Kirghiz patients in the comparative analysis of HRQoL in SLE patients of RF and Kazakhstan. The HRQoL was comparable in lupus patients from RF and Kazakhstan. There was a strong correlation between Sum LupusQoL domain and age ($r = -0.19$), steady employment ($r = 0.28$), high education ($r = 0.19$), disease duration ($r = -0.29$), SLEDAI 2K index activity ($r = -0.22$), SLICC damage index ($r = -0.25$).

Table 1. HRQoL Assessed by LupusQoL in 1102 Lupus Patients from The Russian Federation, Kirgizstan and Kazakhstan

LupusQoL domains	Russian Federation Mean (SD)	Kazakhstan Mean (SD)	P	Kyrgyzstan Mean (SD)	P
Physical health	67,2±23,04	63,1±24,5	0,25	44,6±28,6	0,00
Pain	70,2±24,5	65,2±25,5	0,3	45,9±29,3	0,00
Planning	64,4±28,9	65,9±27,4	0,17	46,5±31,5	0,00
Intimate	59,3±39,9	58,4±36,7	0,5	57,5±38,5	0,00
relationships					
Burden to others	57,1±27,7	56,6±27,7	0,34	41,1±30,9	0,00
Emotional health	64,9±24,9	65,9±23,4	0,21	48,3±27,9	0,00
Body image	61,4±31,6	62,5±26,5	0,17	57,7±28,6	0,00
Fatigue	63,0±24,8	58,6±26,3	0,16	47,7±28,1	0,00
LupusQoL Sum	63,1±20,4	60,8±20,1	0,25	48,5±23,5	0,00

Conclusion: HRQoL assessed by LupusQoL was low in SLE pts from the RF, Kirgizstan and Kazakhstan. The lowest HRQoL is reported among Kirghiz patients in the comparative analysis of HRQoL with SLE patients in RF and Kazakhstan. The low HRQoL is associated with age, unavailability of work, low education, disease duration, disease activity and damage.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.2277

AB0320

CLINICAL FEATURES AND TREATMENT OF 1102 PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS IN THE RUSSIAN FEDERATION (RF), KIRGIZSTAN AND KAZAKHSTAN IN REAL CLINICAL PRACTICE (RENAISSANCE COHORT)

E. Aseeva¹, S. Solovyev¹, G. Koilubaeva², B. Issayeva³, M. Saparbayeva³, N. Nikishina¹, A. Mesnyankina¹, A. Lila¹. ¹Rheumatology Federal State Research Institution (FSRI) named after V.A. Nasonova, Intensive Care Department, Moscow, Russian Federation; ²Rheumatology, National Center of Cardiology and Internal Medicine named after Academician M. Mirrahimov (NCCIM), Rheumatology Department, Bishkek, Kyrgyzstan; ³Asfendiyarov National Medical University, City Rheumatology Center, Almaty, Kazakhstan

Background: Clinical features of systemic lupus erythematosus may differ significantly in various regions and are frequently associated with the ethnicity of patients.

Objectives: The aim of this study was to compare clinical features and treatment of patients with systemic lupus erythematosus in the Russian Federation (RF), Kirgizstan and Kazakhstan in real clinical practice.

Methods: 1102 SLE pts who fulfilled SLICC 2012 criteria were enrolled into the study. Disease activity was evaluated by the SLEDAI-2K, and chronic damage by the Systemic Lupus International Collaborating Clinics Damage Index score (SDI).

Results: 400/600/102 Lupus pts from RF, Kirgizstan and Kazakhstan respectively were studied. Pts were predominantly female (91%/93%/98%) with a mean±SD age of 34,2±11,5/35,07±12,2/33,8±10,5 years ($p=0,36$; $p=0,96$) respectively. The mean disease duration (Me) in RF/ Kazakhstan was 6 [3;12]/ 5[2;9] years ($p=0,15$), in Kirgizstan- 2[0,6; 7] years($p=0,05$). Kazakh pts ($p=0,00$) have higher disease activity (SLEDAI 2K) 17,6±8,8 than Kirghiz pts 15,1±8,3 and Russian pts 9,4±8,1. The higher SLICC damage index 2,39±1,61 was in Kazakh pts ($p=0,00$) as compared to the Russian. Clinical features of 1102 patients with systemic lupus erythematosus in the Russian Federation (RF), Kirgizstan and Kazakhstan are shown in Table 1. Among the Kirghiz, most of the patients were with Neuropsychiatric disorders (33%), vasculitis (27%), serositis (49%) and lupus nephritis (41%). Patients in RF and Kazakhstan were more likely to have arthritis (60%/80%) and mucocutaneous lesions (44%/74%) respectively.

Russian/Kirghiz/ Kazakh pts received corticosteroids per os with duration (Me) 48[18; 106] /24[7,2; 84]/ 37[13; 84] months. The mean±SD dosage was 17,8±12,0/23,2± 19,9/12,33±9,8mg per day. Among cytostatic drugs, patients in Kirgizstan were prescribed more often cyclophosphamide (64%) and methotrexate (27%). They were prescribed mofetil micofenolate much less frequently

(4%) than patients from Russia (20%) and Kazakhstan (46%). Prescription of cyclophosphamide, azathioprine and methotrexate in the Russian and Kazakhstan pts was approximately of the same frequency and ranged from 10 to 23%. Hydroxychloroquine was obtained in 67%/26%/51% Russian/Kirghiz/ Kazakh pts respectively. Disability benefits in RF included payment for biological therapy. Lupus patients in Kirgizstan and Kazakhstan bought biological drugs at their own expense. In RF rituximab was administrated in 34% cases and belimumab -in 10%. In Kirgizstan and Kazakhstan rituximab was administrated in 2% and 6% respectively.

Table 1. Clinical Features of 1102 Patients with Systemic Lupus Erythematosus in the Russian Federation (RF), Kirgizstan and Kazakhstan

Clinical features	Russian Federation n (%)	Kyrgyzstan n (%)	Kazakhstan n (%)
Pyrexia	52(13%)	276 (46%)	15 (15%)
Neuropsychiatric	68 (17%)	198 (33%)	34(33%)
Mucocutaneous	176 (44%)	396 (66%)	75 (74%)
Vasculitis	40 (10%)	162 (27%)	4 (4%)
Arthritis	240 (60%)	282 (47%)	81(80%)
Myocarditis	16 (4%)	78 (13%)	-
Serositis	52 (13%)	294 (49%)	12 (12 %)
Lupus nephritis	116 (29%)	246 (41%)	24 (24%)
Leukopenia $\leq 3 \times 10^9$	36 (9%)	96 (16%)	6 (6%)
Trombocytopenia $\leq 100 \times 10^9$	12 (3%)	90(15%)	5(5%)
Anti dsDNA ≥ 20 E μ ml	276 (69%)	198 (33%)	80 (80%)
Low complement	200 (50%)	324 (54%)	6 (6%)

Conclusion: Significant differences have been revealed in the Kirghiz patients as compared to those of the RF and Kazakhstan. Disease activity in vital organs was more often revealed in the Kirghiz patients: neuropsychiatric disorders, vasculitis, serositis and lupus nephritis. As a result, they received a higher mean corticosteroids dose and cyclophosphamide was administered more often. Prescription of biological therapy was limited by a high cost of such sort of drugs. In spite of this fact, the highest SLICC damage index was demonstrated by the Kazakh cohort (2,38 score, while the lowest of merely 0,79) was in the Kirghiz cohort.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.2312

AB0321

SALIVARY GLANDS ULTRASONOGRAPHY AS A DIAGNOSTIC TOOL IN PRIMARY SJÖGREN'S SYNDROME ON THE RUSSIAN COHORT OF PATIENTS

J. Khvan¹, A. Torgashina¹, B. Chalcev¹, E. Sokol¹. ¹V.A. Nasonova Research Institute of Rheumatology, Laboratory of Intensive Care of Rheumatic Diseases, Moscow, Russian Federation

Background: In the international scientific community there has been a long discussion about the role of ultrasound and ultrasound scores for assessing the structure of the salivary glands in Sjögren's syndrome. Stomatological examination according to The American College of Rheumatology (ACR) 2012 classification criteria of primary Sjögren's syndrome (pSS) includes only labial salivary gland biopsy (focus score - FS) and the ACR with European League Against Rheumatism (ACR/EULAR) 2016 criteria include FS and unstimulated saliva flow test (SFT).

Objectives: to compare the diagnostic value of ultrasonography salivary glands (SGUS) with other methods (sialography, stimulated SFT, FS).

Methods: From 2016 to 2020, we examined 94 patients (93 women, 1 man) with the mean age 48.6 ± 14.3 years (minimum 18, maximum 78) with newly diagnosed pSS according to Russian criteria 2001, 86% of patients fulfilled ACR 2012 criteria and 87% - the ACR/EULAR 2016 criteria. All patients underwent classical examination (stomatological, ophthalmological, immunological), and SGUS was performed using GE LOGIQ 9 on the two parotid and two sub-mandibular glands. Ultrasound images were evaluated with the OMERACT SS severity scoring system from grades 0 to 3 (1). Statistical analyses (Spearman coefficient $p < 0.05$) were performed using STATISTICA version 12.

Results: All patients in SGUS had inhomogeneity structure from mild to diffuse with hypoechoic areas from single to multiple. 4 patients had no signs of sialectasia on sialography, however, in ultrasound we found SGUS grade 2. In 5 patients with SGUS grade 0 we determined punctate sialectasia. Detailed characteristics of patients are presented in Table 1.

Table 1.

Parameters	N	%
Oral dryness	78	83,0
Enlargement of parotid salivary glands	32	34,0
Recurrent parotitis	19	20,2
Retention pain	31	33,0
RF positive >2UNL (>30 IU/ml)	51	54,2
anti-SSA (anti-Ro) positive (>25 IU/ml)	81	86,1
anti-SSB (anti-La) positive (>25 IU/ml)	48	51,0
ANA $\geq$ 1:320	94	100,0
SGUS 0	8	8,5
SGUS 1	1	1,0
SGUS 2	20	21,2
SGUS 3	65	69,1
Stimulated SFT < 2,5ml/5 min	59	62,8
Sialectasia on parotid sialography	90	94,7
Punctate sialectasia	12	12,6
Globular sialectasia	63	66,3
Cavitary sialectasia	10	10,5
Destructive sialectasia	6	6,3
FS $\geq$ 1 foci/4 mm2	83	88,2

Correlation was calculated for each SGUS (0-3) with clinical and classical methods of examination of the salivary glands. Pronounced changes in SGUS 3 correlated with recurrent parotitis $r = 0.22$ ($p = 0.03$), enlargement of parotid salivary glands $r = 0.23$ ($p = 0.02$) and cavitary sialectasia $r = 0.23$ ($p = 0.02$). Histological changes FS ≥ 1 correlated with all grades on ultrasound (SGUS 0 $r = -0.24$ ($p = 0.01$), SGUS 1 $r = 0.41$ ($p = 0.000027$), SGUS 2 $r = -0.21$ ($p = 0.03$), SGUS 3 $r = 0.40$ ($p = 0.00006$)). The punctate sialectasia correlated with SGUS 1 $r = -0.28$ ($p = 0.005$) and SGUS 0 $r = 0.45$ ($p = 0.000004$). Stimulated SFT didn't correlate with ultrasound changes.

Conclusion: : Probably, in everyday clinical practice, SGUS can be used as an additional method for salivary gland assessment, given the availability and safety of the method. The most convenient system for assessing the salivary glands, at present, is the OMERACT SS severity scoring system, however, now we don't have a score for the complete differentiation in pSS and lymphoproliferative complications.

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Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.2455

AB0322 ASSOCIATION OF DEPRESSIVE SYMPTOMS ASSESSED BY BDI II WITH PHYSICAL ACTIVITY IN PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME

S. Beider¹, T. Witte¹, D. Ernst¹. ¹Medical School Hanover, Department of Rheumatology and Immunology, Hannover, Germany

Background: Patients with primary Sjögren's syndrome (pSS) suffer from pain, oral or ocular dryness and fatigue. Such symptoms can have a detrimental impact on health-related quality of life. The prevalence of mental health disorders in patients with pSS is considerably higher than in the general population [1]. Regular physical activity, such as nordic walking, improves aerobic capacity and may reduce reported fatigue [2]. According to current European League Against Rheumatism (EULAR) recommendations, management of pSS concomitant diseases should be evaluated in patients presenting with fatigue and pain, and severity scored using specific tools [3].

Objectives: This study analyses the frequency and severity of depressive symptoms in patients with pSS and their relationship to fatigue and physical activity.

Methods: In this monocentric, cross-sectional study, patients with pSS attending our Rheumatology clinic between January 2019 and March 2020 completed standardized questionnaires: Beck's depression inventory second edition (BDI II) and the international physical activity questionnaire short form (IPAQ-SF). Data were analyzed using SPSS 26 (IBM, Armonk, NY, USA). The tests include bivariate and partial correlations and nonparametric Kruskal-Wallis-Test.

Results: In total, 134 patients were included. The majority were female (117/134, 87.3 %), and the patients median age was 57 [21 – 85] years. Median duration of disease-related symptoms at inclusion was 56 months (range 0-388 months). Physical activity was low in 44.8 % ($n = 60$), moderate in 32.1 % ($n = 43$), and high in 23.1 % ($n = 31$) of patients. Depressive symptoms of varying severity

were identified in 76/134 (56.7%) of patients. Severe depression occurred in 10/76 (13.2%) and moderate depression in 14/76 (18.4%) patients. The remaining 52/76 (68.4%) patients had minimal or mild depression. Over two-thirds (67.7%) of patients reporting high physical activity showed no depression and no one with a high level of physical activity had severe depression. There was a clear association between the BDI II depression score and the level of physical activity ($p = 0.003$) regardless of age and illness duration. However, not all the symptoms assessed by BDI II had the same impact. From 21 items of the BDI II Inventory, symptoms such as loss of energy and fatigue were profoundly relevant, being reported by over 75 % of patients. The main depressive symptoms, which had a strong negative correlation with the level of physical activity were loss of energy ($p < 0.001$), sadness ($p = 0.018$), inability to make decisions ($p = 0.007$) and loss of pleasure ($p = 0.004$). Somatic symptoms of decreased activation such as fatigue ($p = 0.026$) and concentration difficulty ($p = 0.013$) were also significant. The cognitive, self-negative symptoms were not associated with the level of physical activity.

Conclusion: A negative correlation of physical activity with fatigue and depression in patients with pSS has been demonstrated. The somatic symptoms of decreased activation played a profound role in this association, while the cognitive self-negotiation symptoms were not influenced by physical activity in our patients. Such symptoms as fatigue and loss of energy could potentially be reduced by exercises and functional training and consequently decrease the level of depression. An intervention study in this regard would be recommended.

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Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.2647

AB0323 INTIMA-MEDIA THICKNESS IS INDEPENDENTLY ASSOCIATED WITH STROKE IN PRIMARY ANTIPHOSPHOLIPID SYNDROME

L. D. Azoulay¹, A. Mathian¹, F. Cohen¹, J. Haroche¹, M. Pha¹, P. Cherin¹, P. Cluzel², Z. Amoura¹. ¹Pitié-Salpêtrière, Internal Medicine 2, Paris, France; ²Pitié-Salpêtrière, Cardiovascular Imaging and Interventional Radiology, Paris, France

Background: Compared to secondary antiphospholipid syndrome (APS), little is known on intima-media thickness (IMT) in primary APS. Previous reports suggest that intima-media thickness may be associated with anti-cardiolipin antibodies, anti- β 2-glycoprotein-1 antibodies, and with stroke in APS¹.

Objectives: To assess clinical significance of intima-media thickness in primary APS.

Methods: We have included 29 patients with primary APS (defined according to international consensus criteria) seen, at least once, in our tertiary center for a cardiovascular risk assessment from April 2014 to November 2018.

Results: 29 patients were included (females 83%). Mean (SD) age at evaluation was 48 years (16.1). Mean APS duration before assessment was 9.1 years (6.2). 27 patients had thrombotic APS (93%), among which 13 (45%) had a history of arterial thrombosis (12 strokes and 1 myocardial infarction) and 16 (55%) of venous thrombosis. Obstetrical APS was present in 7 patients (24%). Positive APL antibodies were: anti-cardiolipin antibodies (aCL) $n = 15$ (54%), anti- β 2-glycoprotein I (anti- β 2GP1) $n = 10$ (36%), lupus-anticoagulant (LAC) $n = 11$ (39%) and anti-phospholipid antibodies (aPL) $n = 19$ (68%). Mean IgG levels (GPL) were 52.4 (80.3) UGPL, 52.2 (124) UI, 39.2 (40.5) UGPL for aCL anti- β 2GP1, and aPL, respectively. 6 patients (21%) were simple positive, 3 (11%) were double positive, and 10 (36%) were triple positive.

Cardiovascular risk factors were: smoking $n = 6$ patients (21%), overweight $n = 11$ (39%), hypercholesterolemia $n = 12$ (43%), arterial hypertension $n = 11$ (38%), chronic kidney disease (defined by estimated glomerular filtration rate < 60 mL/min) $n = 5$ (17%). No patient had diabetes mellitus. Median risk SCORE was 0.65 (0-2.4). Male sex, obesity, chronic kidney disease and risk SCORE were significantly more frequent in patients with arterial APS compared to patients with venous and/or obstetrical APS (38% vs 0%, $P = 0.01$; 33% vs 0%, $P = 0.02$; 38% vs 0%, $P = 0.01$; 2.3 vs 0.7, $P = 0.03$).

22 patients (76%) underwent an IMT measurement. Mean IMT was 0.57 (0.14) millimeters (mm). Median IMT was significantly higher in APS patient with stroke