between healthy and SSc group. In SSc, Spearman analysis showed that anti-CarP inversely correlated with the modified Rodnan skin score (RSS) (R= -0.325, $p<0.001$), independently of patients' age. Receiver operating characteristics (ROC) analysis identified the anti-CarP cutoff that best discriminated dichotomized clinical variables related to skin involvement. This cutoff that was employed to subdivide SSc patients into anti-CarP positive and anti-CarP negative patients. Three SSc skin-related clinical parameters were significantly different between groups: RSS (p=0.001), SI skin (p=0.002), and scleredema ($p<0.001$). A worse skin involvement was associated with low anti-CarP levels.

Conclusions: The study shows that anti-CarP Ab serum level inversely associates to the severity of skin involvement in SSc patients. One possible mechanism to explain the inverse association is that the disease-dependent accumulation of carbamylated proteins in the skin may neutralize circulating anti-CarP Ab, thus contributing to their serum levels decrease. However, further investigation is needed to clarify this issue and to assess whether the levels anti-CarP Ab can be useful in the clinical setting of SSc.

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AB0172 PSGL-1 AND ADAM8 ON DENDRITIC CELLS ARE ASSOCIATED WITH SYSTEMIC SCLEROSIS AND COULD ACT AS BIOMARKERS FOR INTERSTITIAL LUNG DISEASE

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Background: Systemic sclerosis (SSc) is a chronic autoimmune disorder with cutaneous, vascular and immune cells abnormalities that lead to extensive cutaneous and visceral fibrosis with high morbidity and mortality. P-Selectin glycoprotein ligand-1 (PSGL-1) is the major ligand for P-selectin. PSGL-1 mediates the initial contacts with endothelial cells during extravasation to inflamed tissues or homing to several tissues in homeostatic conditions. In addition, PSGL-1/P-Selectin interaction contributes to the homeostasis of the immune system by generating regulatory T cells[1]. Importantly, the metalloprotease ADAM8 interacts with PSGL-1 and proteolytically processes it, what could be a regulatory mechanism to control the expression of PSGL-1[2]. Interestingly, mice lacking PSGL-1 develop a progressive SSc-like syndrome[3].

Objectives: To investigate whether PSGL-1 and ADAM8 expression on leukocytes could be implicated in the pathogenesis of SSc.

Methods: PBLs from 47 SSc patients and 35 healthy donors were analyzed by flow cytometry. The percentage of cells expressing PSGL-1, HLA-DR and ADAM8, as well as the membrane (without cell permeabilization) and total (after cell permeabilization) expression were assessed for each leukocyte subset. For cell permeabilization, cells were incubated for 15 min at room temperature with a fixation/permeabilization solution. Positivity was stablished using isotype control antibodies. Comparisons between groups were analyzed with Student t tests or Mann-Whitney U test. For pairwise multiple comparisons one-way ANOVA with Tukey's post hoc test was applied ($p<0.05$, 95% CI). To analyze the possible contribution of PSGL-1, ADAM8 and HLA-DR to SSc pathogenesis, and to explore whether they could be used as biomarkers for SSc, we studied the influence of these molecules using a multivariate logistic regression model.

Results: SSc patients showed increased expression of HLA-DR in antigen presenting cells (B cells, monocytes and dendritic cells), indicating a higher activation of these cells. PSGL-1 expression in B cells was decreased in SSc patients but increased in monocytes, dendritic cells (DC) and T cells. ADAM8 was increased in B and T lymphocytes, monocytes and DC from SSc patients. Overall, we have identified three variables that are associated with SSc: high percentage of ADAM8-expressing pDC, high PSGL-1 expression in cDC and high HLA-DR expression in CD16+ monocytes. Remarkably, highest PSGL-1 expression on conventional DC (cDC) and high levels of ADAM8 on plasmacytoid DC (pDC) associate with interstitial lung disease (ILD), one of the most severe SSc clinical manifestations, suggesting that PSGL-1 and ADAM8 could be prognostic markers of ILD.

Conclusions: This study highlights that PSGL-1 and ADAM8 expression on DC, monocytes and lymphocytes could be implicated in SSc pathogenesis and particularly on DC might act as biomarkers for ILD.

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AB0173 MYCOBACTERIAL INFECTION IN SYSTEMIC LUPUS ERYTHEMATOSUS: CLINICAL SIGNIFICANCE AND ASSOCIATED FACTORS. DATA FROM THE REGISTRY OF PATIENTS WITH SLE OF THE SPANISH SOCIETY OF RHEUMATOLOGY (RELESSER)

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Objectives: To study the prevalence of mycobacterial infection (MI), the associated factors and their clinical significance in patients included in a large SLE cohort.

Methods: Retrospective descriptive study of RELESSER patients with a history of MI and analysis of the factors associated with this infection.

Results: In RELESSER 3,658 patients with ≥4 ACR SLE criteria were included. 90% are women with a mean age of 32.9 years. 93% are Caucasians. The mean follow-up time (± SD) was 120.2 (± 87.6) months. 705 (19.3%) patients had ≥1 severe infection (defined as requiring admission); 1,227 severe infections occurred. MI were diagnosed in 42 patients (1.2% of all RELESSER patients, 3.4% of all severe infections), 85.7% women. The incidence rate of MI was 1 per 1,000 patients/year (95% CI:0.7–1.4).

MI presentation was pulmonary in 18 (42.9%) patients and extrapulmonary in 24 (57.1%) patients [joints in 8 (19.0%) patients, soft tissue in 6 (14.3%) and other sites in 10 (23.8%)]. The extrapulmonary form was associated with immunosuppressants use: 84.6% of the 13 patients treated with immunosuppressive drugs versus 44.4% of the 27 patients without (p=0.01). We did not observe this association with the use of corticosteroids.

To study the factors associated with MI, we performed a bivariate analysis including the variables associated with severe infection in RELESSER (age, sex, ethnicity, corticosteroids, immunosuppressants, antimalarials, previous admission by SLE activity, rituximab and anti-TNF use, Katz severity index, SDI index, SLEDAI index and Charlson comorbidity index). There is a statistically significant association with previous admission by SLE activity (RR:2.9, 95–95%:1.3–6.2, p=0.007), renal impairment (RR:2.0, CI 95%:1,1–3,7, p=0,04), the Katz score (RR:2.1, 95% CI:1.1- 4.0, p=0.04) and the Charlson index (RR: 2.5; 95% CI: 1.3–4.8, p=0.009). Damage (SDI>0) was closely associated with significance:RR: 2.0; 95% CI: 1.0–4.0, p=0.07. Iimmunosuppressants use was associated with an important increase in the risk of MI: RR:4.3; 95% CI:2.2–8.3, p=0.31.

Two patients (4.8%) died (1 respiratory and 1 extrapulmonary). Mean survival after MI diagnosis in these cases was 21 days.

Conclusions: MI in RELESSER affects 1.15% of patients. Its incidence rate is 1 per 1,000 patients/year (95% CI:0.7–1.4). Extrapulmonary localization affects more than half of the patients and is associated with immunosuppressants use. Previous admission by SLE activity, renal involvement, SLE severity and increased number of comorbidities are factors associated with MI.

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AB0174 LYMPHOCYTE SUBSETS T, B AND NK CELS IN SYSTEMIC SCLEROSIS

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Background: Systemic sclerosis (SSc) is a rare multisystem disease with underlying immune mechanisms, whose pathogenesis remains unclear. Few previous reports have evaluated lymphocyte subpopulations in SSc and your results are conflicting.

Objectives: The present study aimed to analyze the lymphocyte subsets in SSc patients in comparison to healthy individuals.

Methods: Peripheral blood (PB) samples to analyze lymphocyte subsets were obtained from a non-random convenience sample of 20 SSc patients. Twenty healthy individuals recruited from the blood bank were used as sex and age-matched controls. Blood samples were analyzed by flow cytometry for total T cells, CD4+ and CD8+ T cells subsets, CD19+ B cells and total NK cells. Statistical analyses were performed using the IBM Statistical Package for Social Sciences (SPSS 18.0). Data are expressed as mean ± SD and median and range. Non-parametric Mann–Whitney U test was used for analyses of the flow cytometry. A probability $p<0.05$ was considered statistically significant.

Results: The mean (SD) age of SSc patients was 57.9 (14.2) years, 95% were female and 31.6% presented diffuse cutaneous SSc (dcSSc). Patients presented a lower mean total lymphocyte count compared to healthy controls (23.7% vs.