

**Methods** 56 patients with a mean age of  $33 \pm 6.3$  years and with  $7.5 \pm 3.2$  years' duration of SLE were enrolled in this study. All patients fulfilled with EULAR/ACR 2019 classification criteria and were evaluated with SLEDAI-2K. Anemia was graded as mild (91–110g/l), moderate (71–91g/l) and severe (51–70g/l). Data was analyzed with spss statistical software.

**Results** Out of all examined patients 85% were females and 15% males. Mean SLEDAI-2K was  $11,26 \pm 7,2$ . 68,4% of patients presented with anemia, in particular 27 patients (47,4%) had mild, 7(12,3)– moderate, 4(7,0%)– severe anemia. According to the study lower values of anemia significantly correlate with high SLEDAI-2K ( $p < 0,01$ ) and presence of Lupus nephritis ( $p < 0,042$ ). Diversely, significant association between ESR, CRP and aPL titers and anemia levels was not found. 78,9% of patients with anemia had mucocutaneous manifestations, 57,9%–arthritis, 47,4%–hepatosplenomegaly, 44,7%–pleuritic, 42,1%–pericarditis, 36,8%–lupus nephritis, 28,9%–cerebral vasculitis.

**Conclusion** Anemia could be used as an additional marker for the evaluation of SLE activity status. In purpose to determine, if specific anemia type is more connected with disease activity, further assessment of hepcidin, ferritin and coombs test is required.

#### PO.4.84 INFECTIONS IN INFANTS BORN TO MOTHERS WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND THE ROLE OF PRETERM BIRTH

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**Purpose** To investigate the risk of infections in the first year of life in infants born to mothers with systemic lupus erythematosus (SLE) compared to infants born to general population comparators, and to examine the role of preterm birth as a mediator of the association.

**Methods** Liveborn singletons born to mothers with SLE and general population comparators were identified in the Medical Birth Register (MBR; 2006–2012), sampled from the Swedish Lupus Linkage (SLINK) cohort (1987–2012). SLE was defined by  $\geq 2$  International Classification of Diseases (ICD)-coded visits in the National Patient Register (NPR) and MBR, with  $\geq 1$  visit before pregnancy. Infections were defined as any ICD-coded visit listing an infection diagnosis in the in- and outpatient records of the NPR or dispensed antibiotic prescriptions in the Prescribed Drug Register. Hospitalized infections were defined as a primary ICD-coded hospitalization. Modified Poisson regression models estimated risk ratios and 95% confidence intervals (RR; 95% CI) of infant infection associated with maternal SLE adjusted for maternal age, first-trimester smoking, and calendar year. Causal mediation analysis estimated the percentage of the total effect explained by preterm birth ( $< 37$  weeks).

**Results** Of 441 SLE offspring, 17% had an infection diagnosis in the first three months of life compared to 12% of 4,485 non-SLE offspring, with a corresponding RR of 1.4 [95% CI 1.1–1.7] which was greater for infants born preterm (1.8 [95% CI 1.2–2.9]). Hospitalized infections occurred in 5% of

SLE offspring and 3% of non-SLE offspring in the first three months (RR 2.1 [95% CI 1.3–3.3]), and in 9% of SLE offspring and 5% of non-SLE offspring in the first year (RR of 1.6 [95% CI 1.1–2.2]), regardless of being born preterm. Fifty-two percent of the total effect of maternal SLE on any infection in the first three months was mediated through preterm birth.

**Conclusions** When looking at the first three months, maternal SLE was associated with a nearly 40% higher risk of any infection and a two-fold higher risk of hospitalized infections. Preterm birth may explain half of the association between maternal SLE and any infection in the first three months of life.

#### PO.4.85 WHAT ARE THE SEX DIFFERENCES IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS?

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**Purpose** Systemic lupus erythematosus (SLE) is a chronic, multiorgan, systemic autoimmune disease that is more common in women than men. Men with SLE diagnosed often have a more aggressive clinical course with rapid accrual of organ damage, resulting in a poorer prognosis compared with women with SLE.

**Methods** This cross-sectional study included 227pts: 69% ( $n=156$ ) females, aged  $35,4 \pm 0,8$  years and 31% ( $n=71$ ) males, aged  $36,1 \pm 1,3$  years with SLE according to SLICC/ACR 2012 criteria, attending a routine visit at our Clinic between February 2015 and February 2020. Regarding SLE-specific evaluations, patients were assessed for age at onset, disease duration, cumulative organ involvement, cumulative serology and ongoing therapy, SLE Disease Activity Index (SLEDAI-2K) and the Systemic Lupus International Collaborating Clinics damage index (SDI).

**Results** There were no sex differences in: mean age, age at onset ( $24,5 \pm 9,4$  years in females and  $25,6 \pm 11,0$  years in males), disease duration ( $133,7 \pm 9,6$  and  $131,4 \pm 12,9$  months), SLEDAI-2K score ( $9,51 \pm 0,59$  and  $9,15 \pm 0,98$ ), SDI score ( $1,91 \pm 0,16$  and  $1,85 \pm 0,2$ ), steroid use duration ( $99,8 \pm 8,3$  and  $89,8 \pm 10,4$  months), taking immunosuppressants in the disease course (49% and 53%). SLE men compared to SLE women had a higher incidence of discoid cutaneous lupus – 23% versus 7%,  $p < 0,001$ , venous thromboses – 27% vs 15%,  $p < 0,05$  and cumulative prednisolone dose  $-80,1 \pm 6,6$  vs  $39,1 \pm 3,4$  grams,  $p < 0,001$ . Oral ulcers (28% vs 46%,  $p < 0,05$ ), Sjögren's syndrome (1% vs 11%,  $p < 0,05$ ) and taking hydroxychloroquine (30% vs 63%,  $p < 0,00001$ ) appears to be less common in men than in women. No differences were found in the frequency of other clinical and serological disorders (women and men): acute cutaneous lupus – in 63% vs 62%, joint involvement – 90% vs 96%, serositis involvement – 42% vs 54%, nephritis – 53% vs 62%, neuropsychiatric involvement – 30% vs 31%, haematological involvement – 60% vs 46%, ANA – 85% vs 82%, other serological disorders (anti-dsDNA or anti-Sm, or low complement) – 81% vs 69% ( $p=0,05$ ), antiphospholipid antibodies – 55% vs 41%, antiphospholipid syndrome – 21% vs 30%, arterial thromboses – 11% vs 8%, fever – 25% vs 30%, Raynaud phenomenon – in 25% vs 30% of patients ( $p > 0,05$  in all cases).