p<0.001). The SLEDAI value rose with increasing values of all the parameters except C3 complement. Using the standard multiple regression analysis, the impact of anti-dsDNA, anti-nucleosome, anti-C1q antibodies, complement C3, and serum and urinary MCP1 na SLEDAI was evaluated. The studied model was able to explain 26.60% of disease activity index variance (corrected r²=0.246, F=4.755, p<0.001). As the statistically significant risk factors, serum MCP1 (Beta=0.257, p=0.040) and urinary MCP1 (Beta=-0.326, p=0.008) could be singled out. Serum MCP1 increased SLEDAI values and explains their variance with 4.80%. The impact of urinary MCP1 was stronger. SLEDAI values increased with elevated urinary MCP1. This parameter was able to explain 8.10% of SLEDAI variance.

Conclusions: The study showed that anti-dsDNA, anti-nucleosome and anti-C1q antibodies were associated with SLE disease activity, but the association was strongest with serum and urinary MCP1.

REFERENCES:

Disclosure of Interest: None declared

THE RELATIONSHIP BETWEEN OESTROGEN RECEPTORS AND HYPERURICEMIA IN YOUNG FEMALE SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

H.-J. Liu1,2, L. Dai3, X.-Y. Cao4, J.-D. Ma3, Y.-Q. Mo2,1. 1Department of Rheumatology, PanYu central Hospital; 2Department of Rheumatology, Jinan University; 3Department of Rheumatology, Sun Yat-sen Memorial Hospital, Sun Yat-sen University; 4Department of Rheumatology, The Second Affiliated Hospital, South China University of Technology, Guangzhou, China

Background: We have found that the incidence of hyperuricemia of young female systemic lupus erythematosus (SLE) patients was higher than that of healthy young women1,2. Why the high level of oestrogen didn't show protection in uric acid (UA) level of fertile female SLE patients? There few few reports yet.

Objectives: To investigate the relationship between UA level and the levels of oestrogen, oestrogen receptors, antibodies to oestrogen receptors.

Methods: This was a cross-sectional study of 62 fertile female SLE patients that were divided into two groups including a high UA group (n=27) and a normal UA group (n=35). Serum UA levels, kidney index, SLE disease indicators and levels of oestrogen, oestrogen receptors, antibodies to oestrogen receptors were determined. Multiple linear regression analysis was applied to analyse the associations of UA levels with clinical features and levels of oestrogen, oestrogen receptors and antibodies to oestrogen receptors.

Results: 1. The mean ages of the two groups were (28.62±7.89) years and (28.82±8.28) years respectively, with significantly different (t=0.096, p=0.924). There was no SLE patients manifested renal failure (CRE level higher than 120 µmol/L). All the SLE patients were at the onset of disease. 2. The mean UA levels of the high UA group and the normal UA group were (531.74±134.05) µmol/L and (238.86±61.32) µmol/L, respectively, with significant difference (t=-11.48, p<0.001). 3. In the high UA group, the levels of CRE, LDL, cysterin, urine protein and were dramatically higher than those were found in the normal UA group (t=-3.617, p=0.001, 0.002, 0.007, 0.004, respectively), and oestrogen receptor β level were significantly lower than that of the normal group (t=-2.138, p=0.037). The positive rate of urine blood of the high UA group were significantly higher than that of the normal UA subgroup (p=0.012).

4. Multiple linear regression analysis revealed there were significant relationships between UA level and CRE, oestrogen receptor β, and urine protein, urine blood.

Disclosure of Interest: None declared

Conclusions: Hyperuricemia in young female SLE patients indicated the renal damage, and low level of oestrogen receptor β may contribute to hyperuricemia.

REFERENCE:

Disclosure of Interest: None declared

THE RELATIONSHIP BETWEEN SALIVARY FLOW RATES, ORAL HEALTH ASSESSMENT AND ULTRASONOGRAPHIC SCORING OF THE MAJOR SALIVARY GLANDS IN SJOGREN SYNDROME

Y. Yalcinkaya1; G. Muruc2; Z. Erturk1; A.U. Uenal1; P. Atagunduz1; H. Direksenel1; N. Inanc1; 1Department of Internal Medicine, Division of Rheumatology, Marmara University, School of Medicine, 2University of Health Sciences, Istanbul, Turkey

Background: Salivary flow rates (SFR) and oral health were known to be frequently impaired in Sjogren syndrome (SjS) due to chronic inflammation and destruction of the salivary glands. Ultrasonography (USG) of major salivary glands (MG-USG) is a non-invasive widely used tool to evaluate salivary glands in SjS.

Objectives: The aim of the study was to assess the relationships between SFRs, oral health and USG changes of major salivary glands in patients with primary SjS.

Methods: Fifty-nine SjS patients (F:M=57:2) with the mean age of 52.2±11.5 years. The duration of follow-up period of 9.7±1.1 years fulfilling ACR–EULAR classification criteria (2002) were included. Major salivary glands (bilateral parotid and submandibular glands) were scored according to two different scoring systems which are Hocevar A. (0–48) and Milic VD. (0–12). Oral health was assessed by indices. Measurements of whole unstimulated and stimulated SFRs were carried out in patients between 9 a.m. and 10 a.m in the morning. Oral health related quality of life (OHIP-14) as a patient reported outcome measure was evaluated by using Oral health impact profile (OHIP-14). High scores indicated poor OHRQoL.

Results: Unstimulated SFR (0,210±0,2 ml/min) was correlated with stimulated SFR (1,120±0,7 ml/min) in the whole group (r=0,8, p=0,000). Moderate correlations were seen between unstimulated and stimulated whole SFRs and scores of hypoecho-genic areas in bilateral parotid and submandibular glands (p<0,05). Scores of Hocevar, Milic and OHIP-14 were found to be poor in patients with unstimulated SFR ≤ 0,1 ml/minute compared to those of others (p<0,05) (table 1). In addition, the number of extracted teeth (8,6±7,5) was correlated with the number of carious teeth (r=0,3, p=0,036).

Conclusions: Unstimulated and stimulated SFRs were found correlated with the structural changes of major salivary glands. Tooth loss and poor OHRQoL were shown in patients due to reduced salivary outputs. USG images of salivary glands could give insight to physicians about oral health and OHRQoL as outcome measure in patients with SjS.

Disclosure of Interest: None declared

MATERNAL AND FETAL OUTCOMES IN SYSTEMIC LUPUS ERYTHEMATOSUS

I.Y. Yi1; L. Yang2; H.K. Tan2; L.K. Tan2; J. Thumbroo1; Y.J. Poh1; 1Rheumatology; 2Obstetrics and gynaecology, Singapore General Hospital, Singapore, Singapore

Background: Systemic Lupus Erythematosus (SLE) is associated with an increased risk of adverse pregnancy outcomes. Objectives: We aim to evaluate the maternal and fetal outcomes in SLE pregnancies in a single tertiary referral centre.

Methods: We retrospectively analysed 75 pregnancies in 45 patients with SLE over a 16 year period from 2000 to 2016. All patients fulfilled the 1997 American College of Rheumatology (ACR) criteria or the Systemic Lupus International Collaborating Clinics (SLICC) criteria for diagnosis of SLE.

Results: In our multi-ethnic cohort, there were 65% Chinese, 23% Malays and 7% Indians. The mean age was 32 years old and majority (55%) were nulliparous. The mean SLE disease duration was 5.9 years. Baseline SLE manifestations were predominantly haematological (73%), arthritis (71%) and renal (57%). There were 33 pregnancies (44%) with anti-Ro (SS-A) antibody positivity. There were 5 pregnancies (12%) with SLE and antiphospholipid syndrome. In our cohort, the majority of the patients were on prednisolone (76%). Half of the patients (48%) were on hydroxychloroquine or chloroquine and 27% were on azathioprine. The mean SELENA-SLEDAI score at the booking visit was 4.0. In our cohort, the live birth rate was 75%. More than half of the deliveries were via Caesarean section (57%). There were maternal and fetal complications in 61% of the pregnancies. Pregnancy losses occurred in 16 pregnancies with the majority (87%) being early pregnancy losses that occurred prior to 13 weeks gestation. There were 13 pregnancies (17%) with intrauterine growth restriction and 18 pregnancies (24%) with preterm delivery. In the subgroup of the preterm births, 2 were extremely preterm birth (<28 weeks gestation) and 2 were very preterm birth (28 weeks to <32 weeks gestation). There were no cases of congenital heart block or neonatal lupus. There was one neonatal death.

SLE flares occurred in 25 pregnancies (33%). The most common organ involvement were haematological (44%), renal (40%), mucocutaneous (28%) and arthritis (16%). Pre-eclampsia occurred in 2 pregnancies (2%). There were 3 cases of a first presentation of lupus nephritis in pregnancy. In the subgroup of SLE pregnancies with antiphospholipid syndrome, there were higher SLE flare rates (44%) and more adverse pregnancy outcomes with 3 pregnancies (33%) that resulted in miscarriages. 2 pregnancies (22%) with preterm delivery and one pregnancy (11%) complicated by pre-eclampsia (table 1). There were 7% of pregnancies with a post-partum SLE flare.

Conclusions: In our multi-ethnic cohort, more than half of the patients experienced an adverse pregnancy outcome. SLE flares in pregnancy occurred in a third of the cohort with the most common organ manifestation being haematological and renal flares. SLE pregnancies with antiphospholipid syndrome appeared to be associated with a higher risk of SLE flares and adverse pregnancy outcomes.

Disclosure of Interest: None declared

Abstract FRI0392 – Table 1. Comparison of maternal and fetal outcomes between SLE pregnancies and SLE with antiphospholipid (APS) pregnancies

<table>
<thead>
<tr>
<th>Variable</th>
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<th>Std. mean (n=33)</th>
<th>p-value</th>
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<td>Maternal age</td>
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<td>Maternal weight</td>
<td>70.0 (50.0, 90.0)</td>
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<td>Fetal weight</td>
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<td>3300.0 (3000.0, 3600.0)</td>
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<td>Gestational age</td>
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<td>37.0 (32.0, 41.0)</td>
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Conclusions: Independent-Associated Clinical Biomarkers with Serological ULAs in fertile SLE female patients

<table>
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<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardised Coefficients</th>
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<th>P</th>
<th>95% CI</th>
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<td>CRE</td>
<td>1.145</td>
<td>0.462</td>
<td>2.478</td>
<td>0.016</td>
<td>0.223–2.088</td>
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<td>Urinary protein</td>
<td>-2.758</td>
<td>0.933</td>
<td>0.239</td>
<td>2.299</td>
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<tr>
<td>Urine protein</td>
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<td>1.042</td>
<td>0.286</td>
<td>2.788</td>
<td>0.019</td>
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<td>UBDL</td>
<td>56.426</td>
<td>28.058</td>
<td>0.216</td>
<td>2.011</td>
<td>0.048</td>
</tr>
<tr>
<td>Constant</td>
<td>177.283</td>
<td>42.179</td>
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</table>

Disclosure of Interest: None declared

Abstract FRI0393 – Table 1. Independently-Associated Clinical Biomarkers with Serological ULAs in fertile SLE female patients

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Disclosure of Interest: None declared