

of group 1 (21[12;39]) compared to patients of group 2 (2 [0;8],  $p < 0,05$ ). The control group was composed of 30 women (48[45;57]years) without autoimmune and cardiovascular diseases.

**Results** Dyslipidemia occurred in 38% of the 1st group and 34% in the 2nd group. Average lipids levels of the SLE and control groups are presented in the (table 1). As can be seen from the table both treatment groups had elevated levels of triglycerides (TG), and the 1st group showed a reduction in a LDL-C level. Patients with new-onset SLE expressed more significant disorders in the lipid profile (increase of TG levels and low LDL-C concentration). SLE patients' serum samples of the 2nd group were characterized by elevated levels of C-CICs in contrast to the control group levels, while the difference between the two treatment groups appears to be insignificant ( $p = 0,41$ ).

**Conclusions** C percentage increase in CICs, immune mediator circulating in SLE patients' blood and presumably affecting atherosclerosis progression in SLE, appear to be the characteristic of blood serum lipid spectrum of the 2nd group patients and a distinguishing feature of the 2nd group patient' serum samples in contrast to the 1st group.

#### LP-026 OBESITY, HYPERLEPTINEMIA AND INSULIN RESISTANCE IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND RHEUMATOID ARTHRITIS

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**Background Objective:** To compare the incidences of overweight, abdominal obesity, hyperleptinemia and insulin resistance (IR) in women with systemic lupus erythematosus (SLE) and rheumatoid arthritis (RA).

**Methods** The study included 96 patients (age 18–65 years): 46 women with SLE and 50 – with RA, matched by age and diseases duration. Exclusion criteria: pregnancy and lactation, a history of diabetes, fasting hyperglycemia ( $\geq 6.1$  mmol/L) and/or hypoglycemic drugs taking. The concentration of leptin (ELISA) and insulin (electrochemiluminescent analysis) was determined in all patients, and the HOMA-IR index was calculated. Hyperleptinemia was diagnosed at leptin concentrations  $>11.1$  ng/ml, IR – at HOMA-IR values  $\geq 2.77$ , abdominal obesity (AO) – at waist circumference (WC)  $\geq 80$ cm.

**Results** Leptin concentrations, insulin levels, HOMA-IR were higher, and CRP was lower in SLE than in RA ( $p \leq 0,001$  for all). Hyperleptinemia was found in 34 (74%) SLE and 23 (46%) RA patients ( $p = 0.005$ ), IR – in 10 (22%) and 5 (10%) women, respectively ( $p = 0.2$ ). WC, body mass index (BMI), the frequency of AO (35% vs 40%) and  $BMI \geq 25$  kg/m<sup>2</sup> (43% vs 38%) in the groups did not differ ( $p > 0,05$  for all). Glucocorticoids (GC) were received by 38 (85%) patients with SLE and 18 (36%) – with RA ( $p < 0.0001$ ), daily doses were 10 [7.5;10] mg and 5[5;10] mg, respectively ( $p = 0.001$ ).

**Conclusions** In women with similar anthropometric parameters, hyperleptinemia, but not IR incidences, was more common in SLE than in RA, which may be due to both less expression of inflammation and differences in GC regimens.

#### LP-027 OVERWEIGHT AND OBESITY PHENOTYPES BASED ON BODY MASS INDEX AND INSULIN RESISTANCE IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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**Background Objective:** To find out the rate of various overweight phenotypes based on body mass index and insulin resistance (IR) in women with systemic lupus erythematosus (SLE).

**Methods** A total of 46 women with SLE (40[31;48] years old) without diabetes mellitus or hyperglycemia were enrolled in the study. The median SLE duration was 3,0[0,9;9,0] years, SLEDAI-2K was 5[2;8]. SLE pts were treated with glucocorticoids (GC) (83%), hydroxychloroquine (76%), immunosuppressive drugs (22%) and biological agents (11%). IR was defined as Homeostasis Model Assessment of Insulin Resistance index (HOMA-IR)  $\geq 2,77$ . There were three main phenotypes of obesity/overweight: 1.'classic or metabolic unhealthy obesity/overweight' – body mass index (BMI)  $\geq 25$ kg/m<sup>2</sup> + IR, 2.'metabolically healthy obesity/overweight' – BMI  $\geq 25$ kg/m<sup>2</sup> without IR, 3.'latent or metabolic unhealthy non-obesity' – BMI  $< 25$ kg/m<sup>2</sup> + IR.

**Results** The classic phenotype was found in 15%, metabolically healthy phenotype – in 28%, latent phenotype – in 7%, normal weight without metabolic disturbances – in 50% women. HOMA-IR negatively correlated with SLEDAI-2K ( $r = -0.35$ ,  $p = 0.02$ ), and positively – with waist circumference ( $r = 0.57$ ,  $p < 0.0001$ ). Patients with normal weight without metabolic disorders were younger ( $p = 0.02$ ), had a lower concentration of uric acid ( $p = 0.03$ ) than women with the classical phenotype, received lower daily dose of GC for the entire period of SLE than these with latent phenotype ( $p = 0.05$ ). The healthy overweight phenotype had a higher diastolic blood pressure than patients with normal weight without IR ( $p = 0.02$ ), and a tendency to a greater age ( $p = 0.06$ ).

**Conclusions** A combination of BMI  $\geq 25$  kg/m<sup>2</sup> and IR was used to separate the phenotypes of obesity/overweight, since its existence did not coincide in 35% of patients with SLE. The metabolically healthy phenotype was the most frequent, the latent phenotype was the rarest. The formation of a specific phenotype seems to be influenced by age, disease activity and the intake of GC.

## 4. SLE diagnosis and manifestations

#### LP-029 PEDIATRIC LUPUS ERYTHEMATOSUS-AN INTERDISCIPLINARY CHALLENGE

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**Description** Childhood-onset systemic lupus erythematosus is considered a multisystemic, inflammatory autoimmune disease with a wide spectrum of organs involvement. The clinical presentation can vary from cutaneous involvement to nephritis, hematological, neuropsychiatric or macrophage activation