SLE, Sjögren’s and APS - clinical aspects (other than treatment)

**AB0449**  
THE PREVALENCE OF AUTOANTIBODIES AGAINST IFNα IS HIGH IN SLE AND ASSOCIATED WITH A HIGH FREQUENCY OF TUBERCULOSIS


**Background:** IFNα and anti-IFNα autoantibodies have been implicated in susceptibility both for systemic lupus erythematosus (SLE) and viral infection.

**Objectives:** We aimed to analyze the SLE disease phenotype and risk for infection associated with anti-IFNα IgG autoantibodies in SLE patients

**Methods:** In this multidisciplinary retrospective single referral center study, all consecutive patients with SLE admitted between January 1st and November 30th 2020 were considered. All subjects fulfilled the ACR/EULAR 2019 criteria for SLE.

**Anti-IFNα IgG autoantibodies were quantitated at admission by ELISA.** Demo-graphic, medical history, laboratory, treatment, and outcome data were extracted from electronic medical records using a standardized data collection form.

**Results:** 180 patients [female 87.2%, median age of 44.4 (34-54.2) years] were included. The median disease duration was 10 years [IQR 5-20] with a median SLEDAI score of 2 [0-4] at study time. Fifty-four (30%) patients had a past-history of lupus nephritis. One hundred and forty-four (80%) had received glucocorticoids and 99 (55%) immunosuppressive drugs. Overall, 127 infections - mostly bacterial and viral - were reported in 95 (52.8%) patients. Twenty SLE patients (11.1%) had positive anti-IFNα IgG autoantibodies with a titer ranging from 10 to 103 UA/mL. Age, sex, SLE phenotype and treatment did not significantly differ between SLE patients with or without anti-IFNα. Infection rate was similar in both groups except for tuberculosis which was more frequent in patients with anti-IFNα (20% vs 3.1%, p = 0.01).

**Conclusion:** The prevalence of autoantibodies against IFNα is high in SLE and associated with a higher frequency of tuberculosis.

**Disclosure of Interests:** None declared

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**AB0450**  
SOLUBLE CD163 IS A BIOMARKER FOR CARDIOVASCULAR EVENT IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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**Background:** Prediction models based on traditional cardiovascular risk factors underestimate the risk of cardiovascular events (CVE) in systemic lupus erythematosus (SLE).

**Objectives:** We aimed to determine whether CD163 is a biomarker for SLE-associated atherosclerosis, may predict CVE in SLE.

**Methods:** All SLE patients included between 2007 and 2010 in the randomized, double-blind, placebo-controlled, multicenter PLUS trial were screened. Patients with no past history of CVE at inclusion and a follow-up period of >20 months were analyzed. CD163 level was measured using enzyme-linked immunosorbent assay on serum collected at PLUS inclusion. The primary outcome was the incident CVE. Factors associated with incident CVE and CD163 level were analyzed.

**Results:** Overall, 442 SLE patients (of the 573 included in the PLUS study) were analyzed for the primary outcome with a median follow up of 110 (interquartile range: 99-120) months. Among them, 29 (6.6%) experienced at least one CVE that occurred at a median of 67 (interquartile range: 31-91) months after inclusion. In the multivariate analysis, dyslipidaemia, age and increased sCD163 were associated with CVE onset. Multivariate Cox models analysis showed that a concentration of sCD163 > 263 ng/mL at inclusion increased by 2.7 [hazard ratio 2.7 (95% CI: 1.0, 7.0)] the risk of CVE in SLE. Increased sCD163 was also associated with immunosuppressive treatment, higher body mass index (BMI) and SLEDAI score.

**Conclusion:** Macrophage-specific CD163 serum level reflects lupus disease activity and predicts CVE in SLE.

**Disclosure of Interests:** None declared


**AB0451**  
FACTORS ASSOCIATED WITH ADVERSE PREGNANCY OUTCOMES IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS (SLE)

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**Background:** Pregnancies in systemic lupus erythematosus (SLE) are considered high risk and associated with maternal and obstetric complications.

**Objectives:** Our goal with this study was to determine the most important predictors for each of the main adverse pregnancy outcomes in SLE patients.

**Methods:** We conducted a retrospective case-controls study by including multiparous women diagnosed with SLE from 1980 to 2020 followed in our unit and compared the clinical profile of patients with adverse pregnancy outcomes to control SLE patients. We excluded elective terminations of pregnancy and cases lost to follow-up. Qualitative data were analyzed by Chi-square test and Fisher’s exact test and continuous variables were analyzed by using Student’s t test. Multiple logistic regression models were performed to determine the predictive factors for adverse pregnancy outcomes with adjustment of confounding factors. In all tests, P values less than 0.05 were considered to be statistically significant.

**Results:** 135 multiparous women were included (43% with adverse pregnancy outcomes). The mean age of patients at inclusion was 55.8 (46-64) years. Abortion occurred in 33 patients (57%), pre-eclampsia in 10 patients (17%), ectopic pregnancy in 5 patients (8%), preterm labor in 5 patients (8%), placental abnormalities in 4 patients (6%), stillbirth in 4 patients (6%), premature rupture of membranes (PROM) and neonatal lupus in 3 patients (5%), respectively. 121 patients (89%) have pre-existing lupus and 14 (11%) referred with SLE onset in pregnancy. Renal involvement (p=0.03), anti-DNAds positivity (p=0.002), antiphospholipid antibody (APLA) positivity (p=0.001), anti-Ro/SSA (p=0.003) and a younger age at disease onset (p=0.01) were significantly associated with unfavorable pregnancy outcomes. Abortion was correlated with anti-DNAds (β=0.71, p=0.04), renal involvement (β=0.28, p=0.03) and APLA (β=0.2, p=0.03). Stillbirth was also correlated with renal involvement (β=0.26, p=0.04) and APLA (β=0.22, p=0.03). Preeclampsia was correlated with direct Coombs positivity (β=0.42, p=0.01) and sCD163 (β=0.31, p=0.02). Neonatal Lupus was correlated with anti-RNP (β=0.16, p=0.03) and anti-Ro/SSA (β=0.16, p=0.02). Renal involvement and APLA had a 2.6-fold increased risk of unfavorable pregnancy outcomes (OR 2.6 95% CI (1.1-6.1), p 0.03) and APLA had a 4.3-fold increased risk of unfavorable pregnancy outcomes (OR 4.3 95% CI 2.1-8.8, p=0.002).

**Conclusion:** The most unfavorable pregnancy outcomes in women with SLE were spontaneous abortion. Renal involvement, anti-DNAds and anti-Ro/SSA, antiphospholipid antibody positivity, and a younger age at disease onset increased the risk of pregnancy complications.

**Table 1. Multiple logistic regression analysis**

<table>
<thead>
<tr>
<th>Factor</th>
<th>OR (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-DNAds</td>
<td>β = 0.71, p = 0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>APLA</td>
<td>β = 0.2, p = 0.03</td>
<td>0.003</td>
</tr>
<tr>
<td>Renal involvement</td>
<td>β = 0.26, p = 0.04</td>
<td>0.003</td>
</tr>
<tr>
<td>Serotonin</td>
<td>β = 0.38, p = 0.03</td>
<td>0.004</td>
</tr>
<tr>
<td>Direct Coombs positivity</td>
<td>β = 0.41, p = 0.02</td>
<td>0.003</td>
</tr>
<tr>
<td>Anti-Ro/SSA</td>
<td>β = 0.19, p = 0.03</td>
<td>0.002</td>
</tr>
<tr>
<td>Anti-RNP</td>
<td>β = 0.5, p = 0.09</td>
<td>0.001</td>
</tr>
</tbody>
</table>

**REFERENCES:**


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