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Letter to the Editor

Authors' reply re: Moderately elevated blood pressure during pregnancy and odds of hypertension later in life: The POUCHmoms longitudinal study Potential mechanism for pregnant and non-pregnant hypertension.

Sir,

We thank Wu et al.¹ for their comments on our recent article,² and for hypothesizing a potential biologic mechanism for our finding that even moderately elevated blood pressure during pregnancy increases the odds of hypertension 7-15 years later. We should clarify that our article was not focused on “moderate hypertension” during pregnancy as Wu et al. state, but instead on pregnancy blood pressure values of systolic ≥ 120 mmHg or diastolic ≥ 80 mmHg (e.g., values corresponding to “prehypertension” in the general population) among women without hypertensive disorders.

While we believe their hypothesis could be the basis for further investigation, it may only provide a partial explanation given existing knowledge of the significant vascular adaptations during pregnancy³ and the effects of the placenta on maternal circulation.⁴ We hypothesize that many women with moderately elevated blood pressure during pregnancy are part of a continuum with placental findings similar to those typically observed among women with hypertensive disorders of pregnancy. We are currently investigating this hypothesis.

Careful examination of the hypothesis of Wu and colleagues requires a large cohort of women with repeated measurements of blood pressure before, during and after pregnancy and assessment of concomitant arteriolar injuries. Even then it may be difficult to discern the origins of arteriolar injury.

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