diary processed with FOOD CONS software which allows to study in detail their eating habits. Nutritional state, muscle strength and basal metabolic rate were assessed. Alcoholism or drug abuse, diabetes mellitus, specific dietary models, treatment with drugs and/or food supplements with anti-inflammatory and/or antioxidant activity were considered exclusion criteria. Multivariate linear regression was performed with R project for Statistical Computing.

RESULTS:

N= 40 N= 26

Age, median (range) 53 (25-80) 33 (25-71)
BMI, median (range) 21 (19-29.3) 25.1 (19-33.7)
MedDiet score, median (range) 33 (26-43) 33 (23-40)
ESSDAI, median (range) 2 (0-16) 1 (0-16)
ESSPRI, median (range) 6 (0-8.6) 5.3 (1.6-9)
ESSPRI dryness, median (range) 6 (0-10) 6 (2-10)
Focus score, median (range) 2.5 (0-9.6) 1.7 (0.8-6.24)
ASM kg, median (range) - 16.8 (13.3-21.7)
IPAQ meters, median (range) - 1386 (99-11865)
6MWT meters, median (range) - 595 (536-680)

BMI, body mass index; ASM appendicular skeletal mass; IPAQ International Physical Activity Questionnaire; 6MWT, six minute walking test.

MDiet was administered to 40 female SS outpatients. Even if not reaching significance, patients with a higher focus score in their MSG have a lower value of MDiet score ($p = 0.058$, $r = -1.00$). The MDiet score is not associated with ESSDAI ($p = 0.85$, $r = 0.02$), but only with lower serum levels of C3 ($p = 0.004$, $r = -0.08$). In 26 patients, daily food questionnaire shows that their diet consists of 43% of carbohydrates while fats represent 40% of total energy intake, the remaining 17% daily energy comes from proteins. Fat consumption is higher compared to the levels of energy and nutrient intake for the Italian population⁵. Six patients had a reduction in muscle mass; sarcopenia is not associated to ESSDAI ($p = 0.610$). The MDiet score and the amount eaten of polyunsaturated fatty acids (PUFA) were reduced in patients with high value of subscale dryness of ESSPRI ($p = 0.057$, $r = -1.21$; $p = 0.610$, $r = -1.00$).

Conclusion: This study highlights a lower degree of glandular lymphocytic infiltration (expressed as focus score) in minor salivary glands in patients following MD, so its anti-inflammatory role of seems to be confirmed. SS patients have an unbalanced diet because of a higher intake of fat foods, likely for their lubricating effect. Despite the absence of correlation with objective parameters, the increased dryness in patients with a reduced intake of PUFA arouses our interest in a future study including omega-3 supplementation.

REFERENCES:

- [1] Schwingshackl L et al., *Nutr Metab Cardiovasc Dis* 2014
- [2] Mena MP et al., *Am J Clin Nutr*. 2009
- [3] Vitali C et al, *ARD* 2002
- [4] Panagiotakos D et al., *J Med Food* 2007
- [5] LARN 2014

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.2154

AB0318

RISK FOR CONCOMITANT AUTOIMMUNITY IN PATIENTS WITH ANTIPHOSPHOLIPID SYNDROME; A SWEDISH COHORT STUDY

N. Karandyszowska¹, J. Oesman¹, H. Alagüdüz¹, M. Magnusson², E. Svenungsson¹, M. Bruzelius¹, A. Antovic³. ¹Karolinska Institutet, Department of Medicine Solna, Stockholm, Sweden; ²Karolinska Institutet, Clinical Chemistry and Blood Coagulation, MMK, Stockholm, Sweden; ³Karolinska Institutet, Department of Medicine Solna, Division of Rheumatology, Stockholm, Sweden

Background: In patients with the antiphospholipid syndrome (APS), concomitant systemic autoimmune rheumatic diseases (SARD) are common and often associated with more disease associated damage.

Less is known about the prevalence of non-rheumatic autoimmune diseases (NRAID) in patients with APS.

Objectives: To evaluate the incidence and prevalence of concomitant autoimmune diseases (AID) in a cohort of APS patients. The risk of AID was also evaluated with respect to the antiphospholipid antibodies (aPL) profiles.

Methods: This retrospective cohort study comprises consecutive patients identified with APS through review of electronic medical records at Karolinska University Hospital, Sweden between 2014 and 2020. Exclusion criteria were misdiagnosis and age <18. Descriptive statistics was used for baseline data and multivariable Cox proportional hazard regression analysis to investigate the risk factors to develop new onset AID. Ethical approval was obtained from the Swedish Ethical Review Authority (2020-02333).

Results: Of 271 included patients, 66% were women and the median age at diagnosis of APS was 43 years (IQR 31–55). At inclusion, 130 (48%) patients

presented with other AID; 101 (37%) of them had a concomitant SARD while 54 (19%) had a NRAID. Systemic lupus erythematosus (SLE) was the most frequent in 30% of patients, followed by autoimmune thyroid disease (ATD) in 10% of patients.

In addition, 35 (13%) APS-patients developed AID during the study period, corresponding to an incidence rate of 28.4 (95% CI; 19.3-40.3) per 1.000 person-years with mean time at risk of 4 (±2) years. Twenty-one (8%) patients developed a SARD and further 14 (5%) were diagnosed with a NRAID.

The cumulative incidence for AID was significantly higher in patients with high titers of IgG aPL. Patients that developed SARD had significantly higher median titers of a-β2GPI IgG isotype, $p=0.05$. In the NRAID group, median a-β2GPI and aCL IgG isotypes were significantly increased, $p=0.02$ and $p=0.04$, respectively. The hazard ratio to develop diagnosis of AID was significantly increased in patients with high titers of the IgG isotype aPL (HR 2.4 95% CI; 1.1-5.3). Obstetric APS manifestations were associated with a significantly increased hazard ratio of 2.8 (95% CI; 1.1-7.7) to develop SARD, and also trendwise for AID, as a compound variable.

During the study period, 52 patients had at least one new APS manifestation, as defined by the Sydney criteria (1). In comparison to patients without new manifestations, these patients had significantly higher median titers of aPL of the IgG isotype, and concomitant AID at first visit ($p=0.01$, $p=0.02$, respectively).

Conclusion: APS patients are at high risk to develop other AID, and APS patients with concomitant AID had an increased risk to develop new clinical APS manifestations. These findings might be helpful when considering risk stratification and alternate treatment options in this patient group.

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). *J Thromb Haemost* 2006; 4: 295–306.

Acknowledgements: I have no acknowledgements to declare.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.2194

AB0319

HEALTH-RELATED QUALITY OF LIFE ASSESSED BY LUPUSQOL IN 1102 LUPUS PATIENTS FROM RUSSIAN FEDERATION (RF), KIRGHIZSTAN AND KAZAKHSTAN (RENAISSANCE COHORT)

E. Aseeva¹, S. Solov'yev¹, G. Koilubaeva², B. Issayeva³, M. Saparbayeva³, N. Nikishina⁴, A. Mesnyankina⁴, 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; ⁴Rheumatology Federal State Research Institution (FSRI) named after V.A. Nasonova, Intensive Care Department, Moscow, Russian Federation

Background: Health related quality of life (HRQoL) is an aspect that is generally underexplored in the routine clinical practice but it is attracting more and more attention. Lack of concordance between physician derived outcomes of disease activity and patient HRQoL outcomes is commonly found in SLE. This is due to the fact that the former is influenced by the immunologic pathogenic inflammatory mechanisms while the latter may be affected by a variety of psychological, social and co-morbid conditions.

Objectives: The aim of this study was to compare health-related quality of life assessed by LupusQoL in 1102 Lupus patients (pts) from the Russian Federation, Kirghizstan and Kazakhstan (RENAISSANCE cohort).

Methods: 1102 SLE pts who fulfilled SLICC 2012 criteria were enrolled into the study. The SLEDAI 2K index activity, SLICC damage index, and HRQoL using the LupusQoL questionnaire (validated for the Russian-speaking population in 2018) were evaluated. Descriptive statistics, Spearman's correlation coefficients were performed to analyze the data.

Results: 400/600/102 Lupus pts from RF, Kirghizstan and Kazakhstan respectively were studied. The pts were predominantly female (91%/93%/98%) and of indigenous nationality (Russian 83%/ Kirghiz 88%/ Kazakh 76%) 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 Kirghizstan - 2[0;6]; 7] years($p\leq0,05$). 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. SLICC damage index 2,39±1,61 in Kazakh pts ($p=0,00$) was higher than in Russian 1,57±1,54 and Kirghiz 0,79±0,32 pts. 54% pts from RF and 58 % from Kazakhstan had high education. Only 33% pts from Kirghizstan also had high education. 45%/24%/33% pts from RF, Kirghizstan and Kazakhstan respectively had steady employment, 53%/30%/32% pts received disability benefits. HRQoL assessed by LupusQoL was low in all patients with SLE. The mean scores for each of the domains of LupusQoL are shown in Table 1. The statistically significant lowest HRQoL in all 8 domains is obtained among

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.