Abstract #: 24

Arielle Mendel, Sasha Bernatsky, SLICC Investigators, Evelyne Vinet.
McGill University, Montreal, Quebec, Canada.

Patterns of aspirin use in SLE pregnancies within a multinational inception cohort

Objective(s): Aspirin reduces the risk of preeclampsia in pregnancies at high risk and is recommended in pregnant women with ≥1 risk factors for preeclampsia, including systemic lupus erythematosus (SLE). Our objective was to assess the prevalence of aspirin use in SLE pregnancies within a multinational inception cohort, and compare aspirin use among those with and without additional preeclampsia risk factors.

Method(s): Premenopausal women aged 18-45 enrolled in the Systemic Lupus International Collaborating Clinics (SLICC) Registry (2000-2017) within 15 months of SLE onset were evaluated with yearly visits to update co-morbidities, pregnancy status, and medications. Study visits with a current pregnancy were assessed for aspirin use and preeclampsia risk factors. Aspirin use was compared over time and among those with and without traditional risk factors (i.e. hypertension, renal disease, diabetes, nulliparity, BMI≥35, age>40), as well as disease-specific risk factors (i.e. antiphospholipid antibodies [+aPL], nephritis).

Result(s): We identified 297 women who had 475 pregnancies over the study period. Mean age during pregnancy was 31 (SD 4.9) years and 30% were nulliparous. Half of the pregnancies (51%) experienced ≥1 traditional preeclampsia risk factors in addition to SLE, while a third (33%) had +aPL. We observed aspirin use in 25% of pregnancies (95%CI 22,29) versus 22% (95%CI 19,25) of visits before and after pregnancy among the same women. Aspirin use was similar among pregnancies with and without ≥1 traditional risk factor for preeclampsia [25% (95%CI 20,31) versus 26% (95%CI 21,32)], while we observed a higher prevalence of aspirin use in those with +aPL [38% (95%CI 24,55)] versus those without [23% (95%CI 15,34)]. There was a significant difference in aspirin use based on maternal race/ethnicity, with 32% (95%CI 26,39) aspirin use in Caucasians versus 10% (95%CI 5,18) for black women. Regional variability was observed in aspirin use in pregnancy (12-37%). Aspirin use in pregnancy did not increase over time.

Conclusion(s): In this cohort including 475 SLE pregnancies, we observed that most women were not on aspirin and that half had preeclampsia risk factors in addition to SLE. It is possible that aspirin was introduced at/or following the study visit when the pregnancy was documented, highlighting the importance of the treating rheumatologist in reviewing aspirin use and initiating it, if not already done, in pregnant SLE women. Our findings suggest black SLE women as a potentially vulnerable group during pregnancy, having the lowest prevalence of aspirin use.