Methods: A total of 49 SLE pts (46 women, 3 men, 40 [33;48] years old) without established DM and with normal fasting glucose levels (<6.1 mmol/l) were enrolled in the study. Median disease duration was 3,0[0,7;8,0] years, SLEDAI-2K was 5[2;8]. SLE pts were treated with glucocorticoids (GC) (84%), hydroxychloroquine (78%), immunosuppressive drugs (20%) and biological agents (10%). Insulin levels were measured using electrochemiluminescence assay Elecsys (Roche Diagnostics), serum leptin concentrations were estimated using ELISA (DBS-Diagnostics Biochem Canada Inc.). IR was defined as Homeostasis Model Assessment of Insulin Resistance index (HOMA-IR) ≥ 2.77 . Leptin levels were considered elevated at values ≥ 11.1 ng/ml for women, ≥ 5.6 ng/ml for men. Eight traditional T2DM risk factors from the FINDRISK (Finnish Type 2 Diabetes Risk Assessment Form) questionnaire (older age, being overweight, abdominal obesity, family history of diabetes, sedentary life-style, lack of regular dietary fiber intake, taking antihypertensive medications as a surrogate marker of high blood pressure, documented episodes of hyperglycemia) were evaluated. This study used 5 risk categories for developing T2DM proposed by FINDRISK questionnaire: low, slightly elevated, moderate, high or very high.

Results: Median HOMA-IR levels were 1,7 [1,2;2,5]. HOMA-IR correlated with leptin levels ($r=0.7$, $p<0.001$), body mass index (BMI) ($r=0.6$, $p<0.001$), waist circumference (WC) ($r=0.5$, $p<0.001$), T2DM risk categories by FINDRISK ($r=0.3$, $p=0.03$), SLEDAI-2K ($r=-0.4$, $p<0.01$), and duration of GCs therapy ($r=0.3$, $p=0.03$). Current GC use had no influence on HOMA-IR in SLE. IR was detected in 10 (20%) SLE pts. The traditional T2DM risk factors profiles were similar in pts with (Group 1) or without IR (Group 2) except for higher anthropometric parameters in group 1 (for BMI 27,2[24,8;32,2]kg/m² vs 23,7[20,6;26,7]kg/m², $p<0.01$; for WC: 93[86;102]cm vs 83[76;93]cm, $p=0.02$). Leptin levels were also higher in SLE pts with IR compared to pts without IR (74,2[30,4;112,7]ng/ml vs 25,0[6,7;42,4]ng/ml, $p<0.01$). Increased leptin levels were found in 35 (71%) pts, more often in pts with IR (100 vs 64%, $p=0.04$).

Conclusion: IR was found in 20% of SLE pts without T2DM having normal serum fasting glucose concentration. Emergence of IR was commonly preceded by increased leptin levels. IR values were closely associated with accumulation of adipose tissue facilitated by long-term GCs use and disease activity decrease. Contribution of other traditional risk factors of T2DM seemed insignificant.

Disclosure of Interests: None declared

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POS0728

QRISK3 RELATION TO CAROTID PLAQUE IS HIGHER THAN THAT OF SCORE IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic lupus erythematosus (SLE) has been described as an independent risk factor for the development of cardiovascular (CV) disease. Recently, QRESEARCH risk estimator version 3 (QRISK3) calculator has been released for the assessment of CV risk in general population. QRISK3 now includes the presence of SLE as one of its variables for the calculation of CV risk.

Objectives: We aim to compare, in patients with SLE, the predictive capacity between QRISK3 and Systematic COronary Risk Evaluation (SCORE) for the presence of carotid subclinical atherosclerosis.

Methods: 296 patients with SLE were recruited. The presence of carotid plaque and carotid intima media thickness (cIMT) were assessed through ultrasound. QRISK3 and SCORE were calculated. The relation of QRISK3 and SCORE between themselves and to the presence of carotid subclinical atherosclerosis (both carotid plaque and cIMT) was studied.

Results: Most of the patients were female (95%) and average age was 51 $\pm$ 12 years. Traditional cardiovascular risk factors were prevalent, as shown in table 1. Most SLE patients were in the no activity (41%) or mild activity (29%) categories as shown by the SLEDAI scores. SLICC and Katz indexes were, respectively, 1 (IQR 0-2) and 2 (IQR 1-4). Seventy-one percent of the patients had a SLICC/ACR DI score equal to or higher than 1, and 39% had a Katz index equal to or higher than 3. Almost half of the patients (47%) were taking prednisone (the median dose of those 139 patients on prednisone was 5 [IQR 2.5-5] mg/day at the time of the study). DMARDs use was reported in 77% of the patients and 69% were taking hydroxychloroquine at the time the study was performed. SCORE and QRISK3 did not correlate between them in patients with SLE. In this sense, QRISK3, both calculated including the SLE item (Rho Spearman $r=-0.008$, $p=0.90$) or not (Rho Spearman $r=-0.009$, $p=0.96$), did not correlate with SCORE. This lack of correlation was also found when the corresponding categorizations of both scores were used. For example, patients with a QRISK3

= 10 did not show a higher SCORE when compared to patients with a QRISK3 <10 (1.26 vs. 1.30, $p=0.90$). Similarly, QRISK3 was not different between the low, moderate, high and very-high SCORE CV risk categories.

Relation of QRISK3 and SCORE to cIMT and to the presence of carotid plaque is shown in Figure 1. QRISK3 was statistically significantly correlated with cIMT (Rho Spearman $r=-0.420$, $p=0.000$). However, this relation was not found between SCORE and cIMT (Rho Spearman $r=-0.005$, $p=0.93$). Moreover, QRISK3 showed a statistically significant discrimination for the presence of carotid plaque (AUC 0.765 (95%CI 0.711-0.820)). This relation was found to be significant both when QRISK3 was calculated with the SLE variable item or not. However, in patients with SLE, SCORE did not show a significant discrimination for the presence of carotid plaque (0.561 (95%CI 0.494-0.629)). Additionally, a statistical significant difference was observed between the AUC of QRISK3 and SCORE ($p=0.000$).

Table 1. Characteristics of SLE patients

SLE patients	
(n=296)	
Age, years	51 $\pm$ 12
Female, n (%)	280 (95)
Body mass index, kg/m ²	27 $\pm$ 6
Systolic blood pressure, mmHg	127 $\pm$ 19
Cardiovascular co-morbidity	
Smoking, n (%)	74 (25)
Diabetes, n (%)	14 (5)
Hypertension, n (%)	119 (40)
Dyslipidemia, n (%)	115 (39)
Analytical and lipid profile	
CRP, mg/dl	1.9 (0.9-4.9)
Cholesterol, mg/dl	198 $\pm$ 38
LDL cholesterol, mg/dl	110 $\pm$ 29
SLE related data	
Disease duration, years	17 (10-25)
SLICC	1 (0-2)
SLEDAI	2 (0-4)
Current prednisone, n (%)	139 (47)
Hydroxychloroquine, n (%)	205 (69)
Subclinical atherosclerosis	
Carotid IMT, microns	630 $\pm$ 122
Carotid plaques, n (%)	108 (36)

Figure 1. Relation of QRISK3 and SCORE to cIMT and carotid plaque.

Conclusion: QRISK3 discrimination for carotid plaque is higher than that of the SCORE. QRISK3, and not SCORE, should be used for the calculation of CV risk in patients with SLE.

Disclosure of Interests: None declared

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POS0729

INFLUENCE OF VARIOUS FACTORS ON THE IMMUNOGENICITY OF 23-VALENT POLYSACCHARIDE PNEUMOCOCCAL VACCINE IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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