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Maternal bleeding risk at delivery in SLE pregnancies receiving antithrombotic therapy.

SLE pregnancies have substantially higher exposure to antithrombotic therapy than the general population. Guidelines recommend low-dose aspirin (LDA) for all SLE pregnancies to reduce placenta-mediated complications, while those with APS and other thrombophilic conditions require additional prophylactic or therapeutic low molecular weight heparin (LMWH). Although disease-specific factors, such as thrombocytopenia, may increase bleeding risk, data specifically evaluating bleeding outcomes in SLE pregnancies on antithrombotic therapy remain limited. We aimed to evaluate maternal bleeding risk related to delivery in SLE pregnancies receiving antithrombotic therapy, comparing LDA alone with LDA combined with prophylactic or therapeutic LMWH.

The prospective Lupus in prEGnAnCY cohort includes patients enrolled <17 weeks gestation from Systemic Lupus International Collaborating (SLICC) centres in Canada, Peru, Mexico and South Korea. Participants are followed during the second trimester (20-24 weeks), third trimester (30-34 weeks), and postpartum (8-12 weeks). For this analysis, we included pregnancies ≥20 weeks gestation with a completed postpartum visit. The primary outcome was major bleeding requiring transfusion ≤24 hours of delivery. Minor postpartum hemorrhage was defined as estimated blood loss (EBL) between 500-1000 ml, available only for pregnancies delivered at the coordinating site (n=55).

Of 112 SLE pregnancies, 86 (77%) were exposed to LDA alone, 16 (14%) were exposed to LDA+prophylactic LMWH, and 10 (9%) to LDA+therapeutic LMWH. Only one fetal death at ≥20 weeks gestation occurred, in the LDA+therapeutic LMWH group. Mean gestational age at delivery was 38 0/7 weeks in the LDA-only group, 37 4/7 weeks in the LDA+prophylactic LMWH group, and 36 3/7 weeks in the LDA+therapeutic LMWH group. Cesarean delivery occurred in 42/86 (49%) of LDA-only pregnancies, compared with 11/16 (69%) and 6/10 (60%) in the LDA+prophylactic and LDA+therapeutic LMWH groups, respectively. Among pregnancies receiving LDA+prophylactic LMWH, most common indications were positive aPL without APS (8/16) and obstetric APS (3/16). Among those receiving LDA+therapeutic LMWH, 7/10 had thrombotic +/- obstetric APS, 2/10 had prior thrombosis without aPL, and 1/10 had isolated aPL. Transfusion occurred in 2/86 pregnancies (2%, 95%CI 0-8%) exposed to LDA alone, compared with 1/16 (6%, 95%CI 0-30%) exposed to LDA+prophylactic LMWH and 2/10 (20%, 95%CI 3-56%) exposed to LDA+therapeutic LMWH. At the coordinating site, minor postpartum hemorrhage occurred in 17/46 (37%, 95%CI 24-52%) pregnancies receiving LDA alone, 5/6 (83%, 95%CI 36-99%) receiving LDA+prophylactic LMWH, and 1/3 (33%, 95%CI 2-87%) receiving LDA+ therapeutic LMWH.

Compared with LDA alone, SLE pregnancies receiving LDA combined with LMWH showed a trend toward higher unadjusted bleeding risk at delivery. Differences in cesarean delivery rates and other confounders may partly explain these findings. Larger studies are needed to confirm these observations.