourmoghim <b>S6-1: interstitial lung involvement in scleroderma:</b> Dr. Hoda Kavousi <b>S6-2: pulmonary Hypertension in scleroderma:</b> Dr. Faraneh Farsad <b>S6-3: Heart in Scleroderma:</b> Dr. Zahra Javadinejad <b>Panel for Questions and Answers</b>	<b>Workshop 3: Bone Densitometry</b> Dr. Alireza Rajaei  <b>Opening of Online Registry of Patients with Rheumatologic Problems</b>	Classroom (Ground Floor)  Persian Gulf Hall	
Prayers and Lunch Break				
Ziafat Hall (Underground Floor)				

**SCIENTIFIC PROGRAM*****Wednesday, November 28*****07:30-08:30 Registration****08:30-09:00 Opening Ceremony****09:00-10:30 Scientific Session 1-Drug Monitoring and Peri-Operation Consultations****Co-Chairs:** Mohammadali Nazarinia, M.D - Hadi Karimzadeh, M.D**Mohammadali Nazarinia, M.D***Professor of Rheumatology, Shiraz University of Medical Sciences, Shiraz, Iran.***Hadi Karimzadeh, M.D***Professor of Rheumatology, Isfahan University of Medical Sciences, Isfahan, Iran.***S1-1 Monitoring of DMARDs:****Azam Amini, M.D***Assistant Professor of Rheumatology, Department of Internal Medicine, School of Medicine, Bushehr University of Medical Sciences, Bushehr, Iran.***S1-2 Monitoring of Biologics****Elham Rajaei, M.D***Assistant Professor of Rheumatology, Ahvaz Jondishapour University of Medical Sciences, Ahvaz, Iran.***S1-3 Monitoring of NSAIDs and Steroids****Alimohammad Fatemi, M.D***Assistant Professor of Rheumatology, Department of Internal Medicine, Isfahan University of Medical Sciences, Isfahan, Iran.***S1-4 Peri-operative Consultations****Zahra Habibagahi, M.D***Associate Professor of Rheumatology, Shiraz University of medical sciences, Shiraz, Iran.***Panel for Questions and Answers****10:30-11:00 Poster presentation and Coffee Break****11:00-13:00 Scientific Session 2 – Updates of Peri-arthritis****Chair:** Abdolhadi Nadji, M.D - Karim Mowla, M.D**Abdolhadi Nadji, M.D***Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Science, Tehran, Iran.***Karim Mowla, M.D***Associate Professor of Rheumatology, Ahvaz Jundishapour University of Medical Sciences, Ahvaz, Iran.***S2-1 Peri-arthritis of the hip****Alireza Khabbazi, M.D***Associate Professor of Rheumatology, Tabriz University of Medical Sciences, Tabriz, Iran.***S2-2 Peri-arthritis of the Ankle joint****Asghar Hajiabbasi, M.D***Associate professor of Rheumatology, Gilan University of Medical Sciences, Gilan, Iran.*

**S2-3 Peri-arthritis of the foot****Seyed Reza Najafizadeh, M.D***Associate professor of Rheumatology, Tehran University of Medical Science, Tehran, Iran.***Panel for Questions and Answers**13:00-14:00 **Prayers and Lunch Break**14:00-15:30 **Scientific Session 3-Sjogren & IgG4 related disorders****Co-Chairs:** Mohammad mahdi Emam, M.D-Zahra Zakeri, M.D**Mohammad mahdi Emam, M.D***Assistant of Rheumatology, Loghman hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran.***Zahra Zakeri, M.D***Professor of Rheumatology, Department of Internal Medicine, Shahid Labbafinejad Medical Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.***Arman Ahmadzadeh, M.D***Associate professor of Rheumatology, Loghman hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran.***S3-1 Sign and Symptoms of IgG4-related Diseases.****Saeedeh Aryanian, M.D***Associate Professor of Rheumatology, Loghman hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran.***S3-2 Treatment of IgG4-Related Diseases****Mohammadmahdi Emam, M.D***Assistant Professor of Rheumatology, Shahid Beheshti University of Medical Sciences, Tehran, Iran.***S3-3 Updates of Sjogren****Alireza Rajaei, M.D***Associate Professor of Rheumatology, Loghman hospital, Shaheed Beheshti University of Medical Sciences, Tehran, Iran.***Panel for Questions and Answers**15:30-17:30 **Workshop 1 – Capillaroscopy****Saeedeh Shenavandeh, M.D***Associate Professor of Rheumatology, Department of Internal Medicine, Division of Rheumatology, Shiraz University of Medical Sciences, Shiraz, Iran.****Thursday, November 29***8:30-10:30 **Scientific Session 4– Rheumatoid Arthritis****Co-Chairs:** Nahid Kianmehr, M.D - Zhaleh Shariati Sarabi, M.D**Nahid Kianmehr, M.D***Associate Professor of Rheumatology, Iran University of Medical Science, Tehran, Iran.***Zhaleh Shariati Sarabi M.D***Professor of Rheumatology, Rheumatology division, Internal Medicine Department, Mashhad School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.***S4-1 Eraly RA****Hossein Shayan Moghadam, M.D.***Assistant Professor of Rheumatology, Kerman University of Medical Sciences, Kerman, Iran.*

**S4-2 Lung Involvement in RA****Siavash Kouranifar, M.D***Pulmonologist, Department of Interventional Pulmonology, Iran University of Medical Sciences, Tehran, Iran.***S4-3 Eye involvement in RA****Masoumeh Sajjadi, M.D.***Research Center of Farabi Eye Hospital, Tehran University of Medical Sciences, Tehran, Iran***S4-4 Management of RA in pregnancy and lactation****Ali Javadzadeh, M.D***Professor of Rheumatology, Iran University of Medical Science, Tehran, Iran***Panel for Questions and Answers**10:30-11:00 **Poster presentation and Coffee Break**11:00-12:00 **Scientific Session 5-Oral Presentations****Co-Chairs:** Maryam Sahebari, M.D - Mahdi Mahmoudi, PHD**Maryam Sahebari, M.D***Associate Professor of Rheumatology, Rheumatic Diseases Research Center, Mashhad University of Medical Sciences, Mashhad, Iran.***Mahdi Mahmoudi, PHD***Rheumatology Research Center, Tehran University of Medical Sciences, Tehran, Iran.***S5-1 Behcet's Disease In Iran; From The Iran Registry On 7500 Cases****Fereydoun Davatchi, M.D***Professor of Rheumatology, Rheumatology Research Center, Shariati Hospital, Tehran University of Medical Sciences, Tehran, Iran.***S5-2 Intra-articular Implantation of Autologous Bone Marrow-Derived Mesenchymal Stromal Cells in Rheumatoid Arthritis Patients having a knee Osteoarthritis: A Randomized Triple Blind Placebo Controlled Clinical Trial****Soraya Shadmanfar, M.D***Health Management Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran.***S5-3 Circulating proinflammatory cytokines as the blood markers of treatment efficacy in cognitive behavioral therapy of fibromyalgia patients: a randomized clinical trial****Mozhdeh Zabihyeganeh, M.D.***Bone and Joint Reconstruction Research Center, Shafa Orthopedic Hospital, Iran University of Medical Sciences, Tehran, Iran.***S5-4 A Comparison of The Effect Of Avocado–Soybean Versus Celecoxib On Serum Levels Of Cartilage Oligomeric Matrix Protein (COMP) In Patients With Knee Osteoarthritis****Mohammad Hassan Jokar, M.D***Professor Of Rheumatology Interanal Medicine Department, Emam Reza Hospital, Mashhad University of Medical Sciences, Mashhad, Iran.***S5-5 The Association of the Delta Finger to Palm Distance and Modified Rodnan Skin Score in Systemic Sclerosis: a Longitudinal Study in Iran****Hoda Kavosi, M.D***Assistant Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Sciences, Tehran, Iran***S5-6 Microbiome in Synovial fluids of Rheumatoid arthritis Patients****Ramezanali Ataei, M.D***MSc Student in Department of Medical Microbiology, Faculty of Medicine, Baqiyatallah University of Medical Sciences, Tehran, Iran.*12:00-13:00 **Annual Meeting of Iranian Rheumatology Association**

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

14:00-15:30 **Scientific Session 6– Heart and Lung involvement in Scleroderma**

**Co-Chair:** Farhad Gharibdoust, M.D - Hadi Pourmoghim, M.D

**Farhad Gharibdoust, M.D**

*Professor of Rheumatology, Tehran University of Medical Sciences, Tehran, Iran.*

**Hadi Pourmoghim, M.D**

*Associate Professor of Rheumatology, Iran University of Medical Sciences, Tehran, Iran.*

**Mohammadali Nazarinia, M.D**

*Professor of Rheumatology, Shiraz University of Medical Sciences, Shiraz, Iran.*

**Zahra Mirfeizi, M.D**

*Associate Profesoor of Rheumatology, Rheumatology division, Internal Medicine Department, Mashhad University of Medical Sciences, Mashhad, Iran.*

**Peyman Motaghi, M.D**

*Associate Professor of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran.*

**S6-1 interstitial lung involvement in scleroderma**

**Hoda Kavousi, M.D**

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

**S6-2 Pulmonary Hypertension in scleroderma**

**Faraneh Farsad, M.D.**

*Assistant Professor of Rheumatology, Shahid Beheshti University of Medical Sciences, Tehran, Iran.*

**S6-3 Heart in Scleroderma**

**Zahra Javadzadeh, M.D**

*Specialist in internal medicine with subspecialty of cardiology, Honored faculty member of Rheumatology Research Center, Shariati Hospital, Tehran, Iran.*

**Panel for Questions and Answers**

16:00-18:00 **Workshop2: Bone Densitometry**

**Alireza Rajaei, M.D.**

*Associate Professor of Rheumatology, Shahid Beheshti University of Medical Sciences, Tehran, Iran*

## ***Friday, November 30***

8:30-10:00 **Scientific Session 7 - Management of Transmission of Children with Rheumatic Diseases from children's to adult care system**

**Co-Chairs:** Vahid Ziaee, M.D - GholamAli Nasseh, M.D - Yahya Aghighi, M.D

**Vahid Ziaee, M.D**

*Assistant Professor of Pediatric Rheumatology, Tehran University of Medical Sciences, Tehran, Iran.*

**GholamAli Nasseh, M.D**

*Professor of Pediatrics, Mashhad University Medical Sciences, Teharn, Iran.*

**Yahya Aghighi, MD**

*Professor of Pediatrics, Tehran University Medical Sciences, Tehran, Iran.*

**S7-1 Difference in childhood and adolescent care in rheumatologic diseases**

**Reza Shiari, M.D**

*Associate Professor of Pediatric Rheumatology, Shahid Beheshti University of Medical Sciences, Tehran, Iran.*

**S7-2 Time and type of transmission****Vahid Ziaee, M.D***Assistant Professor of Pediatric Rheumatology, Tehran University of Medical Sciences, Tehran, Iran.***S7-3 Duties of adult and childhood rheumatologists in joint clinics****Fahrad Salehzadeh, M.D***Professor in Pediatric Rheumatology, Pediatric Department, Ardabil University of Medical Sciences (ARUMS)***S7-4 Special measures and assessments of the adult rheumatologist in the treatment of young people with rheumatologic diseases****Mohammad hassan Jokar, M.D***Interanal Medicine Department, Emam Reza Hospital, Mashhad University of Medical Sciences, Mashhad, Iran.***S7-5 Specific Considerations of Common Diseases ( JIA, SLE, Dermatomyositis) in Transition to Adult Services****Peyman Sadeghi, M.D***Assistant professor of Pediatric Rheumatologist, Department of Pediatrics, Tehran University of Medical Sciences, Tehran, Iran.***Panel for Questions and Answers**10:00-10:30 **Coffee Break and poster presentation**10:30-12:30 **Scientific Session 8-Vasculitis and Dermatologic Manifestations****Co-Chairs:** Fereydoun Davatchi, M.D - Farhad Shahram, M.D**Fereydoun Davatchi, M.D***Professor of Rheumatology, Rheumatology Research Center, Tehran University of Medical Science, Tehran, Iran***Farhad Shahram, M.D***Professor of Rheumatology, Rheumatology Research center, Tehran University of Medical Science, Tehran, Iran***S8-1 Introduction****Farhad Shahram, M.D***Professor of Rheumatology, Rheumatology Research center, Tehran University of Medical Science, Tehran, Iran***S8-2 Differential Diagnosis****Zahra Ghodsi, M.D***Professor of Dermatology, Razi Hospital, Bullous Diseases Research Center, Tehran University of Medical Sciences.**Shariati Hospital, Rheumatology Research Center, Tehran University of Medical Sciences. Tehran. Iran***S8-3 Diagnostic Approach****Hosein Soleimani Salehabadi, M.D.***Associate Professor of Rheumatology, Yazd University of Medical Sciences, Yazd, Iran***S8-4 Therapeutic Approach****Zahra Rezaieyazdi, M.D.***Professor of Rheumatology, Mashhad University of Medical Science, Mashhad, Iran***Panel for Questions and Answers**

## POSTER PRESENTATIONS

### Wednesday, November 28

#### **P1-1 The relationship between clinical findings of low back pain and magnetic resonance imaging results**

Mohsen G. Soroush<sup>1\*</sup>, Babak Shekarchi<sup>2</sup>, Mehdi Anari<sup>3</sup>

<sup>1</sup>Associate professor of Rheumatology, Department of Rheumatology, School of Medicine, AJA University of medical sciences, Tehran, Iran.

<sup>2</sup>Associate Professor of Radiology, Department of Radiology, School of Medicine, AJA University of University of Medical Sciences, Tehran, Iran.

<sup>3</sup>Internist, internal medicine section, School of Medicine, AJA University of medical sciences, Tehran, Iran.

E-mail: mohsensoroosh@gmail.com

#### **P1-2 Is there any association between vitamin d deficiency & plantar fasciitis?**

Sasan Fallahi<sup>1,2\*</sup>, Armin Tafazoli Moghadam<sup>3</sup>, Samaneh Akbarpour<sup>4</sup>

<sup>1</sup>Assistant professor of Rheumatology, Internal Medicine Division, Baharloo Hospital, Tehran University of Medical Sciences, Tehran, Iran.

<sup>2</sup>Rheumatology research center, Tehran University of Medical Sciences, Tehran, Iran.

<sup>3</sup>General practitioner, Internal Medicine Division, Baharloo Hospital, Tehran University of Medical Sciences, Tehran, Iran.

<sup>4</sup>Epidemiologist, Occupational Sleep Research Center, Tehran University of Medical Sciences, Tehran, Iran.

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#### **P1-3 Association of Cytokine Profile and Brucellosis Arthritis, Spondylitis, and Sacroillitis**

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#### **P1-4 Serum Markers of Systemic Inflammation and Their Correlation With Local Synovitis in Patients With Knee Osteoarthritis**

Mansour Babaei<sup>1,2,3\*</sup>, Yahya Javadian<sup>4</sup>, Behzad Heidari<sup>1,2</sup>, Hossein Narimani<sup>5</sup>, Hossein Basereh<sup>5</sup>, Alireza Firouzjahi<sup>6</sup>, Mohammad Ranaei<sup>2,6</sup>, Hemat Gholinia<sup>2</sup>

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**P1-5 Effects of Savory Extracts on the Production of Nitric Oxide and Inflammatory Mediators in Macrophages**

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**P1-6 A Comparative Study on the Influence of Kinesio Taping<sup>®</sup> and Laser Therapy on Knee Joint Position Sense, Pain Intensity, and Function in Individuals with Knee Osteoarthritis**

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**P1-7 Evaluation of Serum APRIL Levels in Rheumatoid Arthritis, Vitiligo and Scleroderma Autoimmune Diseases**

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**P1-8 Therapeutic Effect of Carvacrol-loaded Bovine Serum Albumin Nanoparticles on Adjuvant-induced Arthritis in Rat**

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**P1-9 Evaluation of Inflammatory (IL-6, TNF- $\alpha$ ) and T helper17- (IL-17, IL-23)/T regulatory cells- (IL-10, TGF- $\beta$ ) Related Cytokines Balance in Cutaneous Lupus Erythematosus and its Association with Clinical Signs in Southern Iran**

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**P1-10 Association between Selenium Deficiency and Collagen Vascular Diseases: A Systematic Review**

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**P1-11 Effectiveness of stability exercise on disability and pain of chronic non specific low back pain**

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- P1-12 The Relationship of Asymptomatic Generalized Joint Hypermobility with the Demographic Characteristics in School Students in Tabriz City Since 1396 to 1397**  
Rezaei M<sup>\*1</sup>, Beikzadeh A<sup>2</sup>, Moghadam-Salimi M<sup>1</sup>, Jahan A<sup>3</sup>  
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- P1-13 Compliance of Patients with Ankylosing Spondylitis**  
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- P1-14 Effects of the Pomegranates Peel Extract Supplementation on Serum hs-CRP and Lipid Profiles in Women with Knee Osteoarthritis**  
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- P1-15 Effectiveness of Topical Trinitrate Glyceryl (TNG) in the Treatment of Tennis Elbow: a Randomized Clinical Trial**  
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- P1-16 Association of Anti CCP with ILD in Patients with Rheumatoid Arthritis Attending to Rheumatology clinic of Islamic Azad University Hospitals in 2014-16**  
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- P1-17 The First Case of Adult-Onset Periodic Fever, Aphthous Stomatitis, Pharyngitis, and Adenitis Syndrome with Splenomegaly in Iran**  
Adult-Onset PFAPA with Splenomegaly in Iran  
Shahla Abolghasemi<sup>1</sup>, Hesam Adin Atashi<sup>2\*</sup>, Elahe Paydar Tali<sup>2</sup>, Maedeh Olya<sup>2</sup>, Hamid Zaferani Arani<sup>2</sup>  
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- P1-18 The Effect of Elaeagnus Angustifolia Fruit Extract on Arthralgia Pain in Patients with Rheumatoid Arthritis Referring to the Clinic of the Iranian Rheumatism Center in 2015-16**  
Shahla Abolghasemi<sup>1</sup>, Hesam Adin Atashi<sup>2\*</sup>, Hamid Zaferani Arani<sup>2</sup>  
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**P1-19 A Collaborative Approach for Preparation and Implementation of Standard Protocols on Rheumatologic Drugs**

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**P1-20 Shoulder Muscle Activation in Female with Generalized Joint Laxity**

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**P1-21 Effects of Ostrich Oil on Knee Osteoarthritis**

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**P1-22 Evaluation and Comparing Bone Mineral Densitometry in Chemical Victims and Patients with COPD with Control Group**

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**P1-23 Bone Mass Density and its relationship with Nutritional Status in postmenopausal women**

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### **Thursday, November 29**

**P2-1 Evaluation of Left Ventricular Function in PolyMyositis and Dermatomyositis patients using Global Longitudinal Strain (GLS) by Two Dimensional Speckle Tracking Echocardiography**

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**P2-2 Medication adherence of patients with Systemic Lupus Erythematosus and patients with Rheumatoid Arthritis considering the psychosocial factors, Health Literacy and Current Life Concerns of Patients**

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**P2-3 The Association Assessment of Interleukin-10 Gene Promoter Polymorphisms and Haplotypes with the Activity of Systemic Lupus Erythematosus and IL-10 Levels in an Iranian Population**

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**P2-4 Effect of Nigella Sativa Oil on Behcet's Disease Activity Index**

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**P2-5 Cigarette Smoking and Risk of Primary Systemic Vasculitis: A Propensity Score Matching Analysis**

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**P2-6 Effects of N-acetylcysteine On Pulmonary Functions in Patients with Systemic Sclerosis: A Double Blind, Placebo Controlled Study**

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**P2-7 Could ESR and CRP be related to the disease's activity and its type of manifestations in Behcet's Disease? Study on 516 Iranian patients**

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**P2-8 AntiInflammatory Effects of Different Statins in Rheumatoid Arthritis: A Randomized Double-Blind Controlled Clinical Trial**

Mansour Karimifar<sup>1</sup>, Mansour Salesi<sup>1</sup>, Rasoul Ghasemian<sup>2\*</sup>, Mozhgan Karimifar<sup>3</sup>, Ziba Farajzadegan<sup>4</sup>, Mohammad Gholamnezhad<sup>5</sup>

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**P2-9 Evaluation of serum level of soluble LAG-3 in patients with Rheumatoid Arthritis**

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**P2-10 A Randomized, Double-blind, Placebo-controlled Clinical Trial Examining the Effects of Green Tea Extract on Systemic Lupus Erythematosus Disease Activity and And Some Inflammatory Biomarkers .**

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**P2-11 Differential expression of vitamin D associated genes in the aorta of coronary artery disease patients with and without rheumatoid arthritis**

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**P2-12 Evaluating the relationship between serum level of interleukin-6 and rheumatoid arthritis severity and disease activity**

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**P2-13 The Immediate Pain Relieving Effects of Non-Thermal CO2 Laser Therapy (NTCLT) on Oral Aphthous Ulcers Of Behcet's Disease: A Pilot Study**

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**P2-14 The correlation between serum IL-10 and TGF- $\beta$  with Disease Activity in the newly diagnosed rheumatoid arthritis patients**

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**P2-15 Prevalence of periodontitis in patients with systemic lupus erythematosus**Peyman Aghaei<sup>1</sup>, Nafiseh Abdolahi (M.D)<sup>2\*</sup>, Haleh Zokaei<sup>2</sup>, Mehrdad Aghaei (M.D)<sup>3</sup><sup>1</sup>General practitioner, Clinical Research Development Unit, Sayyad Shirazi Hospital, Golestan University of Medical Sciences, Gorgan, Iran.<sup>2</sup>Assistant Professor, Rhumatology Research Center, Golestan University of Medical Sciences, Gorgan, Iran<sup>3</sup>Associate Professor, Rhumatology Research Center, Golestan University of Medical Sciences, Gorgan, Iran

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**P2-16 FcγRIIB and IIIA Gene Polymorphisms and its association with Systemic Lupus Erythematosus Disease activity Index (SLEDAI) in****Isfahan**Karimifar Mansoor<sup>1</sup>, Karimzadeh Hadi<sup>2</sup>, Akbari Khosro<sup>3\*</sup>, Faragzadegan Ziba<sup>4</sup>, Moosaeepour Mohammad<sup>5</sup>, Fathi Farshid<sup>6</sup><sup>1</sup>Department of Internal Medicine, Isfahan Bone Metabolic Disorders Research Center, school of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran<sup>2</sup>Department of Internal Medicine, Isfahan Bone Metabolic Disorders Research Center, school of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran<sup>3</sup>Department of Internal Medicine, Isfahan Bone Metabolic Disorders Research Center, school of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran<sup>4</sup>Department of community and preventive medicine. Isfahan University of Medical Sciences, Isfahan, Iran.<sup>5</sup>Biology Department, Ashrafi Esfahani University, Isfahan, Iran.<sup>6</sup>PhD candidate in Medical Immunology Isfahan University of of Medcal Sciencs, Isfahan, Iran.

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**P2-17 Occupational Therapy in Scleroderma**

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**P2-18 Determination of ANCA frequency in patient with systemic lupus erythematus and its association with disease activating**Navid Rahimi<sup>1</sup>, Nafiseh Abdolahi (M.D)<sup>2\*</sup>, Mehrdad Aghae (M.D)<sup>3</sup>, Atefeh Rezaeifar (M.D)<sup>4</sup><sup>1</sup>Medical Student, Student Research Committee, Golestan University of Medical Sciences, Gorgan, Iran.<sup>2</sup>Assistant Professor, Rhumatology Research Center, Golestan University of Medical Sciences, Gorgan, Iran<sup>3</sup>Associate Professor, Rhumatology Research Center, Golestan University of Medical Sciences, Gorgan, Iran<sup>4</sup>Internist, Clinical Research Development Unit, Sayyad Shirazi Hospital, Golestan University of Medical Sciences, Gorgan, Iran.

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**P2-19 Demographic Characteristics in Patients with Rheumatoid Arthritis in Khouzestan, Ahvaz, Iran**Elham Rajaei<sup>1</sup>, Samaneh Delavari<sup>2,3,4\*</sup>, Mehrdad Dargahi Malamir<sup>1</sup>, Mehri Ghafourian<sup>2</sup>, Fatemeh Javanmardi<sup>5</sup>, Ata Ghadiri<sup>3,4</sup><sup>1</sup>Department of Rheumatology, School of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran<sup>2</sup>Student Research of Committee, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran<sup>3</sup>Department of Immunology, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran<sup>4</sup>Cellular and Molecular Research Center, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

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**P2-20 New Onset Systemic Lupus Erythematosus Presenting with Massive Pericardial Effusion**

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# ORAL PRESENTATIONS



S1-1**Behcet's Disease In Iran; From The Iran Registry On 7500 Cases**

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**Aim:** To analyze Behcet's Disease (BD) in Iran, from 1975 to 2017, from the Iran Registry

**Methods:** Patients from all over Iran, when suspected, were sent to the BD Unit. The diagnosis was done by expert opinion (systematic collaboration of a Rheumatologist, a Dermatologist, and an Ophthalmologist). Other subspecialists were consulted when needed. The patients' data were recorded in the BD registry (updated at each follow-up). The data are given in percentage with 95% confidence Intervals (95%CI).

**Results:** The mean age at onset was 25.7 years. Standard Deviation (SD) was 9.8. The mean disease duration was 11.8 years (SD: 8.9). Males were 55.6% (54.5-56.7), Females 44.4% (43.3-45.5), the male to female ratio was 1.25/1. Oral Aphthosis 97.5% (97.1-97.9), genital aphthosis 64.7% (63.6-65.8), skin lesions 62.9% (61.8-64.0), ocular lesions 55.4% (54.3-56.5), Joint Manifestations 38.5% (37.4-39.6), Gastrointestinal 6.9% (6.3-7.5), Vascular 8.8% (8.2-9.4), neurological (central-peripheral) 3.9% (3.5-4.3), epididymitis 4.6% (4.1-5.1). Lab tests were positive pathergy test 50.8% (49.7-51.9), elevated ESR 51.6% (50.1-53.1), abnormal urinalysis 17.9% (17.0-18.8). The International Study Group (ISG, 1990) criteria and the International Criteria for Behcet's Disease (ICBD, 2014) had respectively a sensitivity of 76.8% (75.8-77.8) and 96.8% (96.4-97.2). The specificity was 99.3% (99.1-99.5) and 97.3% (96.9-97.7). The accuracy was 86.7% (86.1-87.3) and 97.0% (96.7-97.3). The ethnicity of BD patients were Caucasians 60% (56.6-58.9), East Asian (Turks) 39% (37.8-40.1), and Semites 1% (0.8-1.3).

**Conclusion:** Males were involved more frequently than females. The most frequent manifestations were oral aphthosis (97.5%), genital aphthosis (64.7%), skin manifestations (62.9%), and ocular manifestations (55.4%).

**Keywords:** Adamantiades-Behcet's Disease, Behcet's syndrome, Vasculitides, Clinical aspects (Vasculitides)

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S1-2

## Intra-articular Implantation of Autologous Bone Marrow-Derived Mesenchymal Stromal Cells in Rheumatoid Arthritis Patients having a knee Osteoarthritis: A Randomized Triple Blind Placebo Controlled Clinical Trial

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**Objectives:** This study intends to evaluate the safety and efficacy of an intra-articular implantation of autologous bone marrow derived mesenchymal stromal cells (MSCs) into the knees of the patients diagnosed with rheumatoid arthritis having a knee osteoarthritis (RAhOA) compared to a placebo injection.

**Methods:** A total of 30 patients with RAhOA (15 in the MSC group and 15 in the placebo group) enrolled in this randomized, placebo controlled triple-blind clinical trial. Patients were randomized to receive one intra-articular implantation of  $20 \times 10^6$  MSCs or normal saline (placebo). We assessed patients for subjective and objective factors based on physical exams and paraclinical evaluations, as well as Western Ontario and McMaster Universities Arthritis Index (WOMAC) scores, disease activity according to the Disease Activity Score for Joints-28 (DAS-28), visual analogue scale (VAS), underlying disease activity according to the amount of drug usage, erythrocyte sedimentation rate (ESR), and C-reactive protein (CRP) levels.

**Results:** Patients didn't report any adverse effects. The MSCs group reported improvements in total WOMAC scores, as well as the pain, stiffness, and physical function WOMAC subscales, time to jelling, walking distance, pain-free walking distance, standing time, reduction of underlying disease activity according to the DAS-28, and reduction in drug usage. These results were not seen in placebo group. Although because of low amount of patients, these improvements were not significant in contrast with placebo group.

**Conclusion:** Implantation of MSCs appeared to be safe and well-tolerated. There was evidence of improvement in clinical features in RAhOA patients who received the intra-articular implantation of MSCs.

**Keywords:** Rheumatoid Arthritis, Osteoarthritis, Mesenchymal, Stromal Cells, Bone Marrow

S1.3

## **Circulating proinflammatory cytokines as the blood markers of treatment efficacy in cognitive behavioral therapy of fibromyalgia patients: a randomized clinical trial**

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**Background:** Cognitive behavioral therapy (CBT) is the mainstay non-pharmacologic treatments of fibromyalgia (FM). However, there is no consensus regarding the effect size of this treatment, which could be attributed to the self-reporting assessments bias. Here we evaluated the effect of CBT on the potential blood markers of FM, namely IL-6, IL-8, and TNF- $\alpha$ .

**Methods:** In a cross-over randomized clinical trial, 29 FM patients as intervention group (CBT) and 17 FM patients as control group (waiting-list) were evaluated. The mean age of the patients was 46.6 $\pm$ 5.5 years. Traditional CBT was performed in groups of maximum 10 patients and in 20 sessions. Fibromyalgia Impact Questionnaire (FIQ) and visual analogue scale (VAS) were measured as a general estimate of the disease burden. The change of serum levels of IL-6, IL-8, and TNF- $\alpha$  in the collected samples was evaluated using ELISA.

**Results:** The mean reduction of IL-6 was significantly more in the intervention group compared with the control group ( $p=0.001$ ). The mean reduction of IL-8 was also significantly more prominent in the intervention group ( $p=0.009$ ). The mean TNF- $\alpha$  change was not significantly different between the intervention and control group ( $p=0.35$ ). No significant correlation was observed between the change of circulating cytokine levels and self-reporting measures. A positive significant correlation was found between the change of IL-6 and the number of attendance at CBT sessions ( $r=0.412$ ,  $p=0.026$ ).

**Conclusions:** The circulating concentration of proinflammatory cytokines, specifically IL-6 and IL-8, is reduced following the CBT intervention. These results further potentiate the efficacy of CBT in FM treatment.

**Keywords:** Cognitive behavioral therapy, Fibromyalgia, proinflammatory cytokines, IL-6, IL-8

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S1.4

## A Comparison Of The Effect Of Avocado–Soybean Versus Celecoxib On Serum Levels Of Cartilage Oligomeric Matrix Protein (COMP) In Patients With Knee Osteoarthritis

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**Aim:** The aim of our study was to compare the effect of a mixture of Soybean+ Avocado versus celecoxib on Cartilage Oligomeric Matrix Protein (COMP) serum level in patients with knee osteoarthritis.

**Methods:** This was a randomized controlled trial and the patients were recruited from those who attended Imam Reza Hospital, Mashhad, Iran, and had a definite diagnosis of knee osteoarthritis. The inclusion criteria were: grade I or II of Knee osteoarthritis and age 30-80 years, . Exclusion criteria were: secondary osteoarthritis, any history of intolerance to avocado, soya and celecoxib and uncontrolled hypertension. The patients were divided randomly into two groups; Group 1 (n=30) received avocado+soya (300mg daily orally) and group 2 (n=30) received celecoxib (200mg/day orally) for 2 months. At the enrollment and then every month up to 2 months patients' venous blood samples were collected to measure serum COMP.

**Results:** Before treatment, COMP serum levels were 13.9±1.4 unit/liter (u/l) and 14.5±1.4 u/l in celecoxib and soybean+avocado mixture, respectively. After the first month the serum levels of COMP were 1±12.8 u/l and 12.3±1.5 u/l in celecoxib and soybean+avocado mixture, respectively. After 2 months, the serum levels of COMP were 10.1±1.6 u/l and 9.2±1.9 u/l in celecoxib and Soybean and Avocado mixture, respectively. There was not statistically significant difference in COMP levels between the two groups in the study period. (p<0.05).

**Conclusion:** Both Avocado+soya combination and celecoxib reduce COMP serum levels, but there is no statistically significant difference in COMP serum levels between two drugs.

**Keywords:** cartilage oligomeric matrix protein, avocado, soya, celecoxib, knee osteoarthritis

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S1-5

## The Association of the Delta Finger to Palm Distance and Modified Rodnan Skin Score in Systemic Sclerosis: a Longitudinal Study in Iran

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**Aim:** Systemic sclerosis (SSc) is a collagen-vascular disorder characterized by fibrosis and vasculopathy. Delta finger to palm distance (delta FTP) is an index measuring the distance between the tip of the third finger to the distal palmar crease in the flexed and extended position. The aim of the present study was to evaluate the clinical correlation of delta FTP with modified Rodnan skin score (mRSS), forced vital capacity (FVC) and digital ulcers over the one-year follow-up.

**Methods:** This prospective longitudinal study, follow up began with 50 participants who were followed for twelve months. Lowess smoothing and linear regression were applied for detecting and assessing of the relationship between delta FTP and mRSS. Furthermore, for validity and reliability, influence statistic/longitudinal analysis and simple bootstrap resampling approach with 1000 Bootstrap samples were used.

**Results:** The mRSS has a significant negative linear effect on the delta FTP at the baseline and the end of the follow-up. Moreover, changes of mRSS and delta FTP showed a negative linear association over the time. This linear effects remained significant after regrouping the patients based on their SSc subtype. Additionally, the delta FTP was associated with digital ulcers at the baseline but not at the end of the follow-up. Delta FTP and FVC were not correlated nor at the baseline neither at the end.

**Conclusion:** It seems that the delta FTP can be a good marker and surrogate for mRSS, supported by their correlated changes over the one-year follow-up.

**Keywords:** Scleroderma, Systemic; Outcome Assessment; Tendons

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S1-6**Microbiome in Synovial fluids of Rheumatoid arthritis Patients****Gholam Hossein Alishiri<sup>1</sup>, Mohammad Reza Atae<sup>2</sup>, Seyed Reza Hashemi<sup>2</sup>, Ramezan Ali Atae<sup>2\*</sup>**<sup>1</sup>*Professor in Department of Rheumatology, Faculty of Medicine, Baqiyatallah University of Medical Sciences, Tehran, I.R. Iran.*<sup>2</sup>*M.Sc Student in Department of Medical Microbiology, Faculty of Medicine, Baqiyatallah University of Medical Sciences, Tehran, I.R. Iran.*<sup>3</sup>*Professor in Department of Medical Microbiology, Faculty of Medicine, Baqiyatallah University of Medical Sciences, Tehran, I.R. Iran.*

**Aim:** In our previous studies, several bacterial super antigens in synovial fluid of RA patients were tracked. But the major challenges were the ambiguity of originations. This study aimed was to trace the microbiome compositions in synovial fluid of RA patients.

**Methods:** In this study, one hundred SFs of RA patients stored in -80° C were evaluated. A molecular based PCR method for recognition of was analyzed for showing the presence of the bacterial genome by using the Universal primer against the 16srRNA figments. Then, Nested PCR performed and to confirm the presence of the specific gene multiplication was determined. Sequencing of PCR products and BLAST alignment analysis were done.

**Results:** The results showed that the 16srRNA pair primers amplified the related bacteria gene fragments with frequency in totally 38% universally 16srRNA genome and confirmatory sequencing. Nested PCR had clarified of the 10 percent for *Staphylococcus aureus* strains.

**Conclusion:** Based on our previous study, all SF samples were negative for bacterial growth. Although, using 16srRNA genome as universal indicator for bacterial assay showed several bacterial species including *S. aureus* in SF of RA patients. The reason for the lack of bacterial growth in SF is unknown. Furthermore, this finding is important and may be demonstrate the facts for approval the presence of VBNCs form of bacteria in SF of RA patients. However, further study is needed; the anti- VBNC therapy may be helped for RA patient's management.

**Keywords:** 16srRNA Genome, VBNC, Molecular Method, Rheumatoid arthritis and Synovial fluid

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# POSTER PRESENTATIONS



**P1-1****The relationship between clinical findings of low back pain and magnetic resonance imaging results****Mohsen G. Soroush<sup>1\*</sup>, Babak Shekarchi<sup>2</sup>, Mehdi Anari<sup>3</sup>**

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**Introduction:** A large number of patients with low back pain (LBP) refer to imaging evaluation in routine practice. Most of these patients have abnormal findings on magnetic resonance imaging (MRI). There are many reports about the poor association between symptoms and anatomical findings in MRI.

**Object:** The purpose of this study is to evaluate the relationship between clinical findings of patients with LBP and findings in reports of MRI in these patients.

**Material and methods:** We selected 710 patients with LBP that referred to the imaging center for lumbar spine MRI. We did history and physical examination for all of patients before doing MRI and after that, we compared the reports of MRI with our clinical findings.

**Results:** Mean age of referred patients was 41.2 years (18 – 90 yr). Of 79 patients with clinical diagnosis of acute lumbar disc disease, 55 cases (69.6%) had disc protrusion in MRI report. In addition, in 18 cases (22.8%) there was not any specific findings in MRI. In 268 patients we did not find any significant clinical problems, from them 72 cases (26.9%) had report of disc protrusion in MRI and in 176 patients (65.7) no specific findings were reported in MRI.

**Conclusion:** This study shows that we cannot trust to results of lumbar spine MRI in patients with low back pain and we have to first trust to our good physical examination, then request MRI in perfect indications and eventually check the results based on our clinical findings.

**Keywords:** Low back pain; magnetic resonance imaging, imaging, intervertebral disc

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P1-2

## Is There any Association Between Vitamin D Deficiency & Plantar Fasciitis?

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**Aim:** The aim of this study was to evaluate relationship of serum vitamin D level with plantar fasciitis.

**Methods:** Forty three patients with plantar fasciitis diagnosed by a rheumatologist and forty healthy people who were matched for age, sex and blood sampling season were compared for serum vitamin D levels in a case controlled study. The serum level bellow 20 ng/ml was considered as vitamin D deficiency.

**Results:** In case group, 14% and in control group, 12.5% were male and the rest were female. Mean age in the case and control group was  $45.27 \pm 11.37$  and  $44.6 \pm 9.67$  years, respectively ( $p=0.771$ ). Mean serum vitamin D level in the case and control group was  $22.51 \pm 16.62$  and  $19.13 \pm 15.01$  ng/ml, respectively ( $p=0.335$ ). In the case group, 58.1% and in the control group, 67.5% patients had vitamin D deficiency ( $p=0.496$ ). However, mean BMI was significantly higher in patients with plantar fasciitis compared with healthy individuals ( $p < 0.001$ ). Controlling the effect of probable confounding variables with multiple logistic regressions (backward) model showed no significant relationship between vitamin D and plantar fasciitis. However, BMI (odds ratio: 1.25, CI 95% for EXP(B): 1.1 to 1.43,  $p=0.001$ ) and educational level (odds ratio: 0.34, CI 95% for EXP(B): 0.17 to 0.66,  $p=0.002$ ) were the only factors associate with plantar fasciitis in this model.

**Conclusion:** No relationship found between vitamin D and plantar fasciitis. Further prospective studies are suggested for evaluating the effect of vitamin D supplementation on progression of plantar fasciitis associated with vitamin deficiency.

**Keywords:** Plantar fasciitis, Vitamin D

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**P1-3****Association of Cytokine Profile and Brucellosis Arthritis, Spondylitis, and Sacroiliitis****Nayyereh Saadati<sup>1\*</sup>, Mandana Khodashahi<sup>2</sup>, Bahram Naghibzadeh<sup>3</sup>, Rozita Khodashahi<sup>4</sup>**

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**Background:** Cytokines are produced and secreted from various cells including T cells. Cytokines play effective roles in the response elicited by the immune system. As brucella infection cause is an intracellular aerobic rod, cellular immunity plays a considerable role in this disease.

**Objective:** To compare cytokines in brucella arthritis, spondylitis, and sacroiliitis and healthy participants.

**Methods:** The current research was carried out in two academic centers in Mashhad, Iran in 2010. Forty patients with the diagnosis of brucella arthritis and lower back pain and 40 normal participants were included. The brucella was diagnosed considering history, physical examination, and serologic examinations. The cytokines interferon-gamma, interleukins 2 (IL-2) and 4 (IL-4), IL-10, and tumor necrosis factor alpha (TNF-alpha) were measured in the serum sample of both groups by ELISA method.

**Results:** IL-10 had significant difference between the brucella and healthy control subjects ( $p = 0.02$ ). However, IL-2, IL-4, and TNF-alpha were comparable between brucella and control groups ( $p = 0.1$ ). A marginal significant difference regarding interferon-gamma between the brucella patients and controls was observed ( $p = 0.05$ ).

**Conclusion:** Interferon-gamma and IL-10 levels were higher in brucella arthritis with spondylitis and sacroiliitis than in control healthy individuals.

**Keywords:** Brucella, Arthritis, Back pain, Cytokine

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**P1-4**

## **Serum Markers of Systemic Inflammation and Their Correlation With Local Synovitis in Patients With Knee Osteoarthritis**

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**Aim:** This study was conducted to determine the association between local synovitis in KOA with systemic inflammation.

**Methods:** In this study all patients aged  $\geq 40$  years with knee pain and effusion for more than one month was included. Diagnosis of KOA was made according to the American College of Rheumatology criteria and the diagnosis of synovitis was confirmed clinically and by joint aspiration. The severity of KOA was determined by the Kellgren and Lawrence grading scale and knee pain was assessed by VAS score. Subjects with coexistent local or systemic inflammatory processes, history of inflammatory arthropathies, knee joint surgery were excluded. Serum and synovial fluids (SF) were provided from all participants for measurements of high sensitive CRP (hsCRP), IL-17 and, TGF- $\beta$ .

**Results:** Forty patients (women, 65%), mean age  $65.6 \pm 8.9$  years, and mean BMI  $27.7 \pm 3.7$  kg/m<sup>2</sup>, were analysed. Mean levels of hsCRP and IL-17 SF did not differ with serum levels, but TGF- $\beta$  in SF was significantly higher than in serum ( $p = 0.001$ ). The levels of hsCRP, IL-17 and TGF- $\beta$  in SF correlated significantly with serum levels ( $r = 0.795$ ,  $p = 0.001$ ;  $r = 0.386$ ,  $p = 0.014$ ; and  $r = 0.587$ ,  $p = 0.001$  respectively). Furthermore, there was a significant correlation of SF- hsCRP with serum IL-17 ( $r = 0.464$ ,  $p = 0.003$ ) as well as with serum TGF- $\beta$  ( $r = 0.324$ ,  $p = 0.012$  respectively). Knee pain was associated with the radiographic changes

**Conclusion:** These findings confirm the presence of systemic inflammation and its correlation with local inflammation in KOA. Clinical application of systemic inflammatory markers for diagnostic or prognostic purposes requires future studies

**Keywords:** Knee osteoarthritis, C-reactive protein, Synovial Fluid, Cytokine, Correlation

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**P1-5****Effects of Savory Extracts on the Production of Nitric Oxide and Inflammatory Mediators in Macrophages****Zahra Amirghofram (PhD)<sup>1\*</sup>, Zahra Farzaneh (MSc)<sup>2</sup>, Korush Kalantar (PhD)<sup>2</sup>**<sup>1</sup>*Autoimmune diseases research center, shiraz university of medical sciences, Shiraz, Iran.*<sup>2</sup>*Immunology department, Shiraz university of medical sciences, Shiraz, Iran.*

**Aim:** Savory (*Satureja hortensis*) is a medicinal plant used in folk medicine for various purposes including its anti-inflammatory effects. In the present study, we investigated the anti-inflammatory effect of Savory extracts on macrophages as one of the main cells involved in inflammation.

**Methods:** J774.1 mouse macrophages were stimulated with lipopolysaccharide (LPS) and treated by various extracts of *Satureja hortensis*. We examined the macrophages for nitric oxide (NO) production using the colorimetric assay followed by real time-PCR for gene expressions and ELISA for cytokine levels. Flow cytometry was used for measuring the surface expression of intercellular adhesion molecule (ICAM)-1.

**Results:** Dichloromethane and hexane extracts more efficiently reduced NO production at non-cytotoxic concentrations compared to the aqueous and butanol extracts. The hexane and dichloromethane extracts at 25 µg/ml significantly decreased NO release compared to the control ( $p < 0.05$ ). At this concentration dichloromethane extract reduced the IL-6 protein level to less than 79% and the hexane extract to approximately 50% of the control. The IL-1 $\beta$  level decreased to  $62.5 \pm 14.6\%$  (dichloromethane) and  $36.7 \pm 24.3\%$  (hexane). Both extracts at all concentrations decreased gene expressions of inducible NO synthase (iNOS) ( $< 0.44$  fold of control), cyclooxygenase (COX)-2 ( $< 0.29$  fold), interleukin (IL)-1 $\beta$  ( $< 0.41$  fold), IL-6 ( $< 0.25$  fold) and tumor necrosis factor (TNF)- $\alpha$  ( $< 0.2$  fold). These extracts also decreased ICAM-1 fluorescent intensity of expression compared to the control.

**Conclusion:** The inhibitory effects of *Satureja hortensis* extracts on the release of inflammatory mediators and their expression in macrophages may suggest the presence of useful anti-inflammatory compound(s) in this plant.

**Keywords:** Savory; Anti-inflammatory effect; Macrophages

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P1-6

## **A Comparative Study on the Influence of Kinesio Taping<sup>®</sup> and Laser Therapy on Knee Joint Position Sense, Pain Intensity, and Function in Individuals with Knee Osteoarthritis**

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**Aims:** Conservative rehabilitation methods are assumed as a fundamental part of treatment in patients with knee osteoarthritis (OA). The objective was to investigate the influence of Kinesio Taping<sup>®</sup> (KT<sup>®</sup>) and low level laser therapy (LT) on pain intensity, function, and knee joint position sense (JPS) in such patients.

**Methods:** Twenty-six male patients (Mean±SD of age:48.5±4.6 years) with unilateral knee OA were randomly divided in to two groups of KT<sup>®</sup> (N=13) and LT (N=13). Both groups followed their own specific therapeutic protocol in addition to routine physiotherapy program for 10 sessions. The outcome measurements included pain intensity, function, and knee JPS; which were evaluated using visual analogue scale, 'Up and Go test', and reproduction of target angle at baseline and after completing the interventions; respectively.

**Results:** Both methods can significantly improve pain intensity, reduce the time to perform 'Up and Go test', and reduce the angle reproduction error of 60° knee flexion (P<0.001). Mean difference for target angle reproduction error was more significant in KT group compared to LT group (P<0.001); while no significant mean difference was found for other measurements (P>0.05).

**Conclusion:** KT<sup>®</sup> and low level laser can improve pain, knee JPS, and function in clients with knee OA; however there is better effect of KT<sup>®</sup> on knee JPS.

**Keywords:** Kinesio Taping<sup>®</sup>; Laser; Knee Osteoarthritis; Function; Physical Therapy.

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**P1-7****Evaluation of Serum APRIL Levels in Rheumatoid Arthritis, Vitiligo and Scleroderma Autoimmune Diseases****Nasser Gholijani<sup>1\*</sup>, Mohammad-Reza Yazdani<sup>1</sup>**<sup>1</sup>*Autoimmune Diseases Research Center, Shiraz University of Medical Sciences, Shiraz, Iran.*<sup>2</sup>*Department of Immunology, Shiraz University of Medical Sciences, Shiraz, Iran.*

**Aim:** T cells, B cells and the coordinated interaction of cytokines play essential roles in the pathophysiology of autoimmune diseases. A proliferation-induced ligand (APRIL), produced by many of immune cells, as a cytokine has important roles in the pathogenesis of autoimmune diseases and APRIL inhibitors are in clinical trials for systemic lupus erythematosus treatment. So the aim of this study was to evaluate the sera levels of APRIL in Rheumatoid arthritis (RA), vitiligo and scleroderma patients and to compare its levels with various clinical complications in order to suggest the use of APRIL inhibitors to treat these autoimmune diseases.

**Methods:** Eighty eight patients were selected for each of the three diseases. Also 88 sera from sex and aged matched individuals are used as normal control samples. The sera levels of APRIL were assessed by ELISA kit according to manufacturer recommendation.

**Results:** Among RA, vitiligo and scleroderma diseases, only the levels of APRIL were significantly higher in RA patients than control individuals ( $P < 0.0001$ ), vitiligo ( $P < 0.0001$ ) and scleroderma patients ( $P = 0.001$ ). The levels of APRIL were significantly lower in RA patients that they had previous prednisolone ( $p = 0.009$ ) or other NSAIDs ( $p = 0.05$ ) medications. Also positive correlations have seen between APRIL levels and joint erosion ( $p = 0.05$ ) and CRP titer ( $p = 0.04$ ) in RA patients.

**Conclusion:** Among RA, vitiligo and scleroderma diseases, APRIL is probably responsible in part for RA pathogenesis and joint erosion. So targeting of this cytokine activity can improve the RA treatment strategy and may open novel guideline for RA treatment.

**Keywords:** Autoimmune diseases, A proliferation-induced ligand (APRIL), Rheumatoid arthritis (RA), Vitiligo, Scleroderma

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**P1-8**

## **Therapeutic Effect of Carvacrol-loaded Bovine Serum Albumin Nanoparticles on Adjuvant-induced Arthritis in Rat**

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**Aim:** Rheumatoid arthritis (RA) is one of the most common autoimmune diseases. Carvacrol, an important natural terpenoid product in aromatic plants such as thyme, has shown anti-inflammatory effects in animal models of arthritis. However, its poor water solubility and high volatility has limited its application. In the present study in order to overcome this problem we encapsulated carvacrol in bovine serum albumin (BSA) nanoparticles and examined its therapeutic and immunomodulatory effects in adjuvant-induced arthritis (AIA).

**Methods:** Arthritis was induced in Sprague Dawley rats by a single subcutaneous injection of complete Freund's adjuvant in the base of the tail. Carvacrol-loaded BSA nanoparticles were prepared by desolvation method. Nanoparticles had encapsulation efficiency (EE) of  $67.7 \pm 6.9\%$  and loading capacity (LC) of  $26.6 \pm 2\%$ . The size of particles was  $148 \pm 25$  nm and they had monomodal distribution. After arthritis induction, rats were treated intraperitoneally with nanoparticle for every 3 days until day 28.

**Results:** Treatment of rats with 360mg/ml carvacrol-loaded BSA nanoparticle significantly decreased clinical severity score ( $27.5 \pm 26\%$ ,  $p=0.008$ ), erythrocyte sedimentation rate ( $33.4 \pm 26.6\%$ ,  $p=0.02$ ), nitric oxide production ( $82.3 \pm 5.2\%$ ,  $p=0.004$ ) and interleukin (IL)-17 gene expression ( $42.2 \pm 0.37\%$ ,  $p=0.005$ ) compared to untreated arthritic group. A higher reduction in inflammation severity in arthritic rats treated with carvacrol-loaded BSA in comparison to those treated with carvacrol alone was observed.

**Conclusion:** Encapsulation of carvacrol in nanoparticles reduced arthritis signs and release of NO and IL-17 inflammatory cytokine and therefore is suggested to be considered as a good approach for improving the therapeutic applications of carvacrol in RA.

**Keywords:** Carvacrol, Albumin nanoparticles, Adjuvant induced arthritis

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**P1-9****Evaluation of Inflammatory (IL-6, TNF- $\alpha$ ) and T helper17- (IL-17, IL-23)/T regulatory cells- (IL-10, TGF- $\beta$ ) Related Cytokines Balance in Cutaneous Lupus Erythematosus and its Association with Clinical Signs in Southern Iran****Nasser Gholijani<sup>1</sup>, Mohammad-Reza Yazdani<sup>1</sup>***<sup>1</sup>Autoimmune Diseases Research Center, Shiraz University of Medical Sciences, Shiraz, Iran.*

**Aim:** Cutaneous lupus erythematosus (CLE) is a common manifestation among systemic lupus erythematosus patients. Malar rash and discoid lupus (DLE) are in the category of acute and chronic CLE respectively. The pathogenesis of CLE is multifactorial, and cytokine imbalances contribute to immune dysfunction and induction of organ damage. So, we concurrently measured the inflammatory (TNF- $\alpha$ , IL-6)-, Th-17 (IL-17, IL-23) - and regulatory T cells (TGF- $\beta$ , IL-10) - related cytokines in patients with cutaneous LE (patients with malar rash and/or discoid lupus) and compared them with SLE patients and healthy individuals.

**Methods:** Fifty cutaneous lupus erythematosus and twenty-five systemic lupus erythematosus patients without skin involvement were selected. Also twenty-six sera from sex and aged matched individuals are used as normal control samples. The sera levels of IL-6, IL-10, IL-17, IL-23, TNF- $\alpha$  and TGF- $\beta$  cytokines were assessed by ELISA kit according to manufacturer recommendation.

**Results:** IL-6 cytokine was significantly higher in SLE, DLE and malar rash patients compared to those in healthy controls ( $p=0.025$ ). In the case of T helper 17 (Th17)-related cytokines, IL-17 was significantly higher in malar rash patients compared to normal individuals ( $p=0.023$ ), SLE ( $p=0.008$ ) and DLE patients ( $p=0.019$ ) but, IL-23 was significantly higher only in DLE patients than healthy controls ( $p=0.019$ ).

**Conclusion:** Inflammatory cytokines such as IL-6 involving in inflammation and differentiation of Th17 cells, are probably responsible in part for Th17 activity in CLE. So targeting of these cytokines activity pathways can improve the CLE treatment strategy and may open novel guideline for SLE and CLE treatment.

**Keywords:** Cutaneous lupus erythematosus (CLE), T helper17 (Th17), Regulatory T cells, inflammatory cytokines

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**P1-10**

## **Association between Selenium Deficiency and Collagen Vascular Diseases: A Systematic Review**

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**Aim:** The present study aimed to evaluate the role of selenium in autoimmune rheumatic diseases.

**Methods:** In this systematic review, the articles were evaluated through searching PubMed, Scopus, Science Direct, and Google Scholar. All the full text English-language articles published between 1980 and the first week of August 2018 in which patients with collagen vascular diseases were managed by selenium or their selenium levels was compared to healthy controls were included.

**Results:** Of 312 articles, 280 were excluded and 32 articles were entered in this study. Based on the majority of studies assessing selenium level in patients with collagen vascular diseases, lower selenium levels were observed in these patients. Moreover, the majority of articles showed an improvement in clinical symptoms of collagen vascular diseases compared to controls after the treatment of patients with different dosages of L-selenomethionine.

**Conclusion:** A decrease in the serum level of selenium was noted in patients with autoimmune diseases, which may be a risk factor for inflammation and initiation of autoimmunity in these patients. A sufficient quantity of selenium has been shown to contribute to the management of complications of autoimmune diseases and even improved survival in patients with autoimmune diseases, which may be due to the anti-inflammatory effects of selenium. Since this issue is of clinical importance, it can be considered in potential nutrition interventions and have beneficial effects on some autoimmune diseases.

**Keywords:** Selenium, Collagen vascular diseases, Trace elements, Rheumatoid arthritis, Systemic lupus erythematosus

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**P1-11****Effectiveness of stability exercise on disability and pain of chronic non specific low back pain****Alireza Sadeghi\*<sup>1</sup>, Nima Motamed<sup>2</sup>, Rezvane Najafi<sup>3</sup>, Fateme Sangtarash<sup>4</sup>**<sup>1</sup>*Department of Internal Medicine, Rheumatologist, Zanjan University of Medical Sciences, Zanjan, Iran.*<sup>2</sup>*Department of Social Medicine, Zanjan University of Medical Sciences, Zanjan Iran.*<sup>3</sup>*Medical Doctor, Zanjan University of Medical Sciences, Zanjan Iran.*<sup>4</sup>*Clinic of Physiotherapy, Zanjan University of Medical Sciences, Zanjan Iran.*

**Aim:** Chronic non-specific low back pain is the most common cause of disability and absence from work. Although a various ways of therapeutic approaches were applied to treat this condition, the effectiveness of them was not confirmed. The exercise is currently a main approach to reduce the related signs and symptoms of LBP. This study was carried out to evaluate the effectiveness of stability exercise on associated outcomes in people with CNSLBP.

**Methods:** In this study 44 patients with CNSLBP were allocated to two groups of stability exercise and control using permutation block randomization way. The duration of intervention was 4 weeks. We evaluated the related outcomes before and after interventions using VAS and Oswestry disability questionnaire. The associated outcomes were compared between two groups.

**Results:** the change of disability scale was  $5.66 \pm 5.32$  and  $-5.71 \pm 2.98$  following intervention in exercise and control groups, respectively ( $p$ -value $<0.001$ ). While the VAS changed  $-3.85 \pm 7.54$  in control group this change was  $13.04 \pm 11.58$  in intervention group ( $p$ -value $<0.001$ ). Our results reproduced when the confounding variables were removed using multivariate analyses (the related  $p$ -values were less than 0.001).

**Conclusion:** the present study showed that the stability exercises may effectively reduce the disability and pain in individuals with CNSLBP.

**Keywords:** stability exercise, chronic non specific low back pain

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**P1-12**

## **The Relationship of Asymptomatic Generalized Joint Hypermobility with the Demographic Characteristics in School Students in Tabriz City Since 1396 to 1397**

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**Aim:** Generalized and asymptomatic joint hypermobility is prevalent and may be affected by various factors. The aim of this study was to investigate the effect of factors, including age, gender, anthropometric characteristics, physical activity level, limb dominance, and socioeconomic status on the generalized joint hypermobility in school students in Tabriz city since 1396 to 1397. Methods. 782 school students (age ranged 7 to 18 years) including 350 girls and 432 boys were recruited through a cluster sampling method from different regions of Tabriz city based on the ergonomic status. Anthropometric characteristics (body mass index, upper to lower limb ratio) were measured. Physical activity level, limb dominance, and socioeconomic status were obtained by specific questionnaires. Beighton test was applied to investigate the generalized joint hypermobility.

**Results:** There was a negative relationship between age and body mass index with beighton score. Also, body mass index was correlated with physical activity level (negative relationship) and socioeconomic status (positive relationship). Physical activity level had a positive relationship with beighton score. In general, beighton score was higher in girls than boys. In boys, beighton score was higher in the left hand than the right hand ( $P < 0.05$ ). The prevalence of general joint hypermobility with different cut-off points of beighton score was as follows: (cut-off 4: 32.6% in girls and 25% in boys, 5: 14% in girls and 10.2% in boys, and 6: 6.6% in girls and 4.9% in boys).

**Conclusion:** Several factors may have different effects on the amount of generalized joint hypermobility. Nutritional status, handedness, and physical activity level are important factors that need attention with respect to the risk of developing generalized joint hypermobility syndrome in the future.

**Keywords:** general joint hypermobility, school, student

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**P1-13****Compliance of Patients with Ankylosing Spondylitis****Alireza Khabbazi<sup>1</sup>, Behnaz Ghamari<sup>1\*</sup>, Farid Karkon Shayan<sup>1</sup>**<sup>1</sup>*Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran.*

**Aim:** According to the World Health Organization (WHO) report, compliance of chronic disease is about 50%. Ankylosing spondylitis (AS) is a progressive disease and finally it reduces the quality life of patients by decreasing the functional ability and disability caused by ankylosing joints. An important issue in treatment of these chronic diseases is adherence to treatment, which leads to the successful treatment and control of the disease.

**Methods:** In a descriptive-analytical study, 92 patients with AS who referred to Rheumatology Clinic of Tabriz University of Medical Sciences, were included the study. Adherence to treatment in patients was evaluated using compliance questionnaire for rheumatology (CQR-19). Adherent or non-adherent were evaluated in patients.

**Results:** The mean score of the compliance questionnaire for rheumatology in patients was 54.36±11.61 in the range of 5.62 to 73.68, and 28 patients (30.4%) were adherent and 64 patients (69.6%) were non-adherent. The use of NSAIDs and dissatisfaction of treatment were significantly associated with patients' non-adherent.

**Conclusion:** Based on finding of present study, non-adherent is common among patients with AS. There were no significant correlation between the demographic factors and the level of education of patients with the rate of adherence to treatment of patients, but using NSAIDs and the lack of satisfaction with the treatment were significantly correlated with the non-adherent of the patients.

**Keywords:** Ankylosing Spondylitis, Adherent to Treatment, CQR-19.

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**P1-14**

## **Effects of the Pomegranates Peel Extract Supplementation on Serum hs-CRP and Lipid Profiles in Women with Knee Osteoarthritis**

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**Aim:** Osteoarthritis (OA) is one of the most common chronic disorders. Pomegranate peel is considered to have strong anti-inflammatory properties. The aims of this study were to investigate the effects of the pomegranates peel extract supplementation on serum hs-CRP and lipid profiles levels in women with knee OA.

**Methods:** This randomized, double –blind placebo controlled clinical trial was conducted for 8 weeks on 66 obese women with knee OA. Participants in the intervention group (n=33) and in placebo group (n=33) received 500 mg pomegranates peel extract and placebo twice daily, respectively. Fasting blood samples, anthropometric measurements and dietary intakes of patients were gathered at beginning and end of the study.

**Results:** No significant differences were observed in baseline biochemical variables, obesity values and energy intakes of subjects between two groups at baseline. Pomegranates peel extract supplementation significantly reduced serum levels of hs-CRP, total cholesterol and triglyceride levels in intervention group compared to placebo group at the end of study adjusting for confounding factors ( $P<0.05$ ). Other variables did not change significantly in any of groups.

**Conclusion:** Supplementation of pomegranates peel extract had favorable effects on serum hs-CRP and lipid profiles in studied subjects and might be useful in management of OA risk factors.

**Keywords:** Pomegranates peel extract, osteoarthritis, hs-CRP, lipid profiles

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**P1-15****Effectiveness of Topical *Trinitrate Glyceryl* (TNG) in the Treatment of Tennis Elbow: a Randomized Clinical Trial****Hamid Zaferani Arani<sup>1\*</sup>, Shahla Abolghasemi<sup>2</sup>**<sup>1</sup>*School of medicine, Tehran Medical Sciences Branch, Islamic Azad University, Tehran, Iran*<sup>2</sup>*Department of Rheumatology, Tehran Medical Sciences Branch, Islamic Azad University, Tehran, Iran.*

**Aim:** Tennis elbow (TE) is a most important tendonitis that presenting in 3% general population. Previous studied showed the beneficial effect of trinitrate glyceryl (TNG) in the treatment of tendinopathies. However, there is not enough evidence of the TNG efficacy in the treatment of TE. Hence, this study was aimed to evaluate the effectiveness of topical TNG in the treatment of patients with TE.

**Methods:** 84 patient with TE for more than 3 months participated in this clinical trial study and were randomly divided into two groups; group A (treatment group) received dermal patches and TNG-containing drop, and the control group (group B) received dermal patches and liquid paraffin-containing drop (placebo). The pain and tenderness were assessed at 0, 2, 4, and 6 weeks after the beginning of the treatment in both groups. T tests and Chi-square test were used for statistical analysis and all of the tests were done via SPSS statistical software (16, USA). P value  $\leq 0.05$  was considered as statistically significant.

**Results:** Two weeks after treatment, 7.7% and 73.3% of the patients were painless in the placebo and TNG groups, respectively. In addition, the pain was relief in 18.4% and 80%, patients four weeks after treatment and 57.6% and 84.4% patients, six weeks after treatment, respectively.

**Conclusion:** The findings of the present study are consistent with the results of the mentioned studies so that the use of patch along with TNG was effective in patients with TE within 6 weeks.

**Keywords:** Trinitrate Glyceryl (TNG), Treatment, Tennis elbow, Tendonitis

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**P1-16**

## **Association of Anti CCP with ILD in Patients with Rheumatoid Arthritis Attending to Rheumatology clinic of Islamic Azad University Hospitals in 2014-16**

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**Introduction:** Periodic fever, aphthous stomatitis, pharyngitis, and adenitis syndrome (PFAPA) is an auto-immune based disease which is known as a syndrome for pediatrics which typically occurs in children  $\leq 5$  years of age, but in 2008 for the first time one adult case of this disease was reported.

**Case presentation:** Our case is first adult-onset PFAPA patient in Iran which has been accompanied by splenomegaly. First time since March 2017, the patient suffered from periodic febrile attacks (39-40 °C). During these fever attacks, the patient has many aphthous ulcers in his mouth, swollen glands in his neck and sore in the back of the throat. The patient was admitted to a hospital in Tehran during a severe fever attack due to weakness, lethargy, high-temperature fever and slight abdominal pain in LUQ (left upper quadrant) area. Abdominal sonography was done and spleen size was larger than normal and was determined to be 32 × 140 mm (Splenomegaly). This study has been done in Tehran and all data collected from a reliable governmental laboratory.

**Conclusions:** Following the rejection of the causes of other diseases, according to the patient's symptoms, the diagnosis of adult-onset PFAPA was given to the patient and the patient was cured with one long-acting Betamethasone ampoule at the onset of the fever attacks. The disease has remitted after injection of this medicine at the onset of each attack rapidly after about 2-3 hours. Also, Montelukast has given to the patient and we have seen his febrile attacks intervals have increased.

**Keywords:** Adult, PFAPA syndrome, Splenomegaly, Iran

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**P1-17****The First Case of Adult-Onset Periodic Fever, Aphthous Stomatitis, Pharyngitis, and Adenitis Syndrome with Splenomegaly in Iran Adult-Onset PFAPA with Splenomegaly in Iran****Shahla Abolghasemi<sup>1</sup>, Hesam Adin Atashi<sup>2\*</sup>, Elahe Paydar Tali<sup>2</sup>, Maedeh Olya<sup>2</sup>, Hamid Zaferani Arani<sup>2</sup>**<sup>1</sup>*Assistant Professor of Rheumatology, Tehran Medical Sciences Branch, Islamic Azad University, Tehran, Iran.*<sup>2</sup>*Young Researchers and Elite Club, Tehran Medical Sciences Branch, Islamic Azad University, Tehran, Iran.*

**Introduction:** Periodic fever, aphthous stomatitis, pharyngitis, and adenitis syndrome (PFAPA) is an auto-immune based disease which is known as a syndrome for pediatrics which typically occurs in children  $\leq 5$  years of age, but in 2008 for the first time one adult case of this disease was reported.

**Case presentation:** Our case is first adult-onset PFAPA patient in Iran which has been accompanied by splenomegaly. First time since March 2017, the patient suffered from periodic febrile attacks (39-40 °C). During these fever attacks, the patient has many aphthous ulcers in his mouth, swollen glands in his neck and sore in the back of the throat. The patient was admitted to a hospital in Tehran during a severe fever attack due to weakness, lethargy, high-temperature fever and slight abdominal pain in LUQ (left upper quadrant) area. Abdominal sonography was done and spleen size was larger than normal and was determined to be 32 × 140 mm (Splenomegaly). This study has been done in Tehran and all data collected from a reliable governmental laboratory.

**Conclusions:** Following the rejection of the causes of other diseases, according to the patient's symptoms, the diagnosis of adult-onset PFAPA was given to the patient and the patient was cured with one long-acting Betamethasone ampoule at the onset of the fever attacks. The disease has remitted after injection of this medicine at the onset of each attack rapidly after about 2-3 hours. Also, Montelukast has given to the patient and we have seen his febrile attacks intervals have increased.

**Keywords:** Adult, PFAPA syndrome, Splenomegaly, Iran

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**P1-18**

## **The Effect of Elaeagnus Angustifolia Fruit Extract on Arthralgia Pain in Patients with Rheumatoid Arthritis Referring to the Clinic of the Iranian Rheumatism Center in 2015-16**

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**Aim:** Pain and limitation of joints are the complications of rheumatoid arthritis, which causes disability and disability of the disease. In this regard, the aim of this study was to evaluate the effect of Elaeagnus Angustifolia fruit extract on reducing pain in patients with rheumatoid arthritis.

**Methods & Materials:** In this double-blind clinical trial study, 96 patients with a diagnosis of rheumatoid arthritis from the age of 36-55, were randomly divided into two groups of case and control. After collecting demographic information, their pain intensity was measured by visual analog scale measurement. The case group was received Elaeagnus Angustifolia extract and the control group received placebo, in which the medicines were packed in 2 packs of 30 (package A, package B). Then they were asked to take 500 mg capsules for 30 days, twice daily after eating. They were re-evaluated after a one-month period. This clinical trial study was approved by the Ethics Committee of the Islamic Azad University of Tehran Medical Sciences and was registered under the Ir.iau.tmu.rec.1394.17 approval number.

**Results:** The mean of pain severity in the case group before and after consumption of Elaeagnus Angustifolia with  $P < 0.05$  showed significant difference. In control group before and after placebo,  $P = 0.99$  showed no significant difference.

**Conclusion:** The present study showed that consuming approximately 500mg of daily Elaeagnus Angustifolia fruit extract for 30 days reduced the pain intensity of patients with rheumatoid arthritis.

**Keywords:** Rheumatoid Arthritis, Pain, Extract, Elaeagnus Angustifolia

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**P1-19****A Collaborative Approach for Preparation and Implementation of Standard Protocols on Rheumatologic Drugs**

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**Aim:** This project aimed at harmonizing treatment of rheumatologic patients by preparation of standard protocols according to evidence-based clinical guidelines.

**Method:** This work was carried out between January and June 2018 by cooperation of rheumatology and clinical pharmacy services in Imam Khomeini Hospital Complex affiliated with Tehran University of Medical Sciences. Traditional DMARDs, immunosuppressive drugs, biologic agents, NSAIDs, glucocorticoids, and urate lowering agents were included in this project. For each medicine, administration/pregnancy/lactation and fertility considerations, side effects and their managements, drug-drug interactions, vaccination requirement, pre-treatment assessment, monitoring during treatment, and dose adjustments in renal and hepatic impairment were targeted. The initial draft of protocols was prepared by the collaborator clinical pharmacist (S.E). The last version of UPTODATE in each topic, NHS protocols, text book of Kelley and applied therapeutics, and ACR guidelines were used as a main references. After the first revision by the corresponding rheumatologist (R.R.) in the project, revised protocols was sent to the hospital's rheumatology faculty member for final verification. In the case of disagreement, the topic was discussed at a meeting with the presence of clinical pharmacists and rheumatologists to resolve the controversy.

**Result:** Collaborative effort between clinical pharmacy and rheumatology teams led to Preparation of 25 drug therapy protocols. In light of this collaboration, various potential pitfalls in clinical practice such as pre-treatment assessment, special monitoring and vaccination resolved.

**Conclusion:** It seems that preparation and implementation of local protocols would be effective in harmonizing clinical practice among physicians and rationalization of anti-rheumatic drug use.

**Keywords:** Preparation of standard protocols, rheumatology medicine

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**P1-20****Shoulder Muscle Activation in Female with Generalized Joint Laxity****Moghadam Salami M<sup>1\*</sup>, Nodehi Moghadam A<sup>2</sup>, Ghaderi F<sup>3</sup>, Jahan A<sup>4</sup>, Rezaei M<sup>5</sup>**

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**Aim:** Generalized joint laxity (GJL), is defined as a situation that the subject has some joints with excessive range of motion. It could be accompanied with a widespread musculoskeletal injury; such as shoulder dislocation or subluxation. The shoulder joint stability is depending on its muscular function, so considering the activation of these muscles could help to investigating the mechanism of injuries in subjects with GJL. The aim of this study was to inspect the shoulder muscle electromyography activation in women with GJL.

**Methods:** In a cross-sectional study, 15 females with GJL and 15 without GJL were joined to the study. They were requested to elevate their dominant shoulder in the scapular plane. Surface EMG was used to record muscle activity of serratus anterior, infraspinatus, anterior and middle deltoid, superior and inferior trapezius muscles through abduction. Two different MANOVAs were performed to analyze the EMG of muscles in two groups.

**Results:** No significant difference was seen between two groups in EMG activation of the investigated muscles. ( $p>0.05$ ).

**Conclusion:** This result shows no significant difference between EMG activation in women with generalized joint laxity. So, occurrence of shoulder injuries in people with GJL could be the result of the other muscular or physiological parameters of the joint.

**Keywords:** general joint laxity, surface electromyography, shoulder muscle activation

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**P1-21****Effects of Ostrich Oil on Knee Osteoarthritis**

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**Aim:** Osteoarthritis (OA) is a progressive debilitating joint disease which is one of the most common health problems of the elderly. The therapeutic properties of ostrich oil are mentioned in some sources of traditional medicine. The aim of present study is to evaluate the effects of ostrich oil on knee OA.

**Methods:** In a double blind randomized clinical trial study, 90 patients with knee OA who referred to Rheumatology Clinic of Tabriz University of Medical Sciences were allocated into two intervention and control groups. In intervention & placebo group, patients received 2 ml ostrich oil ointment or placebo twice a day per knee topically for 2 months respectively. Efficacy of adjuvant therapy by using ostrich oil was evaluated in terms of helping to improve the OA symptoms.

**Results:** Irrespective of which intervention the groups received, both groups' performance improved during treatment period. Mean of right knee joint pain score in intervention group at beginning of the study, 1&2 month later were  $2.83 \pm 0.76$ ,  $1.61 \pm 0.60$ , and  $1.33 \pm 0.59$  respectively ( $P=0.001$ ) and in left knee joint were  $2.75 \pm 0.84$ ,  $1.56 \pm 0.72$  and  $1.31 \pm 0.60$ , respectively ( $P=0.001$ ). Generally the group received ostrich oil showed better results in 6 meters walking time, knee joint stiffness and pain than the placebo arm which this improvements were statistically significant ( $p < 0.05$ ). The only criteria which showed no statistically difference between groups was Knee circumference ( $p=0.47$ ).

**Conclusion:** In present study, OA symptoms and pain in intervention arm were reduced significantly during treatment, but only one criterion showed no statistically significance between groups.

**Keywords:** Ostrich Oil, Treatment, Knee, Osteoarthritis.

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**P1-22**

## **Evaluation and Comparing Bone Mineral Densitometry in Chemical Victims and Patients with COPD with Control Group**

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**Aim:** Osteoporosis is a systemic bone disease that natural amount of organic and mineral matter of bone is decreased and bone tissue is destroyed especially their trabecular structures. In patients with chronic obstructive pulmonary disease, the relative risk of osteoporosis is higher than general population. This study aimed to assess bone mineral density in COPD patients and chemical warfare victims with similar complications of osteoporosis and compare these groups with control group that was done by Dual Energy X-ray Absorptiometry (DEXA) technique.

**Methods:** This is a descriptive-analytic study that conducted as cross-sectional. The study population included chemical warfare victims, COPD patients referred to Baqiyatallah hospital and control group. The sample size was 180 persons among three groups that were selected by using randomized sampling method. The data collecting tool was self-designed questionnaire. Bone mineral densitometry was calculated in studied populations in three points: spine, femur and forearm by using Dual Energy X-ray Absorptiometry (DEXA) technique. The data was analyzed by using SPSS 20 software and ANOVA, Kruskal-Wallis and Mann-Whitney statistical tests.

**Results:** This study showed there was no significant differences between mean of DXA femur, DXA L2\_L4, DXA T\_Score indicators in chemical warfare victims and COPD groups ( $p > 0.05$ ). However, the mean of these factors between COPD and chemical warfare groups were significantly less than control group ( $p < 0.05$ ). Also there was significant difference between DXA forearm mean in studied groups, so that the highest and lowest mean of this indicator was related to control group and COPD patients, respectively.

**Conclusion:** The results of this study revealed that bone mineral density was significantly lower in chemical victims and COPD groups than control group. Therefore, in order to avoid from bone mass loss in these two groups, screening tests to detect disease in earlier stages, controlling pharmacological effects of corticosteroids on bone tissue through description of medications such as Bisphosphonates, appropriate rehabilitation treatments, providing nutritional guidelines, necessary supplements, encouraging patients to increase mobility, physical activity and exercise is recommended.

**Keywords:** bone density, chemical warfare victims, Chronic Obstructive pulmonary, Dual Energy X-ray Absorptiometry (DEXA)

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**P1-23****Bone Mass Density and its relationship with Nutritional Status in postmenopausal women****Zamzam Paknahad<sup>1</sup>(Ph.D), Zahra Bonakdar<sup>2</sup>(M.D), Akbar Hasan Zadeh(M.Sc.)<sup>3</sup>**<sup>1</sup> *Faculty of Nutrition and Food Sciences, Isfahan University Of Medical Sciences, Isfahan, Iran*<sup>2</sup> *Faculty of Medicine, Isfahan University Of Medical Sciences, Isfahan, Iran.*<sup>3</sup> *Faculty of Health, Isfahan University Of Medical Sciences, Isfahan, Iran.*

**Introduction:** Osteoporosis is a multifactorial disease and one of the most important modifiable factors in the development and maintenance of bone mass is nutrition. The aim of this study was to determine the nutritional status among osteoporotic postmenopausal women and compare intake of several nutrients important in terms of bone health with the standard values (DRIs).

**Method:** seventy-two postmenopausal osteoporotic women were studied. Bone mineral density of the lumbar spine and total hip were measured using dual-energy X-ray absorptiometry. Demographic and dietary information was collected by interview and, using validated 72 hrs dietary recall and food frequency questionnaires.

**Results:** Mean of age and duration of menopause was nearly 57 and 10.5 years respectively. The mean of t-scores for bone mineral density (BMD) of LS, and total hip were  $0.877 \pm 0.179$  and  $0.997 \pm 0.21$  respectively. The mean of calcium, phosphorous, fluoride vitamin D, vitamin K, vitamin C were nearly 1024, 1223, 181, 2.05, 159.31, 255 mg Respectively, and there were lower than the RDA (except the latest). BMD of the hip was significantly correlated with dietary calcium, phosphorous, and animal protein(p (0.05). BMD of Spine did not show any significant correlation with nutrients.

**Conclusion:** Most of the postmenopausal osteoporotic women in Isfahan have a considerable deficiency in terms of micronutrients such as calcium, vitamin D and phosphorous which can be deleterious to bone health.

**Keywords:** Diet, nutrition, postmenopause, bone Mass density

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P2-1

## Evaluation of Left Ventricular Function in PolyMyositis and Dermatomyositis patients using Global Longitudinal Strain (GLS) by Two Dimensional Speckle Tracking Echocardiography

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**Aim:** Cardiac events are a major cause of death in patients with idiopathic inflammatory myopathies including polymyositis (PM) or dermatomyositis (DM). Speckle tracking Echocardiography (STE) is a new echocardiographic technique that allows precise evaluation of myocardial function. This method enables a complete assessment of regional function. So, the aim of this study was to detect subclinical LV function in DM/PM patients using GLS.

**Materials and Methods:** This case-control study was conducted in 30 PM/DM patients (86.7% female; mean age of 41.67±15.86 years) and 40, age- and sex- matched, healthy controls (95.2% female; mean age of 38.79±11.74 years), in Echocardiography Ward, at Imam Khomeini hospital of Ahvaz in 2017. Both groups had no clinical signs and symptoms of cardiovascular diseases. Both PM/DM patients and healthy controls were assessed by 2D STE echocardiography with LV global longitudinal systolic strain analysis. GLS was considered a marker for LV systolic dysfunction.

**Results:** Compared to controls, patients with PM/DM had significantly diminished left ventricular global longitudinal systolic strain (GLS %: -19.61±2.67 vs. -21.91±2.45; P< 0.0001). The PM/DM patients has lower LV ejection fraction in comparison to control group (59.47%±6.46 vs. 63.00%±5.02; P=0.012). Patients age and duration of disease was significantly correlated with LV diastolic dysfunction (P=0.019 and P=0.0001 respectively). No significant difference was found between the PM/DM and control groups concerning the PAP (P=0.094).

**Conclusions:** the GLS is a potentially useful method can be used to diagnose subtle abnormalities in LV function in PM/DM patients.

**Keywords:** Dermatomyositis, Polymyositis, Strain, Two-dimensional speckle tracking

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**P2-2****Medication adherence of patients with Systemic Lupus Erythematosus and patients with Rheumatoid Arthritis considering the psychosocial factors, Health Literacy and Current Life Concerns of Patients****Shenavandeh S<sup>1\*</sup>, Mani A<sup>2</sup>, Eazadnegahdar M<sup>3</sup>, Nekooeian A<sup>4</sup>***<sup>1</sup>Shiraz University of Medical Sciences, Departments of Internal Medicine, Division of Rheumatology, Shiraz, Iran**<sup>2</sup>Research Centre for Psychiatry and Behavioral Sciences, Shiraz University of Medical Sciences, Shiraz, Iran**<sup>3</sup>Shiraz University of Medical Sciences, Departments of Internal Medicine, Shiraz, Iran**<sup>4</sup>Shiraz University of Medical Sciences, Department of Pharmacology, Shiraz, Iran*

**Aim:** In systemic lupus erythematosus(SLE) and rheumatoid arthritis(RA), non-adherence to therapy is associated with adverse clinical outcomes. Barriers to medication adherence are complex so their solutions must be multi factorial. In this study, we were going to evaluate and comparing medication adherence in patients with SLE and RA considering their psychosocial factors, health literacy and current life concerns.

**Methods:** 88 patients fulfilled criteria of RA and SLE, referring to rheumatology clinics or wards of Hafez and Faghihi hospitals related to Shiraz University of Medical Science, using DMARDs or immunosuppressive were evaluated. The 8-item Morisky's Medication Adherence, Depression by Beck depression inventory (21 Q) and drug literacy level were evaluated.

**Results:** Medication non- adherence was seen in 91.3% of RA group and 90.4% of SLE group. Mild to severe depression were 60.86% and 42.85% for RA and SLE patients respectively. In SLE group, being depressed and having poor prognostic factors had significant effect on medication non-adherence. In RA group, depression, having co-morbid disease and higher pill numbers had significant effect on medication non-adherence.

**Conclusion:** There was high prevalence of drug non-adherence in our patients with RA and SLE. One of the most prevalent factors that affect medication adherence in both group was depression. Presence of co-morbid disease affected medication adherence in patients with RA. Poor prognostic factors had significant effect on medication adherence in patients with SLE. Factors like income, health insurance, disease duration, and health literacy had no significant effect on medication adherence in our study.

**Keywords:** RA; SLE; medication adherence; depression; health literacy

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P2-3

## The Association Assessment of Interleukin-10 Gene Promoter Polymorphisms and Haplotypes with the Activity of Systemic Lupus Erythematosus and IL-10 Levels in an Iranian Population

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**Aim:** Systemic lupus erythematosus (SLE) is an autoimmune disease with unknown etiology. The genetic alterations in *interleukin-10* (IL-10) promoter region could be associated with SLE pathogenesis. Here, we investigated the association of genotype and haplotype frequencies of IL-10 promoter polymorphisms with SLE susceptibility, IL-10 plasma levels and disease activity in an Iranian population.

**Methods:** A total of 116 SLE patients and 131 healthy subjects were enrolled. The PCR-RFLP technique was used to detect IL-10 promoter genotypes at the positions of -1082 (G/A), -819 (C/T) and -592 (C/A) in association with IL-10 plasma levels and SLEDAI scores.

**Results:** The GG genotype of -1082 polymorphism was associated with the increased risk of SLE [OR = 2.65, 95% CI (1.21–5.82), *P*-value = 0.046]. The CC genotype in -819 region was associated with SLE susceptibility [OR = 3.38, 95% CI (1.26–9.07), *P*-value = 0.034] and C allele was introduced as risk allele [OR = 1.86, 95% CI (1.15–3.01), *P*-value = 0.009] in this region. IL-10 plasma levels were overexpressed in CC genotype carriers of -592 SNP and decreased in AA genotype carriers of -1082. IL-10 was also increased in SLE patients with CGT (-592/-1082/-819) haplotype. The SLEDAI score was higher among CC genotype carriers at the position of -592 and TT genotype carriers at the region of -819. SLEDAI was also elevated among patients with CGC (-592/-1082/-819) and CAC (*P*=0.011) haplotypes.

**Conclusion:** It could be suggested that IL-10 promoter polymorphisms and haplotypes are associated with SLE susceptibility and increased disease activity.

**Keywords:** systemic lupus erythematosus; interleukin-10; promoter; polymorphism; haplotype

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**P2-4****Effect of Nigella Sativa Oil on Behcet's Disease Activity Index****Hadiseh Kavandi<sup>1\*</sup>, Mehrzad Hajjalilo<sup>1</sup>, Dorsa Kavandi<sup>2</sup>, Alireza Khabbazi<sup>1</sup>**

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**Objective:** Nigella sativa is a medicinal plant that has long been used in traditional medicine for treating various conditions. Previous studies showed its broad anti-inflammatory/anti-oxidant activity and its effectiveness on activity of rheumatoid arthritis (RA). The aim of the present clinical trial was to evaluate the effect of Nigella sativa oil on activity Behcet's disease (BD).

**Materials And Methods:** Fifty-six patients with BD were randomized to two groups in a randomized, double blind and placebo-controlled study. Subjects in intervention group received two capsules, 500 mg each, of Nigella sativa oil, daily for 12 months. The other group consumed two capsules of placebo per day for the same period. Activity of disease was measured by the Iranian's Behcet's Disease Dynamic Activity Measure (IBDDAM), Behcet's Disease Current Activity Measure (BDCAF) and Total Inflammatory Activity Index (TIAI) at baseline and every two month in the follow-up period.

**Results:** In this study, there were no significant difference in age, sex, disease duration and medications. No significant difference was found in the BD activity between treatment and placebo groups.

**Conclusion:** Despite the anti-inflammatory and anti-oxidant effect of nigella sativa, there was no significant difference between control and case group in terms of disease activity.

**Keywords:** Nigella sativa; Activity index; Behcet's Disease

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**P2-5**

## **Cigarette Smoking and Risk of Primary Systemic Vasculitis: A Propensity Score Matching Analysis**

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**Objective:** Considering limited data about the relationship between smoking and primary systemic vasculitides (PSV), present study aims to investigate smoking habit in PSV patients compared to healthy subjects as well as to examine the effect of smoking on clinical characteristics and disease activity in PSV patients.

**Methods:** We included 80 patients diagnosed with PVS and 214 age- and sex-matched healthy controls. Direct interview and questionnaire were used to collect data. Individuals who had smoked at least 100 cigarettes in their lifetime before the first symptom of vasculitis were classified as smokers; those who had never smoked or smoked less than 100 cigarettes in their lifetime were categorized as never smokers. Disease activity at the time of disease diagnosis and in the last visit was evaluated by Birmingham Vasculitis Activity Score(BVAS). Propensity score matching (PSM) analyses for reducing the heterogeneity between studied groups and calculating the actual effect of smoking in PSV was performed.

**Results:** No significant differences were observed in clinical manifestations of patients between ever and never smokers. PSM resulted in 62 patients with PSV, and 124 matched healthy persons with similar baseline characteristics. By multivariate logistic regression and after adjustment for age, sex, marital status and educational status, ever smoking was not significantly associated with an increased risk of PSV compared with never smoking

**Conclusions:** Smoking may not be a significant risk factor for PVS and no significant association exists between clinical manifestations and disease activity of PSV and smoking in Azeri population.

**Keywords:** Smoking; primary systemic vasculitides; risk factor; propensity score matching

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**P2-6****Effects of N-acetylcysteine On Pulmonary Functions in Patients with Systemic Sclerosis: A Double Blind, Placebo Controlled Study****Zohre Khodamoradi<sup>1\*</sup>, Samrad Mehrabi<sup>2</sup>, Maryam Mazidi Moradi<sup>3</sup>, Mohammad Ali Nazarinia<sup>1</sup>**<sup>1</sup>*Shiraz Geriatric Research Center, Shiraz University of Medical Sciences, Shiraz, Iran*<sup>2</sup>*Division of Pulmonology, Department of Internal Medicine, Namazee Hospital, Shiraz University of Medical Sciences, Shiraz, Iran*<sup>3</sup>*Department of Internal Medicine, Namazee Hospital, Shiraz University of Medical Sciences, Shiraz, Iran*

**Aim:** Systemic sclerosis (SSc) is a disorder of connective tissue and rare autoimmune disease that affects many organs characterized by fibrotic changes of peripheral and visceral architecture. N-acetylcysteine (NAC) can act both as the precursor of reduced glutathione and direct scavenger of reactive oxygen species. We assessed the clinical effect of NAC on pulmonary function test of patients with diffuse scleroderma.

**Methods:** This study is a randomized double blind clinical trial that was done on 25 patients with diffuse SSc without lung involvement on primary chest high-resolution computed tomography. Placebo was administered for 13 patients and 1200 milligram NAC for 12 patients. Body plethysmography parameters were assessed at the beginning of the study and after 24 weeks.

**Results:** The analysis showed no significant differences in parameters of plethysmography between the two groups. After importing the data of two patients in the placebo-treated group, who developed interstitial lung disease, DLCO in the placebo-treated group was  $90.69 \pm 21.29$  milliliter at the end of the study, which significantly decreased compared with the beginning of the study ( $102.30 \pm 13.83$  ml). Also, changes of DLCO between the two groups were significantly different.

**Conclusion:** In this trial, sensitivity of DLCO as the first marker in evaluation of pulmonary function in patients with SSc was confirmed. On the other hand, NAC had no effect versus placebo in a period of 24 weeks. We recommend that more studies with larger sample size and longer duration should conduct for further evaluation.

**Keywords:** systemic sclerosis, Scleroderma, interstitial lung disease, pulmonary function test, N-acetyl cysteine.

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P2-7

## Could ESR and CRP be related to the disease's activity and its type of manifestations in Behcet's Disease? Study on 516 Iranian patients

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**Objective:** Behcet's disease (BD) is chronic inflammatory disorder. C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR) are inflammatory markers. The aim of this study is to look for the relation of CRP and ESR to disease activity.

**Method:** In this study 516 patient that follow up continuously were selected. BD was diagnosed by the International Criteria for BD. BD activity was measured by the Iranian Behcet's Disease Dynamic Activity Measure (IBDDAM) and ESR and CRP measured as an inflammatory markers.

**Result:** In this study significant association were shown between CRP positive and the presence of oral and genital aphthous ( $p < 0.001$ ), skin and vascular manifestation ( $p < 0.001$ ) and between ESR and oral and genital aphthous ( $p < 0.001$ ), skin ( $p = 0.001$ ), vascular ( $p < 0.001$ ) and joint manifestation ( $p < 0.05$ ) and retinal vasculitis ( $p < 0.05$ ) and Hypopion ( $p < 0.001$ ). Only central nervous system did not show significant association with these indices of inflammation ( $p > 0.05$ ). There were significant associations between CRP and oral and genital aphthous, skin lesion and vascular manifestation ( $p < 0.001$ ). There was seen no significant associations between IBDDAM score and organ involvement except in eye and vascular manifestation. ( $p < 0.05$ ).

**Conclusion:** It concluded that the exacerbations of BD are manifested by highly visible but mild, mostly local inflammatory biomarkers.

**Keywords:** Behcet s disease, IBDDAM, ESR, CRP

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**P2-8****AntiInflammatory Effects of Different Statins in Rheumatoid Arthritis:  
A Randomized Double-Blind Controlled Clinical Trial**

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**Aim:** Statin family drugs are lipid lowering agents with anti-inflammatory effects. The aim of our study was to evaluate anti-inflammatory effects of different statins in rheumatoid arthritis (RA) patients.

**Methods:** 161 eligible subjects with RA enrolled. They randomly divided in to three groups. The first group received 40 mg atorvastatin, the second group received 40 mg simvastatin, and the third group received placebo as control, for 6 months. Disease Activity Score 28 (DAS28), Visual Analog Scale (VAS), Erythrocyte sedimentation rates (ESR), lipid profiles, were measured once in the base line and another times after three and six months after intervention. Data was analyzed by SPSS (ver. 16). P value <0.05 was significant.

**Results:** DAS28 score in month 0, 3 and 6 in atorvastatin, simvastatin and placebo groups was (5.361.02, 3.23 1.24 and 2.811.13), (5.290.87, 2.751.16 and 2.57 1.00) and (5.52 0.96, 3.901.10 and 3.87 1.52), respectively. Average DAS28 score differences between placebo and atorvastatin groups was 0.6 0.16 (p=0.00), the differences between simvastatin and placebo was 0.9000.16 that was significant (p=0.00) but the differences wasn't significant between atorvastatin and simvastatin groups (p=0.261).

**Conclusion:** statins decrease inflammation in RA patients.

**Keywords:** Atorvastatin, Rheumatoid arthritis, Simvastatin

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**P2-9**

## **Evaluation of serum level of soluble LAG-3 in patients with Rheumatoid Arthritis**

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**Introduction:** Rheumatoid arthritis (RA) is the most common chronic inflammatory arthritis and can lead to extensive destruction of the joints. LAG3 (lymphocyte activation gene 3) is a membrane glycoprotein on natural killer cell, T<sub>H</sub>1 and regulatory T cells (T<sub>reg</sub>) and play an important role in function of the later cell in autoimmune disease. The aim of this study was to measure serum level of soluble LAG3 in patient with RA in comparison with healthy people and its association with severity of disease.

**Materials and methods:** This study was a cross-sectional study in rheumatology department of Ghaem hospital in Mashhad University of Medical Sciences. The groups are divided into four groups: 1. Patients with newly diagnosed RA who have not received any treatment. 2. Patients with active RA (DAS28- ESR > 3.2). 3. Patients who are clinically in remission phase (DAS28-ESR < 2.6). 4. Age and sex matched volunteer. Patients were given a blood sample for measuring soluble LAG-3 with ELISA reader. Data from clinical and demographic observations of patients were analyzed by SPSS software version 16.

**Results:** Serum levels of sLAG-3 in patients with RA was higher than healthy volunteers. (P < 0.01). The values of sLAG3 were lower in newly diagnosed RA patients compared with active RA and patients in the remission phase (P < 0.01 and P < 0.005 respectively). Patients with DAS28 < 2.6 had high levels of sLAG3, and people with DAS28-ESR > 5.1 had lower levels of sLAG3 (P < 0.001).

**Conclusion:** Serum levels of sLAG-3 in patients with rheumatoid arthritis are higher than healthy volunteers.

**Keywords:** Rheumatoid arthritis, disease activity, sLAG-3

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**P2-10****Randomized, Double-blind, Placebo-controlled Clinical Trial Examining the Effects of Green Tea Extract on Systemic Lupus Erythematosus Disease Activity and And Some Inflammatory Biomarkers****Z. Shamekhi<sup>1\*</sup>, Z. Habibagahi<sup>2</sup>, R Amani<sup>3</sup>, F Namjuyan<sup>4</sup>**<sup>1</sup>Assistant Professor, Sepidan Bagherolloom Higher Education College, Shiraz University of Medical Sciences, Shiraz, Iran.<sup>2</sup>Assistant Professor, Shiraz University of Medical Sciences, Shiraz, Iran<sup>3</sup>Assistant Professor, Ahvaz University of Medical Sciences, Ahvaz, Iran<sup>4</sup>Assistant Professor, Ahvaz University of Medical Sciences, Ahvaz, Iran

**Aim:** Antiinflammatory and immunomodulatory benefit of green tea (*Camellia sinensis*) in autoimmune disease has been proven in recent studies. The objective of this study was to assess the effects of green tea on some inflammatory and immunological biomarkers in systemic lupus erythematosus patients. A randomized controlled trial on subjects with lupus was conducted.

**Method:** 68 patients in the age range of  $39.1 \pm 10.3$  years and body mass index of  $25.7 \pm 5.21$  kg/m<sup>2</sup> completed the 12-week study. Patients were randomly divided into two groups of intervention (1000 mg green tea extract, two capsules/day) and control (1000 mg of starch, two capsules/day) systemic lupus erythematosus disease activity, was assessed by the systemic lupus erythematosus disease activity index at the first and after 3 months of intervention., in addition some inflammatory biomarkers including IL6, IL1B and MDA were measured using ELYSA method.

**Result:** Green tea extract supplementation significantly reduced disease activity in lupus patients ( $p < 0.004$ ), Although it had no effect on inflammatory biomarkers including IL6, IL1B and MDA.

**Conclusion:** This study showed that daily consumption of green tea extracts for 12 weeks improves the systemic lupus erythematosus disease activity .

**Keywords:** systemic lupus erythematosus – disease activity – inflammatory biomarkers-green tea

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**P2-11****Differential expression of vitamin D associated genes in the aorta of coronary artery disease patients with and without rheumatoid arthritis****Seyed Ehsan Asadi<sup>1\*</sup>, Ahmad Rahimi<sup>2</sup>**<sup>1</sup>*PHD OF Nursing, Sina Hospital, Isfahan, Iran*<sup>2</sup>*Nursing Student of Dehaghan University, Isfahan, Iran*

**Background:** Vitamin D has an important role in the immune system, and has been linked to rheumatoid arthritis (RA) and coronary artery disease (CAD). The exact mechanisms by which vitamin D is involved in these processes are still unclear. Therefore, we wanted to search for differences in expression of genes involved in the vitamin D receptor (VDR) activation pathway and genes that are known to alter upon vitamin D stimulation, in the aortic adventitia of CAD patients with and without RA.

**Methods:** Affymetrix microarray was used to determine gene expression profile in surgical specimens from the adventitia of the ascending aorta of CAD patients with RA (n = 12) and without RA (n = 12) from the Feiring Heart Biopsy Study.

**Results:** We identified three vitamin D associated genes that were differentially expressed between RA and non-RA patients: Growth arrest and DNA-damage-inducible protein 45 alpha (GADD45A) (FC = 1.53; p = 0.005), Nuclear Receptor Co-repressor 1 (NCOR1) (FC = 1, 36; p = 0.005) and paraoxonases 2 (PON2) (FC = -1.41; p = 0.01). High expression of GADD45A in RA tissues was confirmed by real-time qRT-PCR. GADD45A expression correlated with plasma levels of 1, 25(OH)2D3 (rs = 0.77; p = 0.004).

**Conclusions:** Microarray analyses revealed higher expression of GADD45A and NCOR1; and lower expression of PON2 in the aortic adventitia of RA than non-RA patients. Further studies are needed to elucidate if and how GADD45A, NCOR1 and PON2 are involved in the development of accelerated atherosclerosis in RA.

**Keywords:** vitamin D; coronary artery disease; rheumatoid arthritis

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**P2-12****Evaluating the relationship between serum level of interleukin-6 and rheumatoid arthritis severity and disease activity****Elham Rajaei<sup>1</sup>, Qodratolla Hayati<sup>1\*</sup>***<sup>1</sup> Department of Rheumatology, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.*

**Aim:** The aim of this study was to evaluate the relationship between Interlukin-6 (IL-6) serum level and the severity and activity of RA.

**Methods:** In this cross-sectional study, 120 RA patients referred to the rheumatology clinic, the patients were diagnosed by rheumatologists according to ACR / EULAR 2010 criteria. Based on the Visual Analog Scale (VAS), the patients were divided into 4 groups: Remission, Mild, Moderate and Severe. each group contained 30 patients. Serum levels of ESR, CRP, anti-cyclic citrullinated peptide (anti-CCP) and RF, as well as serum levels of IL-6, were measured in these patients. Then, the relationship between these factors in the four groups was measured and compared, and the relationship between IL-6 and these factors, and especially the severity of the disease, was evaluated based on DAS-28.

**Results:** This study showed that the serum level of IL-6 has a significant relationship with RA severity according to DAS-28 (P value <0.001). There is also a significant relationship between the ESR level, the number of painful joints, and the number of the swollen joints, and the severity of the disease based on VAS.

**Conclusion:** generally the findings of this study indicate that serum levels of IL-6 plays an important role in the severity and activity of RA disease and can be considered as a determining factor in evaluating severity of RA in RA patients.

**Keywords:** Interleukin 6; Rheumatoid arthritis; Cytokine; DAS-28

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**P2-13**

## **The Immediate Pain Relieving Effects of Non-Thermal CO<sub>2</sub> Laser Therapy (NTCLT) on Oral Aphthous Ulcers Of Behcet's Disease: A Pilot Study**

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**Introduction:** NTCLT(Non-Thermal CO<sub>2</sub> Laser Therapy) is a novel photobiomodulative(low-level laser therapy) approach used for immediate and significant pain reduction of some oral lesions without any visible thermal complications . This pilot before- after clinical trial was designed to evaluate the pain relieving effects of application of single session of NTCLT on oral ulcers of Behcet's disease(BD).

**Study Design:** The known cases of BD with painful aphthous ulcers were included in the trial according to the inclusion and exclusion criteria. Before irradiation, a thick layer of non-anesthetic, transparent gel with high water content was placed on the lesions to prevent tissue damage. Then the lesions were irradiated with CO<sub>2</sub> laser (power: 1W, continuous mode, scanning the lesions with rapid circular motion of hand piece) through the gel layer. The patients reported their pain on VAS before and immediately after NTCLT and up to 4days post operatively.

**Results:** The pain severity declined immediately and significantly after NTCLT( $p < 0.001$ ). This analgesic effect was consistent during the follow-up periods. The procedure itself was painfree and no kind of anesthesia was required. There were no visible thermal complications after NTCLT such as ablation, destruction and even erythema. The results of thermometry and powermetry supported the non-thermal, low-power nature of NTCLT.

**Conclusion:** Up to now, the results of this pilot study suggest that NTCLT could reduce pain in BD immediately and significantly without any visible complications and with no need to anesthesia.

**Keywords:** Behcet's disease(BD), pain relief, Non-Thermal CO<sub>2</sub> Laser Therapy(NTCLT), photobiomodulation, low-level laser therapy

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**P2-14****The correlation between serum IL-10 and TGF- $\beta$  with Disease Activity in the newly diagnosed rheumatoid arthritis patients****Taghadosi Mahdi<sup>1\*</sup>, Samimi Zahra<sup>1,2</sup>, Kardideh Bahareh<sup>1,2</sup>, Jalili Cyrus<sup>3</sup>, Roghani Seyyed Askar<sup>1,2</sup>**<sup>1</sup>*Immunology Department., Medical school, Kermanshah University of Medical Sciences, Kermanshah, Iran.*<sup>2</sup>*Student Research Committee, Faculty of Medicine, Kermanshah University of Medical Sciences, Kermanshah, Iran.*<sup>3</sup>*Anatomy Department, Kermanshah University of Medical Sciences, Kermanshah, Iran*

**Aim:** The aim of this study was to evaluate the plasma levels of transforming growth factor- $\beta$  (TGF- $\beta$ ) and interleukin-10 (IL-10) and their correlation with disease activity in the newly diagnosed and under treatment rheumatoid arthritis (RA) patients.

**Methods:** participant in this study were included into three groups, including; 30 newly diagnosed Rheumatoid arthritis patients who did not receive any medication regarding to their disease, 30 under treatment patients and 30 age- and sex-matched healthy subjects. Plasma levels of transforming growth factor- $\beta$  (TGF- $\beta$ ) and interleukin-10 (IL-10) in each group were measured by Enzyme-linked immunosorbent assay. The disease severity was assessed according to the disease activity score (DAS-28) formula.

**Results:** The plasma levels of TGF- $\beta$  in the newly diagnosed and under treatment RA patients were higher than control group ( $P < 0.001$ ). The plasma level of IL-10 was higher in the newly diagnosed RA in comparison with under treatment and control group but this was not statistically significant ( $P > 0.05$ ) also the plasma level of TGF- $\beta$  and IL-10 had significant correlation with DAS-28 in the newly diagnosed RA patients ( $r = 0.369$ ,  $P = 0.046$  and  $r = 0.487$ ,  $P = 0.010$  respectively).

**Conclusion:** The evaluation of the plasma levels of IL-10 and TGF- $\beta$  could be useful as a biomarker for prognosis of disease activity in the newly diagnosed RA patients.

**Keywords:** Rheumatoid Arthritis, TGF- $\beta$ , IL-10, DAS-28

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**P2-15**

## **Prevalence of periodontitis in patients with systemic lupus erythematosus**

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**Background:** Over the last two decades, periodontitis(PD) has been linked to a systemic inflammatory .Some evidence suggests an association with SLE and a beneficial effect of periodontal treatment on SLE activity . The main aim of this study was to evaluate the prevalence of PD and correlation with activity in SLE.

**Method:** 86 SLE patients enrolled in this study.We conducted a cross-sectional survey of consecutive eligible outpatients with SLE attending the rheumatology department at GOUMS. PD diagnosis was confirmed based on physical examination with dentist. SLE activity were collected as part of the outpatients' visit.

**Result:** 57% of patients had periodontal disease. 69.4% of patients who had periodontitis were in the active group (p value <0.0001)

**Conclusion:** PD could contribute to an increased inflammatory profile in patients with SLE. Our data highlight the need of assessing oral health needs of patients with rheumatic diseases.

**Keyword:** Periodontitst, SLE, activity

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**P2-16**

***FcγRIIB and IIIA* Gene Polymorphisms and its association  
with Systemic Lupus Erythematosus Disease activity  
Index (SLEDAI) in Isfahan**

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**Aim:** SLE is a chronic Disease unknown etiology can involve different organs. Polymorphism in FcγReceptors have been identified as a genetic factor in susceptibility to SLE and other auto immune disease. This study was aimed to identify FcγRIIB genotype in rs10550501 and .genotypes in FcγRIIIA in rs396991 and association of SLEDAI.

**Method:** Eighty clinically diagnosed SLE patient in alzahra hospital were included in 2017. SLE patients were classified according to the ACR (American college of rheumatology) criteria. HRM method was used to detect FcγRIIB and FcγRIIIA polymorphism .Disease activity was assessed by SLEDAI2K. analyzed using the SPSS21 software.

**Result:** Of the eighty patient 90% was female 10% was male. min SLEDAI score 0, max 51 . mean SLEDAI score at evaluation was 21.1 Among SLE patients FcγRIIB frequency was 37.5 % for TT genotype and 31.25% for CT and 31.25% for CC. There was no significant association between FcγRIIB genotypes and SLEDAI (P=0.557) FcγRIIIA genotype ferequency was 47.5 % for TT, 31.25% for CT, 21.25 for GG. The findings show a significant association between FcγRIIIA polymorphism and SLEDAI (p=0.029)

**Conclusion:** The findings of this study indicate toward an involvement of TG genotype of FcγRIIIA with disease severity and SLEDAI score. This genotype had a protective effect in SLE. No significant association between FcγRIIB genotypes and SLEDAI. Another future study on a large sample is recommended to support This finding.

**Keywods:** Systemic lupus Erythematosus, FcγRIIB genotype, FcγRIIIA genotype, Disease Activity Index.

**P2-17**

## **Occupational Therapy in Scleroderma**

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**Aim:** Systemic sclerosis or Scleroderma is a chronic multi-system autoimmune disease with extremely heterogeneous manifestations, characterized by thickening and fibrosis of the skin, vasculopathy and involvement of various internal organs in different degrees. Scleroderma is notable for the many different problems faced by people living with the disease. A number of these problems have been reported by patients to significantly influence well-being and quality of life, including limitations in hand function and physical mobility, pain, functional limitations and fatigue, sleep disturbance, coping skills and psychological distress including depression and anxiety. There is no effective treatment or cure to Scleroderma, so a primary goal of care is to reduce symptoms and disability and to improve health-related quality of life with both pharmacological and non-pharmacological interventions. Psychosocial and rehabilitation interventions are increasingly used to attenuate disability and improve health-related quality of life in chronic diseases, but are typically not available for patients with rare diseases such as Scleroderma. The purpose the study was to review the evidence about occupational therapy interventions in these patients.

**Methods:** A comprehensive literature search on articles and book chapters was carried out. Seven bibliographic databases, three Iranian (SID, Iran Doc, Magiran) and four international (PubMed, Science direct, Scopus and Cochrane) were searched. Multiple combinations of keywords were used. Two researchers reviewed the title and abstracts independently. Selection criteria were both qualitative and quantitative studies which appeared to assess effectiveness of occupational therapy and or rehabilitation for individuals with scleroderma. At the next stage, full texts were reviewed.

**Results:** Through three refining steps, 43 articles and books chapters out of 295 records were found to be related to the study.

**Conclusion:** Scleroderma is a rare disease where patients have important unaddressed psychosocial and rehabilitation needs. Because of its complexity, Scleroderma management should be carried out by a multidisciplinary team of physicians, coordinated by the rheumatologist. Similarly, the impairment of skin, musculoskeletal system, and respiratory system requires a rehabilitation therapy to be carried out by a multidisciplinary team. Clinical trial data related to occupational therapy interventions are lacking and few data are available to assess the efficacy of these interventions in systemic sclerosis. The few clinical studies in this area, have reported improvements in hand motion, functional status and ability to perform physical activities. There are many areas where Scleroderma patients would potentially benefit from Occupational Therapy. Occupational Therapy may contribute to the management of Scleroderma dealing with disabilities due to psychosocial problems, fatigue, skin and joint involvement.

**Keywords:** Scleroderma, Occupational therapy, Rehabilitation

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**P2-18****Determination of ANCA frequency in patient with systemic lupus erythematus and its association with disease activating****Navid Rahimi<sup>1</sup>, Nafiseh Abdolahi (M.D)<sup>2\*</sup>, Mehrdad Aghae (M.D)<sup>3</sup>, Atefeh Rezaeifar (M.D)<sup>4</sup>**<sup>1</sup>*Medical Student, Student Research Committee, Golestan University of Medical Sciences, Gorgan, Iran.*<sup>2</sup>*Assistant Professor, Rhumatology Research Center, Golestan University of Medical Sciences, Gorgan, Iran*<sup>3</sup>*Associate Professor, Rhumatology Research Center, Golestan University of Medical Sciences, Gorgan, Iran*<sup>4</sup>*Internist, Clinical Research Development Unit, Sayyad Shirazi Hospital, Golestan University of Medical Sciences, Gorgan, Iran.*

**Background:** Systemic Lupus erythmatous (SLE) is an autoimmune disease that caused by clinical presentation. anti Neutrophil cytoplasmic Antibody is common in Vasculitis is reported in lupus as well as and is various reports are available regarding to its relationship with disease activating therefore. This study considered in order to determine the prevalence of the positive ANCA in Patient with SLE and its relationship with disease activating.

**Methods:** This cross sectional descriptive Study has been conducted on 80rhmatology clinic Lupus patient in which their disease have been diagnosed based on the ACR Criteria .According to the disease activity divided to active group and inactive group. Demographic information has been completed with questionnaire and blood sample has been collected in order to evaluate of for serum ANCA (by using ELISA method) .

**Results:** The average age is  $37.5 \pm 12.4$ . Seven patients are men (%8.5) and the rest are women. 27 patients(33%) had active lupus and 53 (57%) had inactive Lupus. Only one case has been reported as positive in which patient was a 45 age woman. who Lupus nephritis for 10 years with active disease in the time of current research investigation. Evaluation of relationship with the other variables such as “Anti ds DNA”, age, sex due to a few numbers of the positive cases was not applicable.

**Conclusion:** in this study Any relationship between ANCA and disease activity has not been found. The principle reason for this finding could be a few number of positive cases.

**Keywords:** Systemic Lupus erythmatous, ANCA, disease activity

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**P2-19**

## **Demographic Characteristics in Patients with Rheumatoid Arthritis in Khouzestan, Ahvaz, Iran**

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**Aim:** Rheumatoid arthritis is a chronic autoimmune disease that characterized by inflammation of peripheral joints, pain, swelling and bone losses. RA affects all races and age groups. Rate of incidence is observed during 4-6 decades of life. The exact etiology of RA is unknown but failure of self-tolerance is a hallmark of disease. The objective of the study was to determine clinical, demographic characteristics among patients with rheumatoid arthritis.

**Methods:** In this descriptive study, 100 patients with RA according to ACR 2010 Classification Criteria were included (79 females and 21 males). History of patients were assessed by Rheumatologist.

**Results:** The data were analyzed by using SPSS 19. 79% of patients were female and 21% were males. Female are more tendency to RA more than male. Most present age group in both gender was 36-54 years old. Serum RF was positive in 76% and CRP was positive in 83% of patients. The mean of DAS28-ESR was  $4.5 \pm 1.4$ . Majority of patients (71.6%) were received non-biological DMARDs. **Conclusion:** We observed features of patients with rheumatoid arthritis in the study are similar to others in some countries.

**Keywords:** Rheumatoid arthritis, Epidemiology, Drugs

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**P2-20****New Onset Systemic Lupus Erythematosus Presenting with Massive Pericardial Effusion****Dorsa Kavandi<sup>1\*</sup>, Majid Alikhani<sup>2</sup>, Hadiseh Kavandi<sup>3</sup>, Sara Madanisadat<sup>4</sup>**<sup>1</sup>*Medical student at Zanjan University of Medical Sciences, Faculty of Medicine, Zanjan, Iran.*<sup>2</sup>*Department of Rheumatology, Zanjan University of Medical Science, Faculty of Medicine, Zanjan, Iran.*<sup>3</sup>*Connective Tissue Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran.*<sup>4</sup>*Department of Anesthesiology, Tehran University of Medical Science, Faculty of Medicine, Tehran, Iran.*

Systemic Lupus erythematosus (SLE) is an autoimmune connective tissue disorder with multiple system involvements in which the cardiac system is commonly affected. Although pericarditis and pericardial effusion are prevalent cardiac manifestations in SLE but massive pericardial effusion as an initial presentation is unusual. We describe a 47-year-old woman presented to the hospital with headache, dry cough, shortness of breath and fatigue. On admission blood pressure crises, tachycardia, tachypnea, low grade fever and muffled cardiac sounds were detected. In the laboratory tests, pancytopenia, elevated ESR, hematuria and proteinuria were found. Electrocardiogram showed sinus tachycardia and low voltage pattern. Cardiomegaly was found on chest X-ray. Echocardiography and Spiral lung and mediastinal computed tomography scan showed massive pericardial effusion. Bone marrow aspiration and biopsy revealed hypercellular marrow without any malignant cell. In the abdominopelvic ultrasound, splenomegaly was reported. According to the rheumatologic tests SLE was proved and treatment with prednisolone, Hydroxychloroquine and mycophenolate mofetil started. She improved clinically and follow up echocardiography showed reduction of the effusion volume in comparison to the previous ones. Prevalence of cardiac involvement in SLE is reported about up to 50%. However, patients who suffered from lupus associated pericardial effusion are estimated nearly 40%. Cardiac involvement is rarely detected as an initial presenting feature in SLE. In Patients with cardiopulmonary symptoms specially when other organ involvements are seen- screening for autoimmune systemic diseases such as SLE should be considered. In order to achieve rapid recovery and preventing life-threatening complications early diagnosis and treatment is essential.

**Keywords:** SLE, massive pericardial effusion, echocardiography

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