SLE physiopathology has provided to analytic and immunological criteria in the subsequent classification criteria.

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**Background:** The exact pathogenesis of systemic lupus erythematosus (SLE) is poorly understood. It is an autoimmune disease that leads to a chronic inflammatory process involving numerous tissues and organs (skin, kidneys, joints, central nervous system, cardiovascular, respiratory, digestive and hematopoietic systems). However, despite the advancement of SLE molecular biology and the wide availability of tests and diagnostic tools, the knowledge about factors predicting the clinical disease activity as well as related changes in the laboratory results is insufficient.

**Objectives:** The goal of the study was to assess the relationship between selected single nucleotide polymorphisms (SNPs) and the clinical picture of disease and activity parameters in patients with SLE.

**Methods:** We conducted a study of adult patients with SLE diagnosed and treated in the Rheumatology Department of Medical University of Lublin between 2016-2019. We enrolled 80 patients with SLE (71 women, 9 men), with the median (range) age 36 (19-72) and disease duration 6 (1-37) years. To objectively assess disease activity, standardized SLE activity scale - SLE-DAI (Systemic Lupus Erythematosus Disease Activity Index) was used. Using the Real-Time PCR method and specific TaqMan probes SNPs of 3 genes: MAMDC1 (rs910875; c.-1687G> A), CRP (rs3091244; c.-390C> A), and ITGAM (rs7193943; c.-323G> A) were analyzed and then their relationship with specific clinical picture of disease, activity and laboratory data were assessed.

**Results:** Carriers of the CC genotype compared to the remaining polymorphic variants (CG and GG) of the MAMDC1 gene had an approximately 4-fold higher risk of SLE diagnosis compared to other clinical pictures of disease (renal, articular, neuro-psychiatric, hematological) (OR = 4.04; p = 0.0110). Carriers of this genotype also had a higher risk of mortality (OR = 4.57; p = 0.0082), sterile leukocytosis (OR = 53.91; p = 0.0071), the presence of anti-Sm / RNP antinuclear antibodies (OR = 4.15, p = 0.00744), reduced values of the C3 complement component (OR = 6.11; p = 0.0071) and the need for oral glucocorticosteroids (OR = 7.01; p = 0.0028). In addition, significantly higher values of SLEDAI disease activity scale were observed in carriers of the CC genotype of the MAMDC1 gene (medians: 6 vs 4; p = 0.0220). Moreover, we observed a trend towards a higher risk of hepatomegaly in GG genotype carriers of the ITGAM gene (OR=18.50; p=0.0525). In addition, the AA genotype of the CRP gene was associated with a higher risk of proteinuria (OR = 84; p <0.0001), Anti-SSA / Ro autoantibodies (OR = 3.29; p = 0.0484), and aCL IgM (OR = 3.42; p = 0.0332) occurrence. Carriers of AA genotype of the above gene were also at higher risk of earlier occurrence of first disease symptoms as well as disease diagnosis at a younger age (respectively: 24 vs 31 years; p = 0.0225, 23 vs 29 years; p = 0.0442).

**Conclusion:** The results suggest the relationship between SNPs in genes involved in systemic inflammation (MAMDC1, ITGAM, CRP) and disease activity as well as the occurrence of some specific clinical pictures of disease in patients with SLE. The genetic dispositions described above may serve as attractive markers in SLE, potentially useful in clinical practice.
describe pts demographic and clinical characteristics, and medications use in the baseline and follow up.

Results: Study cohort included 9,108 SS pts of which 75.6% had sSS diagnosis on index date. Majority of SS pts were women, Caucasian, with mean age of 58.3 yrs, and from western states in the US (Table 1). Endocrine conditions including hypo- and hyperthyroidism, and diabetes was the most common (45.5%) comorbidity at baseline, followed by rheumatologic disorders (25.6%) and neurological conditions (22.2%). Among patients with treatment information (4088, 44.88%), 42.95% were under symptomatic treatments for dry eye and mouth at baseline. (Table 1). In the follow-up, SS pts had average 5.8 healthcare visits per patient per year (PYYY), including 0.6 inpatient and 3.4 outpatient visit respectively. About 40% of the SS pts (53.8% sSS and 35.8% pSS) were diagnosed by rheumatologists. Majority of the SS pts initiated treatment with cDMARDs (82%) and remained on the same treatment during 1 year follow-up (Fig 2).

Conclusion: Observation of higher comorbidities suggests substantial burden of the healthcare system, with majority of pts being diagnosed outside of rheumatology offices.

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BIOLGICAL PREDICTORS OF ECHOCARPIC SALIVARY GLAND INVOLVEMENT SEVERITY IN PATIENTS WITH SJÖGREN'S SYNDROME

A. Mihal1, D. Mardale1, D. Opris-Belinski2, R. Ionescu2, C. Jurcut1. 1 “Dr Carol Davila” Central Emergency University Military Hospital, Bucharest, Romania; 2 “St Maria” Clinical Hospital, “Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

Background: Echocraphic evaluation of salivary gland increasingly become a routine imaging modality in patients with Sjögren's syndrome (SS). However, predictive parameters associated with the severity of echographic features are still incompletely evaluated.

Objectives: The aim of this study was to evaluate the predictors for severe echographic involvement in patients with SS followed in a tertiary center.

Methods: We included 63 patients with SS (mean age: 52.3±11.9; 59 female). The complete laboratory workup, clinical manifestations and treatment were reviewed and the EULAR Sjögren's syndrome disease activity index (ESSDAI) was calculated for each patients. We performed the standard echographic evaluation of salivary gland in all patients and used a 4 grade system for severity staging.

Results: The distribution of echographic grade was: no any echographic features – 4 pts (6.3%); grade 1 - 24 pts (38.1%); grade 2 – 20 pts (31.7%); grade 3 – 10 pts (15.9%); grade 4 – 5 pts (7.9%). The ESSDAI and the hydrochloroquine use were similar in these subgroups. We didn't find differences regarding CRP and fibrinogen and echographic features. The age of the patients, the anti-SSA and anti-SSB, ESR, total protein, IgA, IgG and rheumatoid factor levels were significantly higher and lymphocyte count was lower in patients with echographic severity above grade 2 when compared with patients with no or mild echographic features. However, using ANOVA test and post-hoc analysis, the only parameters associated with the severity of echographic features were high ESR (53 vs 17 in grade 4 vs 1, p=0.02), IgA (363 vs 190 in grade 4 vs 1, p=0.004) and IgG (1985 vs 1191 U/l in grade 4 vs 1, p=0.001) levels.

Conclusion: Parameters linked to polycythaemia globulomemia (IgA and IgG levels; and ESR) seem to be linked to the severity of echographic appearance of salivary gland in patients with SS. Further studies are needed in order to better characterize this link.

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