

n:1), anti-Ro carriers (n:2 and n:1). No difference in complications between anti-Ro positive and negative women ($p=0.047$).

Hydroxycloquine prescribed in 97 patients (64%), aspirin in 99 (65,6%), heparin in 33 (21,9%) and prednisone in 48 (31%).

Conclusions In our series, women with SLE and APL have higher risk of abortion, pregnancy complications and instrumental delivery than general population. Anti-Ro carriers don't have increased rate of abortions nor complications during pregnancy. Follow-up of pregnancy in a multidisciplinary unit decreases the risk of abortion.

P82 ANTI-PHOSPHOLIPID ANTIBODIES AND RENAL INVOLVEMENT ARE THE MAIN FEATURES ASSOCIATED WITH ADVERSE PREGNANCY OUTCOMES IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS – A LONG-TERM LONGITUDINAL STUDY IN SOUTHERN SWEDEN

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Background Systemic Lupus Erythematosus (SLE) affects mostly women in childbearing age. Modern management of SLE patients has improved the pregnancy outcomes over the last decades. However, there is still an increased risk of maternal, fetal and neonatal complications. In this longitudinal follow-up of pregnant women affected by SLE, we aimed to investigate which clinical and immunological features may predict for the occurrence of adverse pregnancy outcomes (APOs).

Methods We investigated the outcome of 59 pregnancies in 28 SLE patients who have had one or more pregnancies, between 2002 and 2018. Longitudinal clinical and laboratory data from rheumatology, obstetrics and neonatal units were collected and analyzed. We assessed the association between the presence of SLE-related clinical and immunological features and the occurrence of adverse pregnancy outcomes.

Results We recorded 52 APOs in 18 (64.3%) patients. The 59 investigated gestations resulted in 44 (31 vaginal and 13 C-sections) deliveries, 8 (18.2%) before the 37th gestational week, 13 (22%) early miscarriages and 2 (3.4%) induced abortions. HELLP syndrome and preeclampsia complicated 1 (2.3%) and 11 (25%) gestations, respectively. Moreover, 10 (22.7%) newborns had low birth weight, 5 (11.4%) fetuses had intra-uterine growth restriction, whereof 1 (2.3%) resulted in small for gestational age neonate. Neonatal lupus occurred in 1 (2.3%) baby. Previous lupus nephritis was associated with higher risk of APOs overall ($OR=5.9-p=0.01$), in particular impaired fetal growth ($OR=16.6-p=0.01$). The presence of anti-phospholipid antibodies was also associated with higher risk of APOs overall ($OR=4.5-p=0.01$). In particular, the occurrence of preterm delivery and the incidence of miscarriage were associated with the presence during pregnancy of anti-cardiolipin antibodies ($OR=6.8-p=0.03$) and with concomitant anti-phospholipid syndrome (APS) ($OR=3.3-p=0.04$), respectively.

Conclusions Several different APOs occur in the majority of SLE-patients, in particular in those with renal involvement, APS and presence of anti-phospholipid antibodies.

P83 A PRE-PREGNANCY COUNSELLING PATHWAY FOR WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND/OR ANTIPHOSPHOLIPID SYNDROME: THE EFFECT ON MATERNAL AND FETAL PREGNANCY COMPLICATIONS AND THE COURSE OF DISEASE – A RETROSPECTIVE COHORT STUDY

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Background Women with systemic lupus erythematosus (SLE) and/or antiphospholipid syndrome (APS) are at higher risk of complications and SLE flares during pregnancy and are therefore referred to as 'high risk pregnancies'. To provide optimal patient care, a multidisciplinary pre-pregnancy counselling approach is recommended. We examined the effect of such a multidisciplinary pre-pregnancy counselling pathway that is specifically designed for SLE and/or APS patients on the maternal and fetal pregnancy complications and on the course of SLE and APS disease.

Methods We performed a retrospective cohort study on records in the Leiden University Medical Center (LUMC), a tertiary referral hospital in the Netherlands. We compared a cohort of SLE and/or APS pregnancies enrolled in the pre-pregnancy counselling pathway (2014–2018) with a historical cohort of SLE and/or APS pregnancies that were not enrolled in the pathway (2008–2014).

Results This study was done on 34 pregnancies in the pathway cohort and 71 in the cohort. The pathway cohort had more severe SLE disease than the historical cohort. SLE flares developed in 18 (32%) of all SLE pregnancies, whereas the risk on a flare was significantly ($p=0.042$) lower in the pathway cohort ($n=1,8\%$) than in historical cohort ($n=17,40\%$). The incidence of maternal and fetal pregnancy complications were not different between the pathway and the historical cohort.

Conclusions This study showed the positive effect of a multidisciplinary pathway for SLE and/or APS patients on a significant reduction in SLE flares. Although, overall, the patients that were enrolled in the pathway suffered from more severe SLE disease than the historical cohort, the incidence of maternal and fetal complications were similar in both groups. We believe that, women with SLE and/or APS would benefit from pre-pregnancy referral to a hospital with a multidisciplinary approach towards pre-pregnancy counselling and pregnancy follow up.

P84 LUPUS AND PREGNANCY IN URUGUAY: SUCCESSFUL OUTCOMES IN AN INTEGRATED CARE UNIT

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Background/Purpose Most reports show an increased Systemic Lupus Erythematosus (SLE) activity during pregnancy and worse maternal-fetal outcomes than those of the general population. The objective of this work is to describe pregnancy outcomes of Uruguayan women with SLE.

Materials and Methods We performed a prospective study of a SLE pregnant cohort. All patients were evaluated and followed with the same clinical protocol in a multidisciplinary care unit (internal medicine, gynecology, hematology, nephrology) from January 2008 to December 2018. Clinical and laboratory data were collected in a preformed clinical record registry.

Results Seventy pregnancy (67-women) with a medium age of 26 (16–41) years old were included. Before pregnancy SLE involvement was: cutaneous (75%), joint (65%), hematological (41%) and renal (40%) (Type -WHO- I:2/II:9/III:3/IV:5/V:9). Eleven patients had carried out a preconception counselling. Median time between SLE onset and pregnancy was 6 (1–25) years. At the beginning of the follow-up, disease was active in 15,7% and status of antibodies was: persistently positive antiphospholipid: 32.8%, anti-SSA/Ro: 24%, anti-SSB/La: 10%. Mycophenolate, enalapril and warfarin treatment was suspended at the first visit. During pregnancy treatment included: corticosteroids (63%), azathioprine (43%), hydroxychloroquine (97%), low-molecular-weight-heparin (48%) and low-dose aspirin (74%). Thirty-two patients had SLE-flare and 19 (27%) preeclampsia. Preterm delivery (PD) was 42.9%. SLE-flare during pregnancy was associated with PD ($p=0.00$) and preeclampsia ($p=0.04$). Lupus nephritis (regardless of activity) was associated with PD ($p=0.00$) and preeclampsia ($p=0.03$). Forty-five women had a cesarean section and 37% of them were admitted with preterm labor. Median gestational age at birth was 37 ± 5 weeks and median birth weight was 2770 (710–4315) gr. There were two fetal deaths, two abortions and no maternal deaths.

Conclusion We present the first report of pregnancy outcomes of lupus patients in Uruguay. We highlight the low rate of complications, fetal and maternal death. It is possible that close, protocolized and multidisciplinary follow-up have a positive influence in these good results.

P85

THE IRF5 (RS729302) POLYMORPHISM IS A GENETIC RISK FACTOR FOR SYSTEMIC LUPUS ERYTHEMATOSUS IN ALGERIAN PATIENTS

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Background Interferon regulatory factor 5 (IRF5) is a transcription factor regulating interferon secretion and was proved to be implicated in the pathogenesis of systemic lupus erythematosus (SLE) in several studies.

The purpose of this case-control study was to investigate whether IRF5 gene polymorphism is involved in the genetic predisposition to SLE in the Algerian population.

Methods IRF5 rs729302 (A/C) polymorphism was analyzed in 120 SLE patients and 98 age and sex matched controls by real time-polymerase chain reaction.

Results Significant association was observed for AA and AC genotypes of IRF5 between patients and healthy subjects (60% vs 73%; 40% vs 27%, $p=0.025$, respectively).

Patients with SLE had more frequent C allele compared to controls (20% vs 13%, $P=0.041$).

However, the allele and genotype frequencies did not show any difference in patients with nephritis in comparison to those without nephritis.

Conclusion The rs729302 C allele and AC genotype can be considered as risk factors for the development of SLE in Algerian patients.

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THE NCF1-339 POLYMORPHISM IS ASSOCIATED WITH ALTERED FORMATION OF NEUTROPHIL EXTRACELLULAR TRAPS, HIGH SERUM INTERFERON ACTIVITY AND ANTIPHOSPHOLIPID SYNDROME IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background A single nucleotide polymorphism in NCF1 (NCF1-339, rs201802880), encoding NADPH oxidase complex 2 subunit p47^{phox}, reducing production of reactive oxygen species (ROS) is highly associated with development of systemic lupus erythematosus (SLE). However, the effect of NCF1-339 genotype on SLE regarding pathogenetic processes or comorbidities has not been investigated.

Methods NCF1-339 genotyped SLE subjects from four Swedish university hospitals were investigated regarding neutrophil ROS production ($n=31$), neutrophil extracellular traps (NETs) ($n=31$), serum interferon ($n=141$), autoantibody profiles ($n=305$) and clinical phenotypes ($n=1087$).

Results Compared to SLE patients with normal-ROS NCF1-339 genotypes, neutrophils from patients with low-ROS genotypes displayed impaired NET-formation and increased dependence on mitochondrial ROS for canonical NET-release. An increased frequency of low-ROS patients had high serum interferon activity. Patients with low-ROS genotypes had an increased frequency of positivity for antiphospholipid antibodies anti- $\beta 2$ glycoprotein I and anti-cardiolipin, related to the severe comorbidity antiphospholipid syndrome (APS). No other autoantibodies investigated were associated with NCF1-339 genotype. Clinical characterization revealed a strong association between NCF1-339 low-ROS genotypes and secondary APS.

Conclusions NCF1-339 genotype affects neutrophil functions of ROS production, NET formation and dependence on mitochondrial ROS. SLE subjects with low-ROS NCF1-339 genotypes are associated with high serum interferon, presence of antiphospholipid antibodies and secondary APS.

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