Objectives: In the study, we evaluated the association between MeS, HR-QoL and QoL-related factors, such as depression, fatigue and physical activity.
Methods: We conducted a cross-sectional study with retrospective evaluation of disease activity, damage and therapies cumulative dosage. MeS was defined according to International Federation of Diabetes (IFD) criteria. All patients were evaluated to explore MeS IFD criteria and other CVD risk factors (familiar history, lifestyle, smoking). SLE disease activity and damage were evaluated using SELENA-SLEDAI and SDI indices, respectively. Disease flares were retrospectively assessed by SFI index. HR-QoL was quantified by SF-36 instrument. We used Beck Depression Inventory (BDI) to assess depression and Facit-Fatigue to evaluate fatigue. Physical activity was quantified using International Physical Activity Questionnaire (IPAQ) and expressed according to categorical IPAQ total score. Patients also completed Pittsburgh Sleep Quality Index (PSQI) exploring sleep pathology.
Results: We enrolled 55 SLE patients (2 male and 53 female). Mean age was 45±12.5. MeS prevalence was 23.6% and obesity (according to IFD definition) was recorded in 36.4% of patients. SLE patients with MeS presented reduced scores in SF-36 summary components MCS and PCS compared to patients without MeS (p 0.002 and p 0.04, respectively). The SF-36 individual components significantly decreased in MeS were the Mental Health, the Physical Rose and the Social Role (p 0.003, p 0.03, p 0.05, respectively). In multiple linear regression the values of MCS was significantly associated only to obesity (p 0.01), while neither MeS it self nor any MeS components were associated to PCS values. BDI score was significantly higher and Facit-Fatigue score was reduced in SLE patients meeting MeS criteria compared to subjects without MeS ($p<0.0001$, p 0.005, respectively). A greater proportion of SLE patients with MeS presented almost mild depression (p 0.03). We found to be physically inactive, according to IPAQ score, the majority of SLE patients with MeS compared to patients without MeS ($p<0.0001$). In multiple logistic regression, factors related to MeS were the Number of flares in the previous one year [OR (95% CI) 13.7 (1.7–107.8)], to have a BDI>13 (to have almost mild depression) [OR 0.05 (0.004–0.87)] and to be physically inactive (IPAQ=1) [OR 33.5 (2.3–496.4)].
Conclusions: HR-QoL seems to be compromised in SLE patients with MeS, especially in mental components. Moreover, SLE patients with MeS often presented depression, are burdened by more severe fatigue and frequently are physically inactive. The presence of MeS in SLE was associated to the number of flare and, above all, to the physical inactivity, while not having depression seems exert a protective effect on MeS.
Disclosure of Interest: None declared
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THU0268 PREVALENCE AND FEATURES OF CELIAC DISEASE IN PATIENTS WITH SYSTEMIC AUTOIMMUNE DISEASES: RESULTS OF A LARGE MULTICENTER STUDY

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Background: Celiac disease (CD) is an inflammatory and immune-mediated gluten-dependent enteropathy occurring in genetically susceptible individuals. CD is recognized to affect between 0.6% and 1% of worldwide population, with wide regional differences. Disease clinical features are protean and highlight the systemic nature of the disease. In recent years, an increased prevalence of CD has been also reported in patients with connective tissue diseases (CTDs). This association may be due to a shared genetic predisposition, to immunological mechanisms and/or exposure to a common triggering event. However, this observation remains controversial since data are usually based on descriptive case reports. Different methods of antibody detection and enrolled population sample size may contribute to result discordance. Moreover, CD diagnosis is often delayed because disease clinical spectrum may be atypical mimicking rheumatologic conditions and autoimmune disease itself may display typical symptoms of CD. Undoubtedly, awareness of CD occurrence in CTDs is important to prevent potential long-term systemic complications related to an unrecognized CD in these patients.
Objectives: To evaluate the prevalence of overt and subclinical CD and features of the disease in a large cohort of patients with systemic lupus erythematosus (SLE), systemic sclerosis (SSc) and primary Sjögren's syndrome (pSS) with a multicenter prospective study involving 9 Italian Rheumatology Units.
Methods: Data from consecutive 580 SLE, 354 pSS and 524 SSc patients were collected. Disease-specific features were registered in patients with known CD. Remaining patients were tested for IgA transglutaminase (Eu-tTG® human IgA new, Eurospital S.p.A., Trieste). Anti-endomysium (EMA) IgA and IgG were tested in IgA tTG positive and borderline patients. Esophagogastroduodenoscopy with duodenal biopsy was proposed in IgA tTG+/EMA+, IgA tTG-/EMA+ and IgA tTG±/EMA+ patients.
Results: CD prevalence was 1,7% in SLE, 7% in pSS and 1,3% in SSc patients. Higher frequency of elevated liver enzymes was detected in SLE-CD and of herpetiform dermatitis in SSc-CD patients in comparison to the other groups ($p<0.05$ for both). Interestingly, pSS-CD and SSc-CD patients were younger and had a lower age at diagnosis in comparison to pSS and SSc without CD ($p<0.05$ for all). Of interest, higher prevalence of CD was detected in SSc patients with diffuse form in comparison to limited SSc (86% vs 14%, p=0.002).
Conclusions: The results of the present large multicenter study confirm higher prevalence of CD in CTD patients, especially in pSS. Screening of CD may be considered in younger patients with CTD and lower age at diagnosis. The strong association of CD with the diffuse type of SSc is of note and suggests that different, still unexplored, pathogenic mechanisms may characterize the two subsets of the disease.
Disclosure of Interest: None declared
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THU0269 ELECTROCARDIOGRAPHIC NONSPECIFIC ST-T ABNORMALITIES ARE ASSOCIATED WITH HIGHER MODIFIED FRAMINGHAM RISK SCORE IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS WITHOUT CLINICAL CARDIOVASCULAR DISEASE

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Background: Cardiovascular disease (CVD) is a leading cause of mortality in systemic lupus erythematosus (SLE). Traditional CVD risk scores underperform in SLE. Interestingly, a high prevalence of nonspecific ST-T changes (NST-T) has been recently reported in lupus patients[1,2]. These electrocardiographic findings are known to increase the risk for myocardial infarction, coronary artery disease, CVD, and all-cause mortality[3] in the general population, but in SLE this association remains unknown. Therefore, we sought to define the association of NST-T with the modified Framingham Risk Score (mFRS) as a surrogate outcome for CVD[4].
Objectives: To evaluate if NST-T are associated with higher mFRS in SLE patients without clinical cardiovascular disease.
Methods: Adult SLE patients without clinical CVD continuously seen at the Columbia University Lupus Center between April 2016 and January 2017, meeting 1997 American College of Rheumatology classification criteria for SLE were studied. Twelve-lead electrocardiogram (EKG), high sensitivity C-reactive Protein (hsCRP), demographics, disease-specific characteristics, medication use, and CVD risk factors were ascertained. Univariable and multivariable linear regression models were constructed to test the association of NST-T with the mFRS.
Results: Seventy-four lupus patients were studied (baseline characteristics in table 1). In univariable analysis, patients with NST-T had a significantly higher mFRS (0.44, p=0.018). There were no confounders identified in the analysis. However after adjusting for variables associated with the mFRS: smoking, diabetes, hsCRP, Systemic Lupus International Collaborating Clinics/American College of Rheumatology Damage Index [SDI], aspirin use, this association remained statistically significant (0.38, p=0.05). Image 1 shows the association of mFRS with NST-T vs no NST-T.

Age, years ± SD	39±13
Female, n (%)	67 (90%)
Hispanic, n (%)	56 (77%)
African American, n (%)	14 (19%)
Body mass index	30±8.3
Median Disease Duration, years (IQR)	6.5 (4–12)
Median SLEDAI (IQR)	4 (2–8)
Moderate-Severe Disease activity (SLEDAI ≥6), n (%)	23 (31%)
Median SDI, n (%)	0 (0–1)
hsCRP median (IQR)	2.4 (1–6.5)
ESR , Median (IQR)	37 (23–51)
Anti-DNA, n (%)	44 (60%)
Anti-SSA, n (%)	42 (59%)
Anti-Smith, n (%)	21 (30%)
Ever smoker, n (%)	16 (22%)
Hypertension, n (%)	22 (30%)
Diabetes, n (%)	6 (8%)
mFRS, median (IQR)	0.5 (0–1.8)
NST-T abnormalities, n (%)	27 (38%)

Conclusions: Non Specific ST-T changes are independently associated with a higher mFRS in SLE patients without clinical CVD.
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