Immunology, Istanbul, Turkey; ⁴Marmara University, Institute of Health Sciences, Istanbul, Turkey

Background: Sjögren's syndrome (SjS) is a chronic systemic autoimmune disease targets primarily the salivary and lacrimal glands, the severe dryness of the mouth and eyes are common manifestations in patients. Therefore, daily life could be affected by these manifestations in patients with SjS.

Objectives: The aim of the study was to assess associations among daily activity impairment and scores of EULAR Sjögren's Syndrome Patient Reported Index (ESSPRI) and major salivary gland ultrasonography (SGUS) in primary SjS.

Methods: In this cross-sectional study, 41 patients with primary SjS (F/M:39/2; mean age: 52,1±10,5) were included. The mean disease duration was 9.5±6,6 years in the group.

Data were collected by clinical examinations and a questionnaire regarding two patients reported outcome measures (PROMs). Firstly, Work Productivity and Activity Impairment (WPAI) questionnaire assessed paid and unpaid work during the last seven days. Scores of WPAI subgroups as absenteeism, presenteeism, overall work impairment as well as daily activity impairment were calculated by using 6 items. Secondly, dryness, fatigue and pain in ESSPRI scale were evaluated by visual analogue scale (VAS; 0-10 points) in SjS. High scores in both PROMs indicates that disease manifestations affect patient's life poorly.

In addition, structural damage of parotid and submandibular salivary glands were examined by using Milic and Hocevar USG scoring methods. Unstimulated whole salivary flow rate (U-WSFR; as ml/min) were also used to interpret the functional status of major salivary glands. High SGUS score and low U-WSFR reflects that disease activity affects major glands poorly.

Results: Daily activity impairment was calculated as 63,9±31,1 in patients with primary SjS. High scores in ESSPRI-dryness, ESSPRI-fatigue and ESSPRI-pain were also observed in the group (7,5±2,4; 6,4±2,8 and 6,1±3,1, respectively). Daily activity impairment was correlated with scores of ESSPRI-dryness ($r:0,55$ $p=0,000$), ESSPRI-fatigue ($r:0,38$ $p=0,014$) and ESSPRI-pain ($r:0,56$ $p=0,000$) as well as parenchymal inhomogeneity USG scores of right and left parotid glands ($r:0,49$ $p=0,032$; $r:0,51$ $p=0,025$).

U-WSFR ($0,20\pm0,20$ ml/min) was moderately correlated with parenchymal inhomogeneity USG scores of major salivary glands ($p<0,05$). ESSPRI-dryness score was significantly higher in patients with low U-WSFRs ($\leq 0,1$ ml/min) than the others ($87,5\pm16,3$ vs $68,3\pm25,1$, respectively) ($p=0,021$).

Conclusion: Firstly, subgroup scores of ESSPRI and low U-WSFR associated to daily activity impairment in patients with primary SjS. Secondly, parenchymal inhomogeneity scores of both parotid glands could give an important clue to clinicians for the disease-related damage. Finally, WPAI with 6-item could be thought as an useful tool to understand the effect of the disease manifestations on patients' daily life.

Disclosure of Interests: : None declared

DOI: 10.1136/annrheumdis-2020-eular.6033

AB0415

SERUM RESISTIN LEVEL IN SYSTEMIC LUPUS ERYTHEMATOSUS: RELATION TO LUPUS NEPHRITIS AND DISEASE ACTIVITY

E. Ismail¹, S. Salah², M. Abdelhamed³, M. Aboul Ela⁴. ¹Professor of Rheumatology Minia University, Rheumatology and Rehabilitation, Minia, Egypt;

²Lecturer of Rheumatology, Rheumatology and Rehabilitation, Minia, Egypt;

³Assistant lecturer of Rheumatology, Rheumatology and Rehabilitation, Minia, Egypt;

⁴Minia University Hospital, Minia, Egypt

Background: Systemic lupus erythematosus (SLE) is a chronic autoimmune disease affecting different organs and systems. Adipokines have recently been implicated as mediators of immune and inflammatory processes. Human resistin is a cytokine that induces low-grade inflammation by stimulating monocytes

Objectives: The aim of this work is to assess the serum level of resistin in SLE patients and to detect its relation to lupus nephritis, and disease activity

Methods: 40 patients with SLE with age ranged between 18-48 years and 20 healthy age, sex and BMI matched volunteer were enrolled in this study. According to the presence or absence of lupus nephritis (LN), patients were classified into two subgroups Full history, clinical examination and laboratory investigations were performed for all patients including serum resistin level

Results: The level of serum resistin was higher in SLE patients than the controls ($p=0,001$). Also, serum resistin levels were higher in patients with lupus nephritis than those without nephritis ($p=0,02$). Serum resistin level correlated positively with the levels of ESR ($p<0,001$), CRP ($p=0,005$), Anti-dsDNA ($p=0,002$) and serum urea ($p=0,002$). Serum resistin levels correlated negatively with hemoglobin levels ($p=0,001$) and levels of C3 ($p<0,001$) and C4 ($p<0,001$). There was a significant positive correlation between serum resistin level and the presence of albumin ($p=0,001$), RBCs ($p=0,003$), pus cells ($p=0,001$) and casts ($p<0,001$) in urine and also with the levels of 24 hour urinary protein and protein/creatinine ratio ($p<0,001$). Serum resistin level was found to be strongly correlated with

SLEDAI ($p<0,001$). No correlation was found between serum resistin levels and ISN/RPS classification of renal biopsy.

Conclusion: Serum resistin level can be used as a marker of inflammation, nephritis, disease activity in patients with SLE.

Disclosure of Interests: : None declared

DOI: 10.1136/annrheumdis-2020-eular.3883

AB0416

ANTIPOSPHOLIPID SYNDROME IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOUS

M. Jordhani¹, D. Ruci¹. ¹Mother Teresa Hospital, Internal Medicine, Tiranë, Albania

Background: Antiphospholipid Syndrome (APS) is an autoimmune disorder characterized by venous/arterial thrombotic events and pregnancy morbidity in presence of pathogenic autoantibodies known as antiphospholipid antibodies (APL). APS is often associated with systemic autoimmune diseases, especially with Systemic Lupus Erythematosus (SLE), being part of the latest criteria of SLE.¹

Objectives: The aim of this study was to evaluate the impact of Antiphospholipid syndrome in patients with Systemic Lupus Erythematosus presented at our Rheumatology Clinic at University Hospital Center Mother Teresa in Tirana, Albania.

Methods: This is an observational case-control study which included patients diagnosed with SLE from 16-51 years old, presented at our clinic during the period from 10 December 2014-10 September 2019.

Seventy-three patients with SLE were included in the study. Patients were classified according to the presence of Antiphospholipid Syndrome or not, according to the current guidelines. The case study (patients with SLE and APS) consisted in 24 patients, and the control group consisted in 49 patients. Besides the usual laboratory tests (complete blood count, erythrocytation rate, C3, C4 complement fractions, urinalysis and 24h proteinuria, c-reactive protein), all patients underwent immunological tests for anti-nuclear antibodies, anti-DNA antibodies and antiphospholipid antibodies (Anti-cardiolipin IgM and IgG). If APL were found positive, according to EULAR recommendations, tests were repeated after 12 weeks. Female patients were asked about their pregnancy history and their possible miscarriages/aborts.

Results: After our statistical analysis it resulted that there is a significant difference between C3 complement fraction (patients with APS and SLE tend to have more hypocomplementemia than the other group) ($p=0,006$). Thrombocytopenia resulted to be an important feature, statistically significant in the cases' group ($p=0,003$). It was seen a statistically significant difference referring to the number of miscarriages/aborts in the history of female patients with APS and SLE in comparison to those with SLE without APS ($p=0,03$). Proteinuria it has a tendency to be more marked in patients with APS and SLE, with a significant difference in comparison to the controls ($p=0,04$).

Conclusion: In this study was seen that patients with antiphospholipid Syndrome and Systemic Lupus Erythematosus tend to have more hypocomplementemia C3, and thrombocytopenia. It resulted a statistically significant relationship with miscarriages or abortions in patients with APS and SLE in comparison to SLE patients. It was seen a significant tendency to have marked proteinuria in patients with SLE and APS compared to controls.

Through this study it was seen a characteristic clinical and laboratory picture that may be useful in the identification of cases with APS in patients with SLE, in their follow-up and treatment.

References:

[1] Miyakis S, Lockshin MD, Atsumi T, et al. International consensus statement on an update of the classification criteria for definite antiphospholipid syndrome (APS). *Thromb Haemost* 2006;4: 295–306.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.776

AB0417

WORK IMPAIRMENT AND PREDICTORS OF WORK INCAPACITY AMONG PRIMARY SJOGREN'S SYNDROME PATIENTS

D. Khalifa¹, A. Guiga², W. Ben Yahya², A. Atig², N. Ghannouchi². ¹Farhat Hached Hospital, Rheumatology Department, Susah, Tunisia; ²Farhat Hached Hospital, Internal Medicine Department, Susah, Tunisia

Background: Primary Sjogren's syndrome (PSS) is a prevalent rheumatic disorder affecting exocrine glands but also other systems. It alters quality of life of affected patients and increases work incapacity and general activity impairment.

Objectives: The purpose of this study was to assess the influence of PSS on work among affected patients and determine predictors of work incapacity.

Methods: A cross-sectional study was conducted in the internal medicine department. Adult patients diagnosed with PSS and fulfilling the EULAR criteria for the diagnosis were included. Clinical and biological data was collected from medical files and during medical visits. Disease activity was calculated using

the ESSDAI score. Work incapacity was assessed by the Work productivity and activity impairment for general health questionnaire (WPAI-GH) from which four dimensions can be calculated and expressed in percentages by the following scores: 1) percent work time missed due to health = $Q2/(Q2 + Q4)$ for those who were currently employed; 2) percent impairment while working due to health = $Q5/10$ for those who were currently employed and actually worked in the past seven days; 3) percent overall work impairment due to health $Q2/(Q2 + Q4) + ((1 - Q2/(Q2 + Q4)) \times (Q5/10))$ for those who were currently employed; 4) percent activity impairment due to health $Q6/10$ for all respondents.

Results: Eighty patients were randomly asked to fill out the questionnaire. Response rate was of 62.5%. Total number of enrolled patients was 50. The median age was 56.5 years (min=22, max=60). Patients were mainly women with female to male ratio of 11.5:1. The median age of diagnosis was 50.5 years (min=18, max=59). Mean duration of the disease was 6 years $\pm$ 3.76. Sicca syndrome was the most prevalent clinical feature affecting the eyes in 84% of the cases and the mouth in 90% of the cases. Arthralgia was present in 88% of the cases. 65.1% of patients had an active disease. Anti Ro antibodies were positive in 38%, anti La in 28% and rheumatoid factor in 50% of cases. 36% of the patients were unemployed. Percentage of work time missed due to health for those who were employed in the past 7 days was 2.44% ($Q1=0; Q2=5.26$). Mean percentage of impairment while working due to health for those who were employed and actually worked in the past 7 days was $20.56 \pm 18.25\%$. Percentage of overall work impairment due to health for those who were currently employed and actually worked was $25.87 \pm 19.58\%$, and the percentage of overall activity impairment due to health for all respondents was $26.6 \pm 18.36\%$. Analytic statistics showed no correlation between employment status and age, duration of disease, gender or seropositivity. However, all unemployed patients had ocular symptoms vs 75% of those employed (p value=0.04). The first dimension was correlated with the presence of dry mouth (p value=0.07) but with weak statistical significance. Second and third dimensions weren't associated to any general, clinical or laboratory feature. Fourth dimension was significantly correlated to the presence of dry eyes (p value=0.019) and gender (p value=0.001).

Conclusion: PSS is associated with high unemployment rates in Tunisia, high impairment rates while working and high rates of overall impairment. This high prevalence may be explained by gender and the presence of dry eyes and dry mouths. This work highlights the importance of managing sicca symptoms as they alter different aspects of quality of life like work.

References:

- [1] Reilly MC, Zbrozek AS, Dukes EM. The validity and reproducibility of a work productivity and activity impairment instrument. *PharmacoEconomics*. nov 1993;4(5):353- 65.
- [2] Mandl T, Jørgensen TS, Skougard M, Olsson P, Kristensen L-E. Work Disability in Newly Diagnosed Patients with Primary Sjögren Syndrome. *J Rheumatol*. févr 2017;44(2):209-15.

Disclosure of Interests: : None declared

DOI: 10.1136/annrheumdis-2020-eular.5730

AB0418

APPLICATION OF ACR (2012), ACR/EULAR (2016) AND RUSSIAN (2001) CRITERIA FOR PRIMARY SJÖGREN'S SYNDROME ON RUSSIAN COHORT OF PATIENTS

J. Khvan¹, S. Palshina¹, V. Vasiliev², A. Torgashina¹, E. Sokol¹, B. Chaltcev¹.

¹V.A. Nasonova Research Institute of Rheumatology, Moscow, Russian Federation; ²MEDSI, Moscow, Russian Federation

Background: Over the past few years new international criteria have been proposed for the classification of primary Sjögren's syndrome (pSS) from the American College of Rheumatology (ACR) in 2012 and the ACR with European League Against Rheumatism (ACR/EULAR) in 2016 [1, 2]. In real practice in Russia we use Russian criteria (2001).

Objectives: To estimate ACR (2012) and ACR/EULAR (2016) criteria in Russian cohort of patients with pSS patients fulfilling Russian criteria (2001).

Methods: From 2016 to 2019 we examined 110 patients (109 female, 1 male) with newly diagnosed pSS fulfilling Russian criteria with the mean age 50.2 ± 14 years (min 18; max 82). Russian criteria for pSS: I) keratoconjunctivitis sicca (stimulated Schirmer's test <10 mm/5 min or fluorescein staining of the cornea or tear break-up time <10 sec); II) sialadenitis (sialectasia on parotid sialography (obligatory) +/- stimulated saliva flow test <2.5 ml/5 min +/- labial salivary gland biopsy with focus score (FS) of ≥ 2 foci/4 mm²); III) positive antinuclear antibody (ANA) or positive ANA with rheumatoid factor (RF) or anti-SSA (anti-Ro) or/and SSB (anti-La). According it pSS is verified if the first two criteria and at least one of the immunological criteria are presented. We evaluated clinical, laboratory and instrumental features (table 1).

Table 1. Characteristics of Russian cohort of patients with primary Sjögren's syndrome (n = 110)

Parameters	Patients (n / %)
ocular dryness	76 (69%)
oral dryness	88 (80%)
anti-SSA (anti-Ro) positive (>25 IU/ml)	93 (84.5%)
anti-SSB (anti-La) positive (>25 IU/ml)	57 (51.8%)
RF positive >2 UNL (>30 IU/ml)	68 (61.8%)
ANA $\geq 1:320$	110 (100%)
(stimulated) Schirmer's test (≤ 5 mm/5 minutes)	55 (50%)
stimulated SFT <2.5 ml/5 min	77 (70%)
OSS ≥ 5	28 (25.4%)
OSS ≥ 3	43 (39%)
FS ≥ 1 foci/4 mm ²	99 (90%)
Sialectasia on parotid sialography	110 (100%)

In our cohort according to Russian criteria (2001) 94 patients (86%) fulfilled ACR (2012) criteria, 86 (78%) - ACR/EULAR (2016) criteria.

Results: In our cohort, 20-30% of patients, according to Russian criteria did not complain of oral or ocular dryness. In 61% of patients, mild eye damage was detected (OSS $<3-5$), and in half of the cases, the stimulated Schirmer's test was more than 5.0 mm, but less than 10 mm/5 minutes, while 69% of patients complained of dry eyes. Most patients (84.5%) had positive anti-Ro, just over half (51.8%) had anti-La. All patients had sialectasia of various stages on parotid sialography. Less than 1 FS was detected in 10% of patients.

Conclusion: Using Russian criteria (2001), we can identify pSS at an early stage. Our criteria inclusion complex examination in which an immunological sign must be present to confirm the diagnosis. Patients with pSS according to ACR (2012) and/or ACR/EULAR (2016) criteria seem to be diagnosed without specific antibodies and on the more progressive disease stages.

References:

- [1] SC Shiboski, CH Shiboski, LA Criswell, AN Baer, S Challacombe, H Lanfranchi, M Schiødt, H Umehara, F Vivino, Y Zhao, Y Dong, D Greenspan, AM Heidenreich, P Helin, B Kirkham, K Kitagawa, G Larkin, M Li, T Lietman, J Lindegaard, N McNamara, K Sack, P Shirlaw, S Sugai, C Vollenweider, J Whitcher, A Wu, S Zhang, W Zhang, JS Greenspan, and TE Daniels for the Sjögren's International Collaborative Clinical Alliance (SICCA) Research Groups. American College of Rheumatology Classification Criteria for Sjögren's Syndrome: A Data-Driven, Expert Consensus Approach in the SICCA Cohort.
- [2] Caroline H. Shiboski,1 Stephen C. Shiboski,1 Raphae 'le Seror,2 Lindsey A. Criswell,1 Marc Labetoulle,2 Thomas M. Lietman,1 Astrid Rasmussen,3 Hal Scofield,4 Claudio Vitali,5 Simon J. Bowman,6 Xavier Mariette,2 and the International Sjogren's Syndrome Criteria Working Group. 2016 American College of Rheumatology/European League Against Rheumatism Classification Criteria for Primary Sjogren's Syndrome. *ARTHRITIS & RHEUMATOLOGY* Vol. 00, No. 00, Month 2016, pp 00–00 DOI 10.1002/art.39859.

Disclosure of Interests: : None declared

DOI: 10.1136/annrheumdis-2020-eular.4686

AB0419

THE COEXISTENCE OF FAMILIAL MEDITERRANEAN FEVER (FMF) IN SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) PATIENTS - A CROSS SECTIONAL STUDY

T. Klein^{1,2}, S. Tiosano^{1,2}, A. Chohen^{3,4}, H. Amital^{1,2}. ¹Tel Aviv University, Sackler Faculty of Medicine, Tel Aviv-Yafo, Israel; ²Sheba Medical Center, Medicine 'B', Tel-Hashomer, Ramat Gan, Israel; ³Clalit Health Services, Quality Measurements and Research, Chief Physician's Office, Tel Aviv-Yafo, Israel; ⁴Ben Gurion University of the Negev, iaal Research Center for Family Medicine and Primary Care, Faculty of Health Sciences, Be'er Sheva, Israel

Background: Systemic Lupus Erythematosus (SLE) is a chronic autoimmune disease characterized by multisystem inflammatory lesions affecting many organ systems in the body. Familial Mediterranean fever (FMF) is an autosomal recessive disease of chronic autoimmune inflammation characterized by frequently relapsing self-limiting fever and inflammation that may be localized in peritoneum, pleura, joint or skin.¹ Previous studies have described the similarity of clinical symptoms of FMF among SLE patients. However, the literature on this topic is inconsistent and based mostly on case reports.²⁻⁴

Objectives: To examine the proportions of coexistence of FMF among SLE patients compared to the general population. We hypothesized that the proportion of FMF among SLE patients is higher than the general population.

Methods: This cross-sectional study used the Clalit Health Services database, the largest Health Maintenance Organization in Israel, serving 4,400,000 members. SLE patients were compared to age- and sex-matched controls. Chi- was used for univariate analysis.