

Mid-trimester uterine artery Doppler for aspirin discontinuation

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Objective

To assess whether aspirin treatment can be discontinued in those women at a high risk of preeclampsia (PE) who have a normal uterine artery pulsatility index (UtAPI) at 24 to 28 weeks without increasing the incidence of preterm PE.

Methods

This is a post hoc analysis of the StopPRE trial conducted at nine maternities across Spain between September 2019 and September 2021. In the StopPRE trial, all single pregnancies with a high-risk of PE at the first-trimester screening received treatment with daily aspirin at a dose of 150 mg. Among the eligible women with normal angiogenic markers at 24-28 weeks, 968 were randomly assigned, to either continue aspirin until 36 weeks (control group) or discontinue aspirin treatment (intervention group). That study demonstrated that aspirin discontinuation was non-inferior for preventing preterm PE. In this secondary analysis, women with aUtAPI > 90th percentile were excluded.

Results

A total of 13,983 pregnant women were screened for PE; of the 1,476 eligible women, 836 agreed to participate in the trial and 804 were included in the analysis. Preterm PE occurred in 3 of 409 (0.7%) women in the intervention group and 5 of 395 (1.3%) women in the control group (absolute difference, -0.53; 95% CI, -1.91 to 0.85), indicating the non-inferiority of aspirin discontinuation. The incidence of minor antepartum haemorrhage was significantly lower in the intervention group (absolute difference, -5.59; 95% CI, -9.79 to -1.38).

Conclusion

Discontinuing aspirin treatment at 24 to 28 weeks in women with a UtA PI \leq 90th percentile was non-inferior to continuing aspirin treatment until 36 weeks for preventing preterm PE and other related disorders.