

LSO-085 NATIONWIDE PATTERNS AND FACTORS ASSOCIATED WITH ADVERSE PREGNANCY OUTCOMES IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background Systemic Lupus Erythematosus (SLE) is predominant in women of childbearing age. Careful family planning is required because SLE disease activity and SLE therapy affect the risk of adverse pregnancy outcomes (APOs). This study investigates prevalence and risk factors of APOs (Pre-term birth (PB), pre-eclampsia/eclampsia).

Methods We conducted a cohort study of pregnancies in women with SLE using the National Health Insurance Service (NHIS) database of Korea (2002–2018). SLE was defined as having both ICD-10 codes (M32.0) and rare intractable disease registration codes (V136). Pregnancies from 2005 to 2017 of women aged 15–49 with SLE-related visits at least a year before the Last Menstrual Period (LMP) were included. Logistic regression models for APOs were conducted, including age, SLE-related clinical characteristics before pregnancy (SLE treatments during 3 months before LMP, number of SLE-related outpatient visits or hospitalization), use of immunosuppressants (mycophenolate mofetil (MMF)/methotrexate (MTX)/cyclophosphamide (CYC)) during pregnancy, comorbidities, parity, and obstetric complications.

Results In 5,044 total pregnancies, mean age was 32.4 years (standard deviation 4.3). PB and pre-eclampsia/eclampsia were 11.0% and 4.3%, respectively. Only 42.3% were prescribed hydroxychloroquine (HCQ) during pregnancy, and 2.8% were prescribed MMF/MTX/CYC during 1st trimester. PB was associated with more than 10 SLE-related visits (Adjusted Odds Ratio [AOR] 2.15, 95% Confidence Interval [CI] 1.64–2.81) in previous year and pre-eclampsia/eclampsia (AOR 2.02, 95% CI 1.42–2.85). The risk of pre-eclampsia/eclampsia was associated with MMF/MTX/CYC use during the first trimester (AOR 3.55, 95%CI 1.32–9.57), hypertension (AOR 2.70, 95%

CI 1.93–3.77), and steroids use during 3 months before LMP (≥ 7.5 mg AOR 1.89, 95%CI 1.28–2.79 vs. 0mg).

Conclusions The limited use of HCQ during pregnancy was observed in study period. PB was associated with higher number of SLE visits before pregnancy and pre-eclampsia/eclampsia. Pre-eclampsia/eclampsia was associated with MMF/MTX/CYC use during the first trimester, hypertension, and steroid use, reflecting the effects of maternal comorbidities and SLE disease activity.

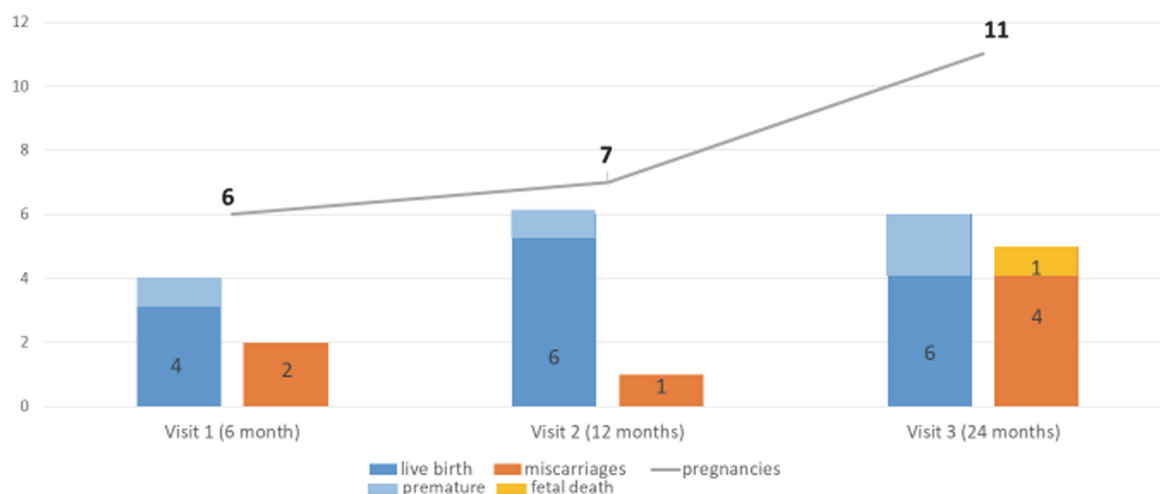
LSO-086 PREGNANCY OUTCOMES IN SYSTEMIC LUPUS ERYTHEMATOSUS: DATA FROM A MULTIETHNIC, MULTINATIONAL LATIN AMERICAN COHORT

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Background Obstetric morbidity (OM) is higher in Systemic Lupus Erythematosus (SLE) women than in healthy ones. Few data on SLE pregnancy outcomes in Latin America (LA) have been reported. The aim of this study was to assess SLE pregnancy outcomes in LA.

Methods GLADEL 2.0 is an observational prevalent/incident cohort started in 2019.¹ To date, 43 centers from 10 LA countries have enrolled 1030 SLE patients, ≥ 18 years, 1982/1997 ACR or SLICC criteria. Women with at least one pregnancy were included. Past and ongoing (6, 12, 24 months



Abstract LSO-086 Figure 1 Pregnancy outcome during 2-year follow-up (6, 12 and 24 months)

Abstract LSO-086 Table 1 Sociodemographic, clinical and treatment characteristics among SLE women with at least one pregnancy at cohort inclusion related to obstetric morbidity

VARIABLES ¹	OBSTETRIC MORBIDITY		p value ³	VARIABLES	OBSTETRIC MORBIDITY		p value ³
	No (n=146)	Yes ² (n=183)			SLE background	No (n=146)	
Sociodemographic/comorbidities				SLE background			
Age (years)	41 (34-47)	39 (31.5-50)	0.542	Disease duration (months)	76 (28-153)	100 (36.5-162.5)	0.136
Education (years)	12 (10.2-15)	12 (10-15)	0.664	Antiphospholipid syndrome	3/30 (10%)	24/46 (52.2%)	0.001
Ethnicity			0.299	Laboratory features			
Afro-Latin American	14/146 (9.6%)	8/183 (4.4%)		Anti-dsDNA antibodies	107/134 (79.9%)	139/172 (80.8%)	0.885
White	30/146 (20.5%)	42/183 (23.0%)		Anti-Ro antibodies	51/109 (46.8%)	57/135 (42.2%)	0.518
Amerindian	3/146 (2.1%)	4/183 (2.2%)		Anti-La antibodies	20/107 (18.7%)	18/132 (13.6%)	0.293
Mestizo	99/146 (67.8%)	129/183 (70.5%)		C3 and/or C4, low	117/141 (83.0%)	147/174 (84.5%)	0.760
Socioeconomic level			0.184	Lupus anticoagulant	17/92 (18.5%)	34/121 (28.1%)	0.109
High	29/143 (20.3%)	41/181 (22.7%)		aCL ⁴ IgG	21/101 (20.8%)	34/129 (26.4%)	0.353
Medium	42/143 (29.4%)	67/181 (37.0%)		aCL ⁴ IgM	15/101 (14.9%)	33/130 (25.4%)	0.071
Low	72/143 (50.3%)	73/181 (40.3%)		Anti-β2GPI ⁵ IgG	11/79 (13.9%)	15/95 (15.8%)	0.832
Medical coverage			0.260	Anti-β2GPI ⁵ IgM	10/79 (12.7%)	15/95 (15.8%)	0.666
Complete/partial	94/141 (66.7%)	133/182 (73.1%)		Treatment			
No Coverage	47/141 (33.3%)	49/182 (26.9%)		Corticosteroids	143/146 (97.9%)	176/181 (97.2%)	0.736
Hypertension	47/83 (56.6%)	73/110 (66.4%)	0.180	Antimalarials	141/146 (96.6%)	177/181 (97.8%)	0.520
Diabetes mellitus	9/83 (10.8%)	6/110 (5.5%)	0.184	Immunosuppressors	118/146 (80.8%)	152/179 (84.9%)	0.373
Dyslipidemia	23/78 (29.5%)	31/109 (28.4%)	0.872	Aspirin	30/42 (71.4%)	53/65 (81.5%)	0.243
Smoking	22/50 (44.0%)	34/58 (58.6%)	0.176	Anticoagulation	18/42 (42.9%)	33/66 (50.0%)	0.554

¹Numeric variables: medians (interquartile ranges); categorical variables: frequencies (percentages) were compared using Kruskal-Wallis, Chi-square or Fisher tests as appropriate.

²Obstetric morbidity: pregnancy with any maternal-fetal morbidity (miscarriages, fetal deaths, pre-eclampsia, prematurity, neonatal lupus); ³statistical significance: p < 0.05; ⁴anti-cardiolipin antibodies; ⁵beta-2 glycoprotein I antibodies.

follow-up) OM (miscarriages, fetal deaths, pre-eclampsia, prematurity, neonatal lupus) were evaluated.

Results At inclusion, 329 women have had at least one pregnancy [median (IQR): 2 (1–3)]; table 1. Of them, 293 (89.1%) had ≥1 live birth and 183 (55.6%) developed OM. Pre-eclampsia occurred in 49 (14.9%). Among 71 (21.6%) women with anti-SS-A(Ro)/SS-B(La) antibodies, 3 (4.2%) developed neonatal lupus (without cardiac involvement). Anti-phospholipid syndrome (APS) was associated with a higher risk of pregnancy complications (52.2% vs 10.0%; p < 0.001). Of the 755 pregnancies reported, 551 (73.0%) resulted in live births, of which 79 (14.3%) were premature. The remaining pregnancies ended in 178 (23.6%) miscarriages and 41 (5.4%) fetal deaths. During 2-follow-up years (figure 1), 24 single pregnancies occurred. All occurred under antimalarials; 16 (66.7%) resulted in live births, 4 (25.0%) premature; 12 (50.0%) developed OM. There were seven (29.2%) miscarriages and one fetal loss (4.2%) related to severe pre-eclampsia. One cholestasis gravidarum (4.2%) lead to prematurity. New cases of neonatal lupus were not reported.

Conclusions In GLADEL 2.0 cohort, around half of the women studied presented OM, being frequently related to APS. Miscarriages, prematurity, pre-eclampsia, and fetal deaths were the most common fetal-maternal complications. The incidence of neonatal lupus was lower than previously reported (16%).²

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Short oral presentation session 16: SLE treatment 2

LSO-087 SUB-OPTIMAL USE OF ANTI-MALARIAL THERAPY FOR SLE IN THE ASIA PACIFIC REGION; OBSERVATIONS FROM THE ASIA PACIFIC LUPUS COHORT

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