Methods: After professional training, rheumatologists use non-mydiatic fundus camera to take fundus photography of inpatients in our department and record the clinical features and laboratory test results of the patients. The results of fundus photography are interpreted by both ophthalmologists and rheumatologists. The fundus results of SLE patients from July 2016 to June 2017 were analysed. 35 cases (62 eyes) of retinopathy were defined as experimental group, and 35 cases (70 eyes) without retinopathy were randomly selected as the control group.

Results: A total of 203 patients with SLE with an average age of 38.4 ± 11.6 years acquired bilateral fundus results, including 28 males and 175 females (86.2%). Ocular lesions were found in 51 (25.1%) cases, of which 35 (62.6%) were common retinopathy. There were 5 cases of retinal atrophy and pigmented degeneration (4 binocular, 1 monocular), 9 cotton spots (6 binocular, 3 monocular), 7 flaming bleeding (7 binocular), 14 choroiditis with drusen (9 binocular, 5 monocular), arteries tortuous or occluded in 5 (3 binocular, 2 monocular). The SLEDAI score, anti-dsDNA level and C3 decline rate of the experimental group were significantly higher than those of the control group ($p < 0.05$ or $p < 0.01$), while the titer of antinuclear antibody, the positive rate of anti-SM antibody, the positive rate of anti-phospholipid antibodies, and the erythrocyte sedimentation rate had no significant difference ($p > 0.05$). Subsequently, we followed up 16 patients with retinopathy and SLEDAI score ≥ 10 and achieved remission (SLEDAI score ≤ 4) with glucocorticoid and immunosuppressive agents with an average duration of 6.5 ± 4.5 months. The second examination showed that retinal lesions were improved in 9 cases (56.25%), 3 cases (18.75%) were unable to judge due to the appearance of optical media change which may caused by glucocorticoid, and 4 cases (25%) showed no obvious changes.

Conclusions: Non-mydiatic fundus examination performed by rheumatologists may assist rheumatologists in screening for retinopathy in SLE patients, assessment of disease activity and treatment outcome.

Disclosure of Interest: None declared

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THU0371 CORRELATION BETWEEN IRREGULAR MENSTRUATION AND DISEASE ACTIVITY OF SYSTEMIC LUPUS ERYTHEMATOSUS :1 YEAR COHORT STUDY

N. Oguro, N. Yajima, M. Saito. *Rheumatology, Showa University School of Medicine, Tokyo, Japan*

Background: Systemic lupus erythematosus (SLE) often occurs to young women of reproductive age. Not only the disease but the treatment itself could affect the capability of getting pregnant. In clinical scene, we often experience SLE patients having menstrual irregularity before their relapse. Reports about correlation between menstrual irregularity and disease activity of SLE was very limited.

Objectives: We started this study, that this study could be a suggestion for clinician to use the symptom as a warning sign for relapse.

Methods: The study design was prospective cohort. 67 patients who fulfilled ≥ 4 of the American College of Rheumatology (ACR) criteria for the classification of SLE whose age was 20 to 45 years old and treated as outpatient at Showa University Hospital from Feb 2016 to Jan 2017 were recruited. At the initial point, patients' disease were not active and were receiving maintenance therapy. Loss to follow up was eliminated. We set the main exposure as menstrual irregularity and the primary outcome as whether they would have relapse within 1 year from the registration. We defined the menstrual irregularity as deviation from the normal menstruation, which is 'flow occur every 25 to 35 days and last three to seven days'. We had questionnaire formed from each patient. Definition of relapse was the doctor's decision, to intensify the patients' treatment. We set the confounding as age, Japan Perceived Stress Scale (JPSS), current smoking, history of treatment with IVCY and logistic regression analysis was performed.

Results: The mean age was 35.7 years old. Irregular menstruation patients were 11 (16.4%). The relapse group was 12 (17.9%) and those of normal group was 59 (89%). There was no significant difference in patients' background between both groups. Adjusted with the cited confounding variable there was no significant difference between the both groups (Odds ratio 2.25; 95% Confidence Interval (CI) 0.24 to 20.7; $p = 0.47$).

Abstract THU0371 – Table 1. Abstract THU0371 – Table 2. Logistic regression analysis. Adjusted with age, history of treatment with IVCY, current smoking, and JPSS.

	Total	Normal menstruation group	Irregular menstruation group	p value
Number	67	56	11	
Age median [IQR]	35.7[31-41]	38[31-41]	37[28-41]	0.35
0 month SLEDAI median[IQR]	3[2-6]	2[0-6]	4[2-6]	0.24
JPSS median [IQR]	15[11-18.8]	15[11-18.5]	13[9-29]	0.51
Current smoking N(%)	8(11.9)	6(10.7)	2(18.1)	0.4
History of IVCY N(%)	10(14.9)	8(14.2)	2(18.1)	0.74
0 month PSL dose median[IQR]	5.5[4-10]	5.7[4.3-9.6]	5[3-11]	0.73
0 month Immune-Suppressing drug N(%)	40(59)	35(62.5)	5(45.4)	0.29

IQR: interquartile range, SLEDAI: systemic lupus erythematosus disease activity index, JPSS: Japan Perceived Stress Scale, IVCY: intravenous cyclophosphamide PSL: prednisolone.

	Coefficient (β)	SE	Wald χ^2	p value	Odds ratio	95%CI
Irregular Menstruation Group	-0.40	0.56	0.51	0.47	2.25	0.24-20.7

Adjusted with age, history of treatment with IVCY, current smoking, and JPSS

Conclusions: We investigate that whether menstrual irregularity could be the predictor for the disease relapse, but we could not prove the significant relation.

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THU0372 ULTRASONOGRAPHIC SCORING OF THE MAJOR SALIVARY GLANDS: IS THERE A RELATIONSHIP WITH DISEASE ACTIVITY AND FUNCTIONAL STATUS OF THE GLANDS ?

¹N. Inanc, Y. Yalcinkaya¹, G. Mumcu², Z. Erturk¹, A.U. Unal¹, P. Atagunduz¹, H. Direskeneli¹. ¹Department of Internal Medicine, Division of Rheumatology, Marmara University, School of Medicine; ²University of Health Sciences, Istanbul, Turkey

Background: Ultrasonography (USG) of major salivary glands (SG-USG) is a non-invasive tool that has been used to evaluate salivary glands in primary and secondary Sjogren's syndrome (SjS).

Objectives: We aimed to investigate relation between the ultrasonographic scoring of major salivary glands and systemic disease activity or salivary secretion in patients with primary SjS.

Methods: Seventy-five SjS patients (F/M:73/2) with the mean age of 52 ± 12 and duration of follow-up period of 58 ± 54 months fulfilling ACR-EULAR classification criteria (2002) were included. Disease activity indexes (Sjögren's Syndrome Patients Reported Index (ESSPRI), Visual Analogue Scale (VAS), EULAR Sjögren's Syndrome Disease Activity Index (ESSDAI)) were recorded. Simultaneously, sialometric evaluation of the salivary glands was performed. Major salivary glands (bilateral parotis and submandibular glands) were scored according to two different scoring systems [Hocevar A.(0–48) and Milic VD. (0–12)] and elastography was recorded as well.

Results: Demographics, clinical characteristics, disease activity indexes and SG-USG scores were summarised in table 1 and table 2. Forty-one (55%) and 45 (60%) patients had the cut-off values of ≥ 17 (Hocevar) and ≥ 6 (Milic USG). The patients with the scores of ≥ 17 (Hocevar) were found to have higher scores of ESSPRI-total (16 ± 6 vs 13 ± 7 , $p = 0.045$) and lower sialometry (4.6 ± 4.7 vs 8.4 ± 4.6 ml, $p = 0.002$). Scores of Hocevar and Milic-USG were negatively correlated with sialometry ($r = -.430$, $p = 0.001$ and $r = -.430$, $p = 0.001$). Hocevar, Milic and