

PUBLISHED ABSTRACT

Should ACOG Reconsider Their Criteria for the Early Diagnosis of Hypertension in Pregnancy?

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Background

In 2017, the American College of Cardiology (ACC) and the American Heart Association (AHA) released new guidelines for the evaluation of high blood pressure (BP). These lowered definitions for hypertension include: normal (<120/80 mmHg), elevated (120–129/<80 mmHg), stage 1 (130–139/80–89 mmHg), and stage 2 hypertension (\geq 140/90). Conversely, ACOG defines chronic hypertension as the presence of systolic BP \geq 140 mmHg or diastolic BP \geq 90 mmHg on \geq 2 occasions before 20 weeks' gestation.

There is limited data on the impact of hypertension as defined by the ACC/AHA in pregnancy. We aim to determine if there is a relationship between elevated or stage 1 hypertension in the first trimester and pregnancy-induced hypertensive disorders (PIH).

Methods

In this IRB approved retrospective cohort study, we examined singleton pregnancies, registered in the first trimester and diagnosed with PIH (gestational hypertension, preeclampsia +/- severe features, and HELLP) at an urban hospital between March and September 2018.

Results

110 patients were included: 61.8% of the study population had elevated (22.7%) or stage 1 (39.1%) hypertension. The mean age was greater in normotensive patients ($p = 0.03$). Otherwise, demographics, gestational age ($p = 0.27$), and timing of delivery ($p = 0.41$) were similar between hypertension groups. Neither the incidence of PIH nor the specific PIH diagnosis were associated with hypertension status in the first trimester ($p = 0.08$).

Conclusions

Our data suggests no association between ACC/AHA hypertension status in the first trimester and PIH. However, over 60% of patients would be classified as early/stage I hypertension. Therefore, further evaluation of the incidence of ACC/AHA hypertension in patients with/without PIH and comparison to ACOG criteria is warranted.

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