the follow-up. Considering the whole SLE cohort, cardiovascular events were more frequent in obese patients (14.7%) than in overweight (7.6%) and normal weight (2.9%) SLE patients (ANOVA test: p=0.01). Twenty-nine SLE patients with BMI≥25 Kg/m^2 (BMI: 33.5 ± 5.1 Kg/m^2, age: 47.7 ± 12.3 years, disease duration: 11.9 ± 9.0 years; SLEDAI: 10.5 ± 5.7, SLICC: 1.3 ± 1.1) underwent a scheduled low calories diet. A significant reduction in BMI was observed at 6 and 12 month follow-up [6.6 ± 5.7% at 6 months FU (p = 0.001) and 7.0 ± 7.2% at 12 months FU (p=0.002), respectively] as well as a reduction in disease activity [SLEDAI at 6 months FU: 4.5 ± 4.0 (p=0.001) and at 12 months FU (0.7 ± 0.9 (p <0.001)]. Finally, a significant decrease of systemic inflammatory markers as C-Reactive Protein (p<0.05) was observed in SLE patients who achieved >5% weight loss compared to SLE patients who did not.

Conclusion: Obesity represents a modifiable factor for improving outcomes among obese SLE. A weight loss obtained with a controlled diet may reduce cardiovascular events and reduce the state of chronic inflammation subtended by the activity of adipose tissue.

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AB0516 AUTOANTIBODY PROFILE ANALYSIS AND ITS ASSOCIATION WITH CLINICAL MANIFESTATIONS IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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Background: Systemic lupus erythematosus (SLE) is an autoimmune systemic disease characterized by autoantibody production. The presence of some of them is related to specific clinical manifestations. Previous studies have classified SLE patients according to an autoantibody profile, associating them to specific clinical groups.

Objectives: To define SLE patient groups according to an autoantibody profile and to analyze the correlation of these profiles to clinical manifestations, clinical activity and accumulated damage.

Methods: A cross-sectional observational study of SLE patients diagnosed according to SLICC 2012 criteria was conducted. A clinical and analytical evaluation was performed in all cases. Clinical manifestations were described according to RELESSER study. We selected 8 autoantibodies to classify SLE patients in different subgroups according to autoimmune similar profiles: anti-dsDNA, anti-Sm, anti-RNP, anticardiolipin IgG o IgM (aCL IgG/M), anti-B2microglobulin IgG o IgM (aB2M IgG/M), lupus anticoagulant (LA), anti-Ro and anti-La. Biostatistical analysis was performed using software R and immunological profiles were created according to previous study of Artim-Esen B et al. 2014.

Results: 142 SLE patients were evaluated (94.4% female) with a mean age at diagnosis of 33.29 (13.53) and a mean time of disease evolution of 15.82 (10.56) years. Mean SLEDAI score was 5.91 (5.6) and mean SLICC value 1.1 (1.46). Frequency of the selected autoantibodies was: ANAs 87.3% (n=124), anti-dsDNA 36.62% (n=52), anti-Sm 9.2% (n=13), anti-RNP 3.5% (n=5), aCL IgG/M 20.15% (n=27), aB2M IgG/M 21.88% (n=28), LA ANTI–LA? 26.27% (n=31), anti-Ro 45.07% (n=64) and anti-La 16.2% (n=23).

Profile n°2 included SLE patients with anti-Sm/RNP positivity. Profile n°3 included patients with anti-Ro/La positivity and not included in profile n°2. Profile n°4 included patients with aCL IgG/M or aB2M IgG/M or LA positivity and not included in previous profiles. Profile n°5 included patients who exclusively showed anti-DNA positivity. Profile n°1 included all patients excluded from the other profiles.

Depending on the results obtained, we analyzed autoantibody levels in order to assess its association with the presence of the described clinical affections. A significant association among hematological affection and high levels of anti-Ro (P<0.0001), anti-La (P=0.022) and anti-Sm (P=0.018) was observed. We also observed a tendency of presenting a higher rate of mucocutaneous affection, musculoskeletal and renal affection and Sjögren syndrome in patients classified in Profile 3.

Conclusion: Profile n°1 patients (absence of autoantibodies) were diagnosed earlier and had a longer disease evolution, whereas Profile n°5 patients (only anti-DNA positivity) were diagnosed at a mean age of 36 years and had a shorter disease evolution. We observed an association between the presence of anti-Ro/La and hematological affection, as well as high incidence of Sjögren syndrome in these subgroup of patients.

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AB0517 CORRELATION BETWEEN PATIENT-REPORTED OUTCOMES OF HEALTH-RELATED QUALITY OF LIFE AND CLINICAL ACTIVITY IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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Background: Patient-Reported Outcomes (PROs) allow us to know the way the disease could affect patients, and maybe could not be detected in clinical measures. Among these, PROs of health-related quality of life (PRO-QL) represents patient evaluation of its health status and treatment, which affects the functional, psychological, social and emotional capabilities. In fact, patients with the same health status could show different PROs-QL. In the case of systemic lupus erythematoSus (SLE), patients experience many inflammatory symptoms and all of them can affect the health-related quality of life in different ways.

Objectives: We aimed to measure the PRO-QL in SLE patients and correlate them with the clinical activity of the disease.

Methods: A cross-sectional observational study with SLE patients diagnosed according to SLICC 2012 criteria was performed. In all cases SLEDAI score was carried out, and patients full-filled questionnaires of fatigue (FACIT-FATIGUE), quality of life (EQ-5D-5L), disability (HAQ) and a Global Health Status Scale (GHS) (0-100). Biostatistical analysis with software R was performed, using the multivariate analysis of variance by Pillai test.

Results: 54 SLE patients (91.84% female) participated in the study, with a mean age at diagnosis of 27.55±13.21 years *and a mean time of disease evolution* of 20.45±9.7 years. Mean SLEDAI score was 6.63±6.89, with a 37.04% of patients with SLEDAI>6. The 64.66% of patients were under glucocorticoid treatment, 38.77% under immunosupressants (methotrexate, azatioprine o mycophenolate) and 51.02% under antimalarials.

Patients showed a mean score of 34.02±12.38 in FACIT-FATIGUE, 0.72 ±0.26 in EQ-5D-5L, 0.62±0.71 in HAQ and 64.02±25.93 in GHS.

Statistical analysis showed correlation between SLEDAI score and the four questionnaires of PROs-QL (P<0.001). Particularly in those cases with high clinical activity we observed low scores of EQ-5D-5L, FACIT-FATIGUE and GHS, and an increment in HAQ. We performed the previous analysis considering as correcting factors the age, years of disease evolution, glucocorticoid treatment, antimalarials and inmunosupressants. We also obtained a correlation between clinical activity and PROs-QL (P=0.0107).

Conclusion: We observed a correlation between PROs-QL full-filled by SLE patients with the clinical activity of the disease, independently of glucocorticoid treatment, antimalarials and inmunosupressants, the age and the disease evolution.

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