Background: Osteoporosis is a common comorbidity in patients with systemic lupus erythematosus (SLE). Available evidence showed that autoimmunity and associated inflammation play main effect in the pathogenesis of negative skeletal effects in SLE patients. However, the potential contribution of disease-associated factors to bone status in SLE is not well known since the reported risk factors from different studies differ greatly.

Objectives: The aim of this study was to examine frequency of reduced bone mass in SLE women, and determine their potential associations with disease activity, damage accrual and SLE-related clinical markers.

Methods: A cross-sectional study including a total 121 Caucasian pre-menopausal and postmenopausal women was conducted (mean age 49.29±12.43 years). The SLE Disease Activity Index (SLEDAI-2K) and the SDI Damage Index were used to assess disease activity and disease-related damage, respectively. Bone mineral density (BMD) of the left femoral neck and lumbar spine (L2–L4) were measured by dual-energy X-ray absorptiometry (Hologic QDR 400).

Results: Ten patients (8.3%) had osteoporosis, 63 (52.1%) patients had osteopenia and 68 (56.1%) of women had history of previous fracture. Patients with low bone mass had a significantly higher mean SDI (1.36±1.26 versus 0.70±1.09 p=0.003), T-score at lumbar spine was inversely correlated with SDI score (r=-0.222, p=0.014) and complement C3 level (r=-0.206, p=0.024). Results of bivariate correlations showed that T-score at lumbar spine was inversely correlated with SDI score (r=-0.222, p=0.014) and complement C3 level (r=-0.206, p=0.024). SDI scores were significantly different between patients with osteoporosis, osteopenia and normal BMD after adjusting for age, menstral status, BMI, time since diagnosis and corticoid use (p<0.004).

Conclusion: There is a high prevalence of low BMD in Caucasian women with SLE and this status of osteopenia/osteoporosis was associated with higher damage accrual scores, supporting that disease damage may itself be a major contributor to the low BMD. SLE women with organ damage require regular bone status monitoring to prevent further musculoskeletal damage. Since diminished BMD is a main comorbidity it is therefore essential to study, monitor and prevent osteoporosis in SLE women to avoid fractures leading to reduced quality of life.

References:

Acknowledgements: This research was supported by the grant PI0523-2016 from “Consejería de igualdad, salud y políticas sociales” (Junta de Andalucía) and is part of the research group LyDIMED “Lupus y Dieta Mediterránea”.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.20545
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:

<table>
<thead>
<tr>
<th>N 40</th>
<th>N=26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, median (range) 53 (25-80)</td>
<td>33 (25-71)</td>
</tr>
<tr>
<td>BMI, median (range) 21 (19-23)</td>
<td>25.1 (19-33.7)</td>
</tr>
<tr>
<td>MedDiet score, median (range) 33 (26-43)</td>
<td>33 (23-40)</td>
</tr>
<tr>
<td>ESSDAI, median (range) 2 (0-16)</td>
<td>1 (0-16)</td>
</tr>
<tr>
<td>ESSPRI, median (range) 6 (0-10)</td>
<td>5.3 (1.6-9)</td>
</tr>
<tr>
<td>ESSPRI dryness, median (range) 6 (0-10)</td>
<td>6 (2-10)</td>
</tr>
<tr>
<td>Focus score, median (range) 2.5 (0-9.0)</td>
<td>1.7 (0-8.6-24)</td>
</tr>
<tr>
<td>ASM kg, median (range)</td>
<td>16.8 (13.2-17.7)</td>
</tr>
<tr>
<td>IPAG meters, median (range)</td>
<td>1386 (99-11865)</td>
</tr>
<tr>
<td>6MWT meters, median (range)</td>
<td>595 (336-680)</td>
</tr>
</tbody>
</table>

BMI, body mass index; ASM, appendicular skeletal mass; IPAG, 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 ESSPRI (p = 0.01, r = 0.2). The median score for each of the domains of LupusQoL are shown in Table 1. The statistically significant lowest HRQoL in all 8 domains is obtained among patients with concomitant AID.

REFERENCES:


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. Soloyvey1, G. Kolubava2, B. Issayeva1, 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. Minashinov (NCCIM), Rheumatology Department, Bishkek, Kyrgyzstan; 3Astafyevov National Medical University, m. Asi, 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 underscored 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 means±SD age of 34.2±11.3, 34.0±10.5, 34.2±10.5 years (p=0.38; p=0.96; p=0.51) respectively. The mean disease duration (MD) in RF/Kazakhstan was 6 [3;12]/7 [1;27] years (p=0.15), in Kirghizstan - 2 [0,6; 7] years(p≤0,05). Kazakh pts (p=0,00) had higher MD compared to RF/Kazakhstan respectively had steady employment, 53%/30%/32% pts received disability insurance, 45%/24%/33% pts from RF, Kirghizstan and Kazakhstan respectively had high education. 54%/20%/30% pts from RF, Kirghizstan and Kazakhstan respectively had high education. 54%/20%/30% pts from RF, Kirghizstan and Kazakhstan respectively had high education. 54%/20%/30% pts from RF, Kirghizstan and Kazakhstan respectively had high education.

The statistically significant lowest HRQoL in all 8 domains is obtained among patients with concomitant AID.

AB0318

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

N. Karandyszowska1, J. Oesman1, H. Alagündüz1, M. Magnusson2, E. Svenningson1, M. Bruzelius1, A. Antovic1, 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 1000 person-years with mean time at risk of 4 (2,2) 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-IgG aPL IgG isotype, p=0.05. In the NRAID group, median a-IgG 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 aPL isotype (HR 2.9 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:


Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.2154

AB0319

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