Abstract PS4:79 Table 1 Autoimmune/inflammatory diseases and neurophychiatric disorders in 320 children, distributed according to maternal diagnosis and timing of pregnancy. CA: chronic arthriitis; CTD: connective tissue diseases; SGA: small for Gestational Age. LD: learning disabilities (LD)

	Children born to women with CA (n=113)	Children born to women with CTDs (n=207)
LEARNING DISABILITIES AND NEURODEVELOPMENTAL DISORDERS n=11/320 (3.4%)		
Born BEFORE maternal diagnosis	1/84 (1.2%) 1 "slow learner" (a SGA female)	5/144 (3.5%) 3 LD 1 Attention Deficit Hyperactivity Disorder 1 Autism Spectrum Disorder
Born AFTER maternal diagnosis	0/29 (0%)	5/63 (7.9%) 3 LD 1 Attention Deficit Hyperactivity Disorder 1 Attention Deficit Hyperactivity Disorder + LD
AUTOIMMUNE/INFLAMMATORY DISEASES n=12/320 (3.7%)		
Born BEFORE maternal diagnosis	3/84 (3.6%) 1 Juvenile Rheumatoid Arthritis 1 Diabetes Mellitus type 1 1 Coeliac Disease	4/144 (2.8%) 1 Chronic Autoimmune Thyroiditis 3 Coeliac Disease
Born AFTER maternal diagnosis	1/29 (3.4%) 1 Coeliac Disease	4/63 (6.3%) 1 Fever of Unknown Origin 3 Coeliac Disease

questions) to consecutive patients (aged 18–55) during September 2015. Data were analysed dividing children upon maternal diagnosis: Chronic Arthritides (CA) and Connective Tissue Diseases (CTD).

Results Data were collected for 320 children born to 184 mothers (63 CA and 121 CTD). At the time of interview, children had a mean age of 17.1±9.6 years. Pre-term delivery (<37 w) was observed in 72 cases (22.5%), including 13 (4%) cases born <34 w.

The occurrence of an autoimmune/inflammatory disease (AIID) and/or neurodevelopmental disorders (ND)/learning disabilities (LD) is reported in table 1.

Twelve children (3.7%) were diagnosed with an AIID, mostly coeliac disease (8/12, 67%). Eleven children (3.4%) were diagnosed as having a ND and/or LD by a Paediatric Neuropsychiatrist. Data of in utero exposure to maternal autoantibodies and/or anti-rheumatic drugs were retrieved for 280 children (87.5%) and a comparison was performed between affected (n=11) and not-affected children (n=258). No association was found with ND/LD and in utero exposure to autoantibodies (ANA, anti-Ro, anti-dsDNA, aPL) or drugs (HCQ, AZA or steroids), neither with sex, preterm birth, birth weight or maternal diagnosis.

Conclusions The long-term follow-up of children born to mothers with RD did not raise particular concerns in terms of relevant health problems. In particular, each AIID did not display a significantly increased frequency as compared to the literature. Children with ND/LD had a tendency to cluster in the group of mothers with CTD, especially after maternal diagnosis, with a higher frequency as compared to GPP (7.9% vs 3%).

Our data suggest that the development of ND/LD in children of patients with RD cannot be linked exclusively to maternal disease. The results of this study can be reassuring for patients with RD about problems in the offspring possibly related to their disease.

PS4:80 HYDROXYCHLOROQUINE IN LUPUS PREGNANCY: A META-ANALYSIS OF INDIVIDUAL PARTICIPANT DATA

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Abstract PS4:80 Table 1 Pooled odds ratios for the association of hydroxychloroquine use and pregnancy outcomes

	Fetal Loss	Preterm Birth	High Disease Activity	Preeclampsia
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Overall	**0.49 (0.24, 1.00)**	0.92 (0.56, 1.50)	0.68 (0.32, 1.47)	1.18 (0.60, 2.30)
Lupus Nephritis History	**0.24 (0.07, 0.83)**	0.81 (0.35, 1.89)	0.47 (0.21, 1.09)	0.70 (0.24, 2.03)
No Lupus Nephritis History	0.69 (0.31, 1.53)	0.99 (0.54, 1.82)	1.00 (0.39, 2.51)	1.36 (0.57, 3.24)
APS	0.39 (0.10, 1.47)	0.82 (0.23, 2.96)	1.30 (0.16, 10.48)	0.55 (0.12, 2.45)
No APS	0.60 (0.29, 1.21)	0.90 (0.52, 1.55)	0.70 (0.40, 1.22)	1.28 (0.58, 2.84)
High Disease Activity at 1st Visit	0.61 (0.13, 2.89)	1.53 (0.42, 5.62)	--	0.93 (0.12, 7.14)
No High Disease Activity at 1st Visit	0.46 (0.19, 1.11)	0.76 (0.42, 1.37)	0.73 (0.29, 1.87)	1.07 (0.50, 2.31)

Purpose Our current knowledge about how to treat lupus in pregnancy derives from small prospective or retrospective cohorts. The goal of this individual participant meta-analysis was to pool data from multiple prospective cohorts to answer the clinical question of whether hydroxychloroquine (HCQ) treatment affects pregnancy outcomes

Methods The literature was searched for prospective cohorts of pregnancies among women with lupus. HCQ use was defined as use any time during pregnancy. Outcomes of interest included fetal loss, preterm birth, high disease, and preeclampsia. Data from each cohort were collected and analysed individually. Pooled ORs were calculated by random-effect models in Review Manager. Due to multiple pregnancies per patient, one pregnancy was randomly selected per patient. Primary analysis included only women with first trimester visits (6 cohorts). Subgroup analyses were stratified by a history of nephritis, APS, and disease activity at first clinic visit.

Results The current analysis included 591 pregnancies from six cohorts, of which 73% were exposed to HCQ during pregnancy.

Fetal loss: Overall, there was a 51% decrease in the risk of fetal loss among patients taking HCQ during pregnancy (OR: 0.49; 95% CI: 0.24 to 1.00). Among patients with a history of lupus nephritis, taking HCQ during pregnancy reduced the risk of fetal loss by 76% (OR: 0.24; 95% CI: 0.07 to 0.83; table 1).

Preterm birth: There was no evidence that HCQ decreased the risk of preterm birth.

Disease activity: Although not significant, among patients with a history of lupus nephritis, HCQ use during pregnancy may reduce the risk of having high disease activity during pregnancy (OR: 0.47; 95% CI: 0.21 to 1.09).

Preeclampsia: Overall, there was no evidence that HCQ decreased the risk of. Among patients with APS, there may be a protective effect of HCQ, but the precision of the estimate was limited (OR: 0.55; 95% CI: 0.12 to 2.45).

Conclusion Our results suggest that among patients with lupus nephritis, HCQ use may decrease the risk of fetal loss and decrease high disease activity during pregnancy. The heterogeneity of data collection suggests the need for a unified approach to identify larger cohorts of lupus pregnancies.

PS4:81 QUALITY OF LIFE MAY INFLUENCE ON THE ABILITY TO ACHIEVE PREGNANCY IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND WOMEN WITH RHEUMATOID ARTHRITIS

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Objectives To examine possible influence of quality of life domains in women with systemic lupus erythematosus (SLE) and rheumatoid arthritis (RA) not achieving pregnancy.

Methods Data from RevNatus, a Norwegian nationwide observational register of women with rheumatic diseases planning pregnancy was used. We compared women with SLE and RA who did and did not achieve pregnancy during follow-up. Fifty-three women with SLE and 180 women with RA with a pregnancy wish had follow-up until pregnancy and known pregnancy outcome or at least one year if not achieving pregnancy. We assessed quality of life (QoL) using RAND-36. A higher score indicates a better QoL. A change in score of 3–5 points is considered a minimal clinically important difference (MCID).

Results During follow-up 47 (88.7%) SLE- women and 130 (72.2%) RA-women conceived, while 6 (11.3%) SLE-women and 50 (27.8%) RA-women did not. In women with SLE not achieving pregnancy (NAP), a higher frequency were nulliparous, smoked, had active disease or overweight compared to SLE women achieving pregnancy (AP). Women with RA not achieving pregnancy were older and had experienced preeclampsia more often than women with RA achieving pregnancy. Women with SLE not achieving pregnancy compared to SLE-women achieving pregnancy had lower mean QoL-scores