Low dose aspirin prophylaxis in pregnant women with chronic hypertension: More questions than answers

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Dear Editor

We read with interest the recent meta-analysis by Richards et al. published in the journal. The authors conclude that low dose aspirin prophylaxis does not reduce the rates of pre-eclampsia, but improves preterm birth rates in pregnant women with chronic hypertension. While the results are interesting, we would like to highlight certain issues that we feel are relevant and should be discussed in the context of the findings.

Some of the included studies in the review are secondary analyses of larger randomized trials. Limitations of such secondary analyses including a lower dose of aspirin and commencement at later gestation have been well established, which likely impacted the results of this review also.

Another important limitation is the high loss to follow up. This could be because many of the studies included in the review were from developing countries. This is important for two reasons. First, a high loss to follow up raises questions on compliance with medications, i.e., aspirin prophylaxis as well as anti-hypertensive drugs since both would be important in the prevention of superimposed pre-eclampsia. Second, the availability and utilization of health care resources may not be uniform across the various studies; the health of laboring women in developing countries may not be paramount to their families.

Population-based studies have found different rates of pre-eclampsia in women of different ethnicities receiving aspirin prophylaxis. While the authors mention that the review included women from multiple ethnicities, how exactly did it impact the results is not detailed, for e.g., a sub-analysis to determine the effect of aspirin prophylaxis in women from different ethnic background.

Only four studies in this review included women with chronic hypertension and therefore, unlikely to be truly representative of the study population of interest. In
addition, chronic hypertension could be due to both essential hypertension and secondary hypertension, and it is unknown whether both types would respond in a similar manner to aspirin prophylaxis.

The evidence for a decrease in prematurity comes from two studies which is less reassuring.¹ In this regard, a retrospective review by Banala et al. found no evidence of 81 mg aspirin prophylaxis in chronic hypertensive women with singleton pregnancies on either pre-eclampsia prevention or on prematurity rates.⁴ Surprisingly, that study is not included in the present review. Finally, important safety outcomes data such as peripartum haemorrhage, maternal gastro-intestinal and fetal intracranial bleed are not included which may have been of additional value.

References


