

Table 1. Correlations between urinary soluble VCAM-1 and other LN biomarkers/disease scores

LN biomarkers/disease scores	VCAM-1
SLEDAI-2k	0.597***
Renal SLEDAI	0.569***
Renal SLAM-R	0.470***
Renal SLICC	0.620***
Anti-dsDNA	0.342**
C3	-0.344**
C4	-0.382**
UPC	0.654***

Spearman's correlation coefficients

*p value <0.05; **p value <0.01; ***p value <0.001

C, complement; LN, lupus nephritis; SLEDAI, Systemic Lupus Erythematosus Disease Activity Index; renal SLAM-R, The renal Systemic Lupus Activity Measure revised; renal SLICC, The Systemic Lupus International Collaborating Clinics renal activity/response exercise; UPC, urine protein-creatinine ratio.

Conclusion: The uVCAM-1 is a reliable biomarker that reflects renal disease activity and is useful for monitoring individual patients with lupus nephritis over time.

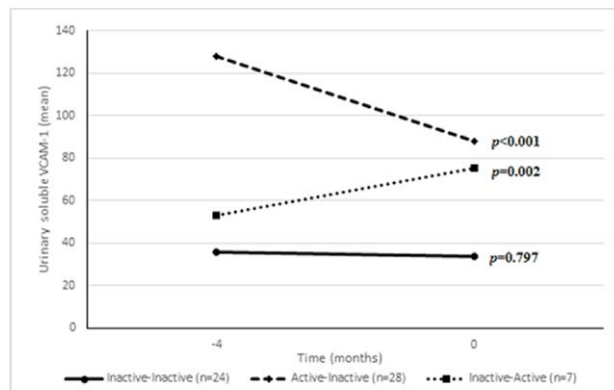


Figure 1. Urinary soluble VCAM-1 levels according to lupus nephritis status. Active LN was defined as proteinuria (UPC \geq 0.5) plus active urinary sediment (hematuria, leukocyturia or cellular hematic/granular casts).

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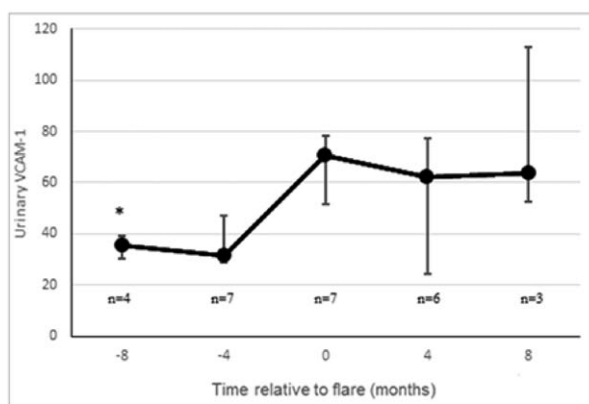


Figure 2. Urinary soluble VCAM-1 levels at different time points relative to a lupus nephritis flare. The levels of uVCAM-1 of seven lupus nephritis patients were evaluated 8 and 4 months before and after a flare, including at the time of the flare itself (time point 0). The number of patients who contributed at each moment was informed. Graph represents median and interquartile range. *p<0.05 compared with level at flare.

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AB0413

INVESTIGATION OF THE ASSOCIATION OF CARDIOVASCULAR EVENTS AND ANTI-SS-A ANTIBODIES AS RISK OF DEVELOPMENT IN PATIENTS WITH LUPUS NEPHRITIS FROM THE LUNA REGISTRY: A CROSS-SECTIONAL STUDY

T. Igawa¹, K. Ichinose¹, M. Okamoto¹, A. Takatani¹, N. Yajima², K. E. Sada³, R. Yoshimi⁴, Y. Shimojima⁵, S. Ono⁶, H. Kajiyama⁷, S. Sato⁸, M. Fujiwara⁹, A. Kawakami¹. ¹Nagasaki University Graduate School of Biomedical Sciences, Department of Immunology and Rheumatology, Unit of Advanced Preventive Medical Sciences, Division of Advanced Preventive Medical Sciences, Nagasaki, Japan; ²Division of Rheumatology, Department of Medicine, Showa University School of Medicine, Tokyo, Japan; ³Department of Nephrology, Rheumatology, Endocrinology and Metabolism, Okayama, Japan; ⁴Department of Stem Cell and Immune Regulation, Yokohama City University Graduate School of Medicine, Yokohama, Japan; ⁵Department of Medicine (Neurology and Rheumatology), Shinshu University School of Medicine, Matsumoto, Japan; ⁶Center for Rheumatic Diseases, Yokohama City University Medical Center, Yokohama, Japan; ⁷Department of Rheumatology and Applied Immunology Faculty of Medicine, Saitama Medical University, Saitama, Japan; ⁸Fukushima Medical University School of Medicine, Department of Rheumatology, Fukushima, Japan; ⁹Department of Rheumatology, Yokohama Rosai Hospital, Yokohama, Japan

Background: Cardiovascular disease (CVD) has been identified as a major cause of morbidity and mortality in patients with lupus nephritis (LN)^(1,2). There is a clear causal relationship between the onset of neonatal lupus (cardiac complications) and SS-A antibodies^(3,4), but no association has been reported in adults. In recent years, there have been reports from overseas that suggest the association between CVD and anti-SS-A antibody in adult systemic lupus erythematosus (SLE) patients^(5,6). So far, no studies have not been reported to evaluate the relationship between anti-SS-A antibody and the risk of developing CVD in LN in a large cohort of patients with SLE in Japan.

Objectives: The aim of this study was to evaluate the association between anti-SS-A antibody and the risk of developing CVD in LN patients using a multicenter registration study [Lupus registry of nationwide institution (LUNA)] in Japan.

Methods: We identified 931 patients diagnosed with SLE in the Lupus registry of nationwide institution (LUNA), and further identified 275 LN patients with known the presence or absence of both development of CVD and presence of anti-SS-A antibody. We defined the exposure factor as anti-SS-A antibody, and the outcome as CVD. SELENA-SLEDAI score (at diagnosis), eGFR <60%, HbA1c, BMI, and steroid pulse treatment history were used as confounding factors and we analyzed using logistic regression analysis.

Results: We found 68 patients (24.7%) complicated with CVD, including pericarditis (7.3%), cerebrovascular disorder (6.2%), peripheral Arterial Disease (6.2%), Ischemic heart disease (2.9%), venous thromboembolism (2.9%), pulmonary hypertension (1.5%), valvular heart disease (1.1%), and cardiomyopathy (0.4%). In univariate analysis, there was no significant difference in the occurrence of CVD depending on the presence or absence of anti-SS-A antibody (p = 0.32), and the results of multivariate analysis showed no significant difference in anti-SS-A antibody [p = 0.23, odds: 0.41, 95% confidence interval (0.09-1.89)].

Conclusion: The association between anti-SS-A antibody and the development of CVD in LN patients in Japan has not been identified.

References:

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AB0414

ESSPRI COMPONENTS AND SALIVARY FLOW RATE ARE RELATED TO DAILY ACTIVITY IMPAIRMENT IN PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME

G. Mumcu¹, K. Abacar², İ. Tatlı³, Y. Yenisoy⁴, A. Kapusuz⁴, E. N. Çakır⁴, F. Türe-Özdemir³, H. Direskeneli², N. İnanc². ¹Marmara University Faculty of Health Sciences, Department of Health Management, Istanbul, Turkey; ²Marmara University Medical School, Department of Rheumatology, Istanbul, Turkey; ³Marmara University Medical School, Department of Hematology and

Immunology, Istanbul, Turkey; ⁴*Marmara University, Institute of Health Sciences, Istanbul, Turkey*

Background: Sjögren's syndrome (SjS) is a chronic systemic autoimmune disease targets primarily the salivary and lacrimal glands, the severe dryness of the mouth and eyes are common manifestations in patients. Therefore, daily life could be affected by these manifestations in patients with SjS.

Objectives: The aim of the study was to assess associations among daily activity impairment and scores of EULAR Sjögren's Syndrome Patient Reported Index (ESSPRI) and major salivary gland ultrasonography (SGUS) in primary SjS.

Methods: In this cross-sectional study, 41 patients with primary SjS (F/M:39/2; mean age: 52,1±10,5) were included. The mean disease duration was 9.5±6,6 years in the group.

Data were collected by clinical examinations and a questionnaire regarding two patients reported outcome measures (PROMs). Firstly, Work Productivity and Activity Impairment (WPAI) questionnaire assessed paid and unpaid work during the last seven days. Scores of WPAI subgroups as absenteeism, presenteeism, overall work impairment as well as daily activity impairment were calculated by using 6 items. Secondly, dryness, fatigue and pain in ESSPRI scale were evaluated by visual analogue scale (VAS; 0-10 points) in SjS. High scores in both PROMs indicates that disease manifestations affect patient's life poorly.

In addition, structural damage of parotid and submandibular salivary glands were examined by using Milic and Hocevar USG scoring methods. Unstimulated whole salivary flow rate (U-WSFR; as ml/min) were also used to interpret the functional status of major salivary glands. High SGUS score and low U-WSFR reflects that disease activity affects major glands poorly.

Results: Daily activity impairment was calculated as 63,9±31,1 in patients with primary SjS. High scores in ESSPRI-dryness, ESSPRI-fatigue and ESSPRI-pain were also observed in the group (7,5±2,4; 6,4±2,8 and 6,1±3,1, respectively). Daily activity impairment was correlated with scores of ESSPRI-dryness ($r=0,55$ $p=0,000$), ESSPRI-fatigue ($r=0,38$ $p=0,014$) and ESSPRI-pain ($r=0,56$ $p=0,000$) as well as parenchymal inhomogeneity USG scores of right and left parotid glands ($r=0,49$ $p=0,032$; $r=0,51$ $p=0,025$).

U-WSFR (0,20±0,20 ml/min) was moderately correlated with parenchymal inhomogeneity USG scores of major salivary glands ($p<0,05$). ESSPRI-dryness score was significantly higher in patients with low U-WSFRs ($\leq 0,1$ ml/min) than the others (87,5±16,3 vs 68,3±25,1, respectively) ($p=0,021$).

Conclusion: Firstly, subgroup scores of ESSPRI and low U-WSFR associated to daily activity impairment in patients with primary SjS. Secondly, parenchymal inhomogeneity scores of both parotid glands could give an important clue to clinicians for the disease-related damage. Finally, WPAI with 6-item could be thought as an useful tool to understand the effect of the disease manifestations on patients' daily life.

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AB0415 SERUM RESISTIN LEVEL IN SYSTEMIC LUPUS ERYTHEMATOSUS: RELATION TO LUPUS NEPHRITIS AND DISEASE ACTIVITY

E. Ismail¹, S. Salah², M. Abdelhamed³, M. Aboel Ela⁴. ¹*Professor of Rheumatology Minia University, Rheumatology and Rehabilitation, Minia, Egypt;* ²*Lecturer of Rheumatology, Rheumatology and Rehabilitation, Minia, Egypt;* ³*Assistant Lecturer of Rheumatology, Rheumatology and Rehabilitation, Minia, Egypt;* ⁴*Minia University Hospital, Minia, Egypt*

Background: Systemic lupus erythematosus (SLE) is a chronic autoimmune disease affecting different organs and systems. Adipokines have recently been implicated as mediators of immune and inflammatory processes. Human resistin is a cytokine that induces low-grade inflammation by stimulating monocytes

Objectives: The aim of this work is to assess the serum level of resistin in SLE patients and to detect its relation to lupus nephritis, and disease activity

Methods: 40 patients with SLE with age ranged between 18-48 years and 20 healthy age, sex and BMI matched volunteer were enrolled in this study. According to the presence or absence of lupus nephritis (LN), patients were classified into two subgroups Full history, clinical examination and laboratory investigations were performed for all patients including serum resistin level

Results: The level of serum resistin was higher in SLE patients than the controls ($p=0,001$). Also, serum resistin levels were higher in patients with lupus nephritis than those without nephritis ($p=0,02$). Serum resistin level correlated positively with the levels of ESR ($p<0,001$), CRP ($p=0,005$), Anti-dsDNA ($p=0,002$) and serum urea ($p=0,002$). Serum resistin levels correlated negatively with hemoglobin levels ($p=0,001$) and levels of C3 ($p<0,001$) and C4 ($p<0,001$). There was a significant positive correlation between serum resistin level and the presence of albumin ($p=0,001$), RBCs ($p=0,003$), pus cells ($p=0,001$) and casts ($p<0,001$) in urine and also with the levels of 24 hour urinary protein and protein/creatinine ratio ($p<0,001$). Serum resistin level was found to be strongly correlated with

SLEDAI ($p<0,001$). No correlation was found between serum resistin levels and ISN/RPS classification of renal biopsy.

Conclusion: Serum resistin level can be used as a marker of inflammation, nephritis, disease activity in patients with SLE.

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AB0416 ANTIPHOSPHOLIPID SYNDROME IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

M. Jordhani¹, D. Ruci¹. ¹*Mother Teresa Hospital, Internal Medicine, Tiranë, Albania*

Background: Antiphospholipid Syndrome (APS) is an autoimmune disorder characterized by venous/arterial thrombotic events and pregnancy morbidity in presence of pathogenic autoantibodies known as antiphospholipid antibodies (APL). APS is often associated with systemic autoimmune diseases, especially with Systemic Lupus Erythematosus (SLE), being part of the latest criteria of SLE.¹

Objectives: The aim of this study was to evaluate the impact of Antiphospholipid syndrome in patients with Systemic Lupus Erythematosus presented at our Rheumatology Clinic at University Hospital Center Mother Teresa in Tirana, Albania.

Methods: This is an observational case-control study which included patients diagnosed with SLE from 16-51 years old, presented at our clinic during the period from 10 December 2014-10 September 2019.

Seventy-three patients with SLE were included in the study. Patients were classified according to the presence of Antiphospholipid Syndrome or not, according to the current guidelines. The case study (patients with SLE and APS) consisted in 24 patients, and the control group consisted in 49 patients. Besides the usual laboratory tests (complete blood count, erythrocytation rate, C3, C4 complement fractions, urinalysis and 24h proteinuria, c-reactive protein), all patients underwent immunological tests for anti-nuclear antibodies, anti-DNA antibodies and antiphospholipid antibodies (Anti-cardiolipin IgM and IgG). If APL were found positive, according to EULAR recommendations, tests were repeated after 12 weeks. Female patients were asked about their pregnancy history and their possible miscarriages/aborts.

Results: After our statistical analysis it resulted that there is a significant difference between C3 complement fraction (patients with APS and SLE tend to have more hypocomplementemia than the other group) ($p=0,006$). Thrombocytopenia resulted to be an important feature, statistically significant in the cases' group ($p=0,003$). It was seen a statistically significant difference referring to the number of miscarriages/aborts in the history of female patients with APS and SLE in comparison to those with SLE without APS ($p=0,03$). Proteinuria it has a tendency to be more marked in patients with APS and SLE, with a significant difference in comparison to the controls ($p=0,04$).

Conclusion: In this study was seen that patients with antiphospholipid Syndrome and Systemic Lupus Erythematosus tend to have more hypocomplementemia C3, and thrombocytopenia. It resulted a statistically significant relationship with miscarriages or abortions in patients with APS and SLE in comparison to SLE patients. It was seen a significant tendency to have marked proteinuria in patients with SLE and APS compared to controls.

Through this study it was seen a characteristic clinical and laboratory picture that may be useful in the identification of cases with APS in patients with SLE, in their follow-up and treatment.

References:

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AB0417 WORK IMPAIRMENT AND PREDICTORS OF WORK INCAPACITY AMONG PRIMARY SJOGREN'S SYNDROME PATIENTS

D. Khalifa¹, A. Guiga², W. Ben Yahya², A. Atig², N. Ghannouchi². ¹*Farhat Hached Hospital, Rheumatology Department, Susah, Tunisia;* ²*Farhat Hached Hospital, Internal Medicine Department, Susah, Tunisia*

Background: Primary Sjogren's syndrome (PSS) is a prevalent rheumatic disorder affecting exocrine glands but also other systems. It alters quality of life of affected patients and increases work incapacity and general activity impairment.

Objectives: The purpose of this study was to assess the influence of PSS on work among affected patients and determine predictors of work incapacity.

Methods: A cross-sectional study was conducted in the internal medicine department. Adult patients diagnosed with PSS and fulfilling the EULAR criteria for the diagnosis were included. Clinical and biological data was collected from medical files and during medical visits. Disease activity was calculated using