

recommends its management in specialized pregnancy clinics. Our aim is to report the 10-year experience of a pregnancy clinic in a tertiary center in Spain.

Methods Retrospective study of patients with SLE followed up in a specialized pregnancy clinic at a tertiary center in Madrid, Spain, who attended the clinic from December 2012 to January 2023. Categorical variables were described as proportions and/or percentages, while continuous variables were shown as mean and standard deviation (SD) or median and interquartile range (IQR) when appropriate.

Results 56 cases of pregnancy counselling's in 38 patients with SLE were included. The main characteristics are reported in table 1. Preconception consultation was performed in 57.1% (32/56) of the cases since 42.9% (24/56) were already pregnant in the 1st visit; 58.3% (14/24) of pregnant patients were referred from services other than Rheumatology. Before 1st visit, only 48.2% (27/56) of SLE patients had been treated with hydroxychloroquine (HCQ) and 33.3% (5/15) of patients treated with corticosteroids had doses \geq 10 mg/day. At the first visit, treatment adjustment was recommended to 46.9% (15/32) of patients being the introduction of HCQ was the most frequent. The pregnancy rate was 80.4% (45/56) and 6 (13.3%) ended in spontaneous abortion. 80% (36/45) pregnancies ended with a live birth, 6/36 (16.7%) flared. During pregnancy the use of corticosteroids continued to be around 33.3% (n=12/36), median dose 6.9 mg/day (IQR 3.1–10.0). The most frequent delivery was eutocic 27/36 (75%) at a median of 39.2 GW (IQR 37.6–40.1). An adverse pregnancy outcome occurred in 44.4% (n=16/36) of the pregnancies, being gestational diabetes and premature rupture of membranes the most frequent ones. Preeclampsia was found in 5.6% (n=2/36) of the pregnancies and 12.1% (n=4/36) of the neonates had low birth weight.

Conclusions Besides high rates of pregnancy at 1st visit there was a low rate of flares and adverse outcomes. Pregnancy planning should be carried out to minimize the risk of adverse

events during pregnancy. It is advisable to closely monitor pregnancies in patients with SLE in specialized clinics.

P141 EFFECT OF REMISSION, CLINICAL REMISSION WITH ACTIVE SEROLOGY, AND GLUCOCORTICOID DOSAGE ON THE PREGNANCY OUTCOME OF PREGNANT PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background Remission is a key treatment target in systemic lupus erythematosus (SLE) management. Given the direct correlation between lupus flares and elevated risks of adverse pregnancy outcomes (APOs), securing remission before conception becomes crucial. However, the association between clinical remission with active serology, and the risk of APOs is not thoroughly understood. Additionally, determining the optimal glucocorticoid dosage during pregnancy to mitigate APO risks remains under-researched. This study investigated the risk of APOs in relation to remission/serological activity status in patients in clinical remission/glucocorticoid dosage.

Methods Pregnant patients with SLE, who were followed up at two Japanese tertiary referral centers, and had their remission status assessed at conception, were included in this study. We categorized the patients into two groups based on whether they achieved Zen/Doria remission at conception and analyzed

Abstract P141 Table 1 Adverse pregnancy outcome ratio according to the achievement of remission at conception

Factor	Zen/Doria remission		p-value	Logistic regression model (univariate analysis)			Logistic regression model (multivariate analysis)		
	no remission	remission		OR	95%CI	P value	aOR	95% CI	P value
N	37	59							
Overall APO (%)	26 (70.3)	23 (39.0)	<0.01	0.27	0.11–0.65	<0.01	0.28	0.11–0.70	<0.01
Maternal APO (%)	15 (40.5)	11 (18.6)	0.032	0.34	0.13–0.85	0.021	0.33	0.12–0.90	0.030
Neonatal APO (%)	23 (62.2)	23 (39.0)	0.036	0.39	0.17–0.90	0.028	0.37	0.15–0.90	0.029
PROMISSE APO (%)	10 (27.0)	12 (20.3)	0.47	0.69	0.26–1.81	0.45	0.64	0.23–1.76	0.38
Flare during pregnancy (%)	8 (21.6)	2 (3.4)	0.012	0.13	0.03–0.64	0.012			
Flare after delivery (%)	2 (6.7)	1 (1.9)	0.29	0.26	0.23–3.04	0.29			
Gestational DM (%)	6 (16.2)	4 (6.8)	0.18	0.38	0.10–1.43	0.15			
Preeclampsia (%)	3 (8.1)	3 (5.1)	0.67	0.61	0.12–3.18	0.56			
Hypertensive disorders in pregnancy (%)	7 (18.9)	6 (10.2)	0.24	0.49	0.15–1.58	0.23			
HELLP syndrome (%)	1 (2.7)	1 (1.7)	1.0	0.62	0.04–10.2	0.74			
Oligohydramnios (%)	6 (16.2)	2 (3.4)	0.053	0.19	0.04–0.97	0.046			
Maternal death (%)	0 (0.0)	0 (0.0)	NA	NA	NA	NA			
Live birth (%)※	29 (78.4)	54 (91.5)	0.12	2.98	0.89–9.94	0.76			
Total duration of gestation (days)	262.0 [242.0, 271.0]	268.0 [262.0, 276.0]	0.019	NA	NA	NA			
Preterm birth (%)	6 (18.2)	8 (14.8)	0.77	0.78	0.25–2.5	0.67			
Spontaneous abortion (%)	1 (2.8)	2 (3.4)	1.0	1.25	0.11–14.3	0.86			
Missed abortion (%)	3 (8.1)	1 (1.8)	0.30	0.20	0.02–2.02	0.17			
Iatrogenic abortion (%)	5 (13.5)	2 (3.4)	0.10	0.23	0.04–1.22	0.084			
Still birth (%)	0 (0.0)	0 (0.0)	NA	NA	NA	NA			

Height at birth (cm)	46.0 [43.8, 48.0]	48.0 [46.5, 49.5]	<0.01	NA	NA	NA
Weight at birth (g)	2472.0 [2202.0, 2896.0]	2716.0 [2476.5, 3013.8]	0.025	NA	NA	NA
Low birth weight (%)	15 (51.7)	15 (27.8)	0.054	0.36	0.14–0.92	0.033
SGA (%)	6 (20.7)	8 (14.8)	0.55	0.67	0.21–2.15	0.50
Apgar score (1m)	8.00 [8.00, 8.00]	8.00 [8.00, 8.00]	0.53	NA	NA	NA
Apgar Score (5m)	9.00 [9.00, 9.00]	9.00 [9.00, 9.00]	0.55	NA	NA	NA
Apgar.score.1m>7 (%)	27 (93.1)	53 (98.1)	0.28	3.93	0.34–45.3	0.27
Apgar.score.5m>7 (%)	29 (100.0)	54 (100.0)	1.0	NA	NA	NA
Major malformation	1 (3.4)	1 (1.9)	1.0	0.53	0.32–8.80	0.66
Death of neonate	0 (0.0)	0 (0.0)	NA	NA	NA	NA

※multivariate analysis adjusted for renal manifestation, hydroxychloroquine prescription, and aspirin prescription at conception. APO; adverse pregnancy outcome, DM; diabetes mellitus, NA; not applicable, OR; odds ratio, PROMISSE; Predictors of Pregnancy Outcome: Biomarkers in Antiphospholipid Antibody Syndrome and Systemic Lupus Erythematosus, SGA; small for gestational age

Abstract P141 Table 2 APO ratio in pregnant patients in clinical remission at conception based on the serological activity

Factor	pregnant in clinical remission at conception		Logistic regression model			
	clinical remission with active serology	clinical and serological remission	p-value	OR	95% CI	p-value
N	35	24				
Overall APO (%)	12 (34.3)	11 (45.8)	0.42	0.62	0.21–1.79	0.37
Maternal APO (%)	7 (20.0)	4 (16.7)	1.00	1.25	0.32–4.85	0.75
Neonatal APO (%)	13 (37.1)	10 (41.7)	0.79	0.83	0.29–2.39	0.73
PROMISSE APO (%)	6 (17.1)	6 (25.0)	0.52	0.62	0.17–2.22	0.46
Flare during pregnancy (%)	2 (5.7)	0 (0.0)	0.51	NA	NA	NA
Flare after delivery (%)	1 (3.1)	0 (0.0)	1.0	NA	NA	NA
Gestational DM (%)	3 (8.6)	1 (4.2)	0.64	2.16	0.21–22.1	0.52
Preeclampsia (%)	3 (8.6)	0 (0.0)	0.26	NA	NA	NA
Hypertensive disorders in pregnancy (%)	3 (8.6)	3 (12.5)	0.68	0.66	0.12–3.56	0.63
HELLP syndrome (%)	1 (2.9)	0 (0.0)	1.00	NA	NA	NA
Oligohydramnios (%)	1 (2.9)	1 (4.3)	1.00	0.65	0.04–10.9	0.76
Maternal death (%)	0 (0.0)	0 (0.0)	NA	NA	NA	NA
Live birth (%)	32 (91.4)	22 (91.7)	1.00	0.97	0.15–6.30	0.97
Total duration of gestation (days)	270.00 [263.50, 276.00]	267.50 [260.00, 273.75]	0.53	NA	NA	NA
Preterm birth (%)	4 (12.5)	4 (18.2)	0.70	0.64	0.14–2.90	0.57
Spontaneous abortion (%)	2 (5.7)	0 (0.0)	0.51	NA	NA	NA
Missed abortion (%)	0 (0.0)	1 (4.3)	0.40	NA	NA	NA
Iatrogenic abortion (%)	1 (2.9)	1 (4.2)	1.00	0.68	0.04–11.4	0.79
Still birth (%)	0 (0.0)	0 (0.0)	NA	NA	NA	NA
Height at birth (cm)	48.00 [46.08, 49.10]	48.00 [47.00, 49.50]	0.64	NA	NA	NA
Weight at birth (g)	2716.00 [2539.50, 2935.00]	2776.00 [2419.00, 3062.00]	0.82	NA	NA	NA
Low birth weight (%)	7 (21.9)	8 (36.4)	0.36	0.49	0.16–1.64	0.25
SGA (%)	4 (12.5)	4 (18.2)	0.70	0.64	0.14–2.9	0.57
Apgar score (1m)	8.00 [8.00, 8.00]	8.00 [7.25, 8.00]	0.02	NA	NA	NA
Apgar Score (5m)	9.00 [9.00, 9.00]	9.00 [9.00, 9.00]	0.39	NA	NA	NA
Apgar.score.1m>7 (%)	31 (96.9)	22 (100.0)	1.00	NA	NA	NA
Apgar.score.5m>7 (%)	32 (100.0)	22 (100.0)	1.00	NA	NA	NA
Major malformation (%)	1 (3.1)	0 (0.0)	1.00	NA	NA	NA
Death of neonate (%)	0 (0.0)	0 (0.0)	NA	NA	NA	NA

APO; adverse pregnancy outcome, DM; diabetes mellitus, NA; not applicable, OR; odds ratio, PROMISSE; Predictors of Pregnancy Outcome: Biomarkers in Antiphospholipid Antibody Syndrome and Systemic Lupus Erythematosus, SGA; small for gestational age

Abstract P141 Table 3 Glucocorticoid dosage (prednisolone equivalent) >7.5 mg/day at conception and risk of APO

Factor	Glucocorticoid dosage at conception		p-value	Logistic regression model Univariate analysis			Logistic regression model multivariate analysis		
	PSL<7.5 mg/day	PSL≥7.5 mg/day		OR	95%CI	P value	aOR	95%CI	P value
n	64	32							
overall APO (%)	27 (42.2)	22 (68.8)	0.018	3.01	1.23–7.39	0.016	3.11	1.20–8.04	0.019
Maternal APO (%)	14 (21.9)	12 (37.5)	0.14	2.14	0.85–5.43	0.11	2.78	0.98–7.88	0.055
Neonatal APO (%)	25 (39.1)	21 (65.6)	0.018	2.98	1.23–7.22	0.016	2.91	1.14–7.38	0.025
PROMISSE APO (%)	13 (20.3)	9 (28.1)	0.44	1.54	0.58–4.10	0.39	1.59	0.56–4.50	0.38
Flare during pregnancy (%)	2 (3.1)	8 (25.0)	<0.01	10.3	2.05–42.2	<0.01			
Flare after delivery (%)	1 (1.7)	2 (8.0)	0.21	5.04	0.44–58.3	0.20			
Gestational DM (%)	5 (7.8)	5 (15.6)	0.29	2.19	0.58–8.19	0.25			
Preeclampsia (%)	4 (6.2)	2 (6.2)	1.00	1.0	0.17–5.77	1.00			
Hypertensive disorders in pregnancy (%)	8 (12.5)	5 (15.6)	0.76	1.3	0.39–4.34	0.67			
HELLP syndrome (%)	1 (1.6)	1 (3.1)	1.00	2.03	0.12–33.6	0.62			
Oligohydramnios (%)	2 (3.2)	6 (18.8)	0.016	7.04	1.33–37.2	0.022			
Live birth (%)	59 (92.2)	24 (75.0)	0.028	0.25	0.08–0.86	0.027			
Total duration of gestation (days)	268.0 [262.0, 276.0]	261.00 [234.8, 269.5]	0.010	NA	NA	NA			
Preterm birth (%)	9 (15.3)	5 (17.9)	0.76	1.21	0.36–1.0	0.76			
Spontaneous abortion (%)	2 (3.2)	1 (3.2)	1.00	1.02	0.09–11.7	1.00			
Missed abortion (%)	1 (1.6)	3 (9.4)	0.11	6.31	0.63–63.3	0.12			
Iatrogenic abortion (%)	2 (3.1)	5 (15.6)	0.039	5.74	1.05–31.5	0.044			
Still birth (%)	0 (0.0)	0 (0.0)	NA	NA	NA	NA			
Height at birth (cm)	47.9 [46.2, 49.4]	46.2 [44.1, 48.1]	0.025	NA	NA	NA			
Weight at birth (g)	2732.0 [2461.0, 3014.5]	2421.0 [2168.0, 2825.8]	0.014	NA	NA	NA			
Low birth weight (%)	17 (28.8)	13 (54.2)	0.043	2.92	1.09–7.79	0.032			
SGA (%)	8 (13.6)	6 (25.0)	0.22	2.13	0.65–6.96	0.21			
Apgar score (1m)	8.00 [8.00, 8.00]	8.00 [8.00, 8.25]	0.11	NA	NA	NA			
Apgar Score (5 m)	9.00 [9.00, 9.00]	9.00 [9.00, 9.00]	0.63	NA	NA	NA			
Apgar.score.1m>7 (%)	57 (96.6)	23 (95.8)	1.00	0.81	0.07–9.34	0.86			
Apgar.score.5m>7 (%)	59 (100.0)	24 (100.0)	NA	NA	NA	NA			
Major malformation (%)	2 (3.4)	0 (0.0)	1.00	NA	NA	NA			
Death of neonate	0 (0.0)	0 (0.0)	NA	NA	NA	NA			

※multivariate analysis adjusted for renal manifestation, hydroxychloroquine prescription, and aspirin prescription at conception. APO: adverse pregnancy outcome, DM: diabetes mellitus, NA: not applicable, OR: odds ratio, PROMISSE: Predictors of Pregnancy Outcome: Biomarkers in Antiphospholipid Antibody Syndrome and Systemic Lupus Erythematosus, SGA: small for gestational age

the APO ratio. We also examined the influence of serological activity in pregnant patients with clinical remission and analyzed the optimal glucocorticoid dosage to minimize the APO ratio.

Results Of the 96 pregnancies included, 59 achieved remission at conception. Pregnant patients who achieved remission showed a significant decrease in the APO ratio compared with those who did not. (overall APO: odds ratio (OR) 0.27, 95% confidence interval (CI) 0.11–0.65, $p < 0.01$, maternal APO: OR 0.34, 95%CI 0.13–0.85, $p = 0.021$, neonatal APO: OR 0.39, 95%CI 0.17–0.90, $p = 0.028$, table 1). Conversely, no statistical difference was observed in the APO ratio based on serological activity in pregnant patients with clinical remission. (overall APO: OR 0.62, 95%CI 0.21–1.79, $p = 0.37$, maternal APO: OR 1.25, 95%CI 0.32–4.85, $p = 0.75$, neonatal APO: OR 0.83, 95%CI 0.29–2.39, $p = 0.73$, table 2). A glucocorticoid dose of prednisolone equivalent ≥ 7.5 mg/day at conception correlated with increased APO. (overall APO: OR 3.01, 95%CI 1.23–7.39, $p = 0.016$, neonatal APO: OR 2.98, 95%CI:1.23–7.22, $p = 0.016$, table 3).

Conclusions Even with active serology, achieving clinical remission can be a clinical target for reducing APOs in patients who wish to conceive. In addition, if clinically feasible, reducing the glucocorticoid dosage to < 7.5 mg/day before conception could be another treatment target.

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A RETROSPECTIVE ANALYSIS OF THE SAFETY OF TACROLIMUS USE AND ITS OPTIMAL CUT-OFF CONCENTRATION DURING PREGNANCY IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS: STUDY FROM TWO JAPANESE TERTIARY REFERRAL CENTERS

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Background Tacrolimus is one of the major treatment options for systemic lupus erythematosus (SLE) and considered pregnancy-compatible medication. Since little is known about tacrolimus safety during pregnancy complicated by SLE, this study was designed.

Methods We included SLE pregnant patients who were followed up at two Japanese tertiary referral centers. We performed multivariate logistic regression analysis to assess each adverse pregnancy outcome (APO) risk. Moreover, we assessed the influence of tacrolimus on the APO ratio in pregnant with