

## Hypertensive Disorders of Pregnancy Linked to Later Hypertension

— Postpartum, many patients go undiagnosed

by [Michal Ruprecht](#), Editorial Intern, MedPage Today

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Hypertensive disorders of pregnancy (HDP) were associated with increased risk of hypertension 10 years later, according to a prospective cross-sectional study.

Among patients with a history of HDP, chronic hypertension was seen in 56% compared with 23.5% of those without HDP (adjusted relative risk 2.38, 95% CI 1.40-4.40), reported Lisa Levine, MD, MSCE, of the Hospital of the University of Pennsylvania in Philadelphia, and colleagues.

This risk remained after adjusting for race, maternal age, body mass index, and history of preterm birth (adjusted relative risk 2.40, 95% CI 1.39-4.14), they noted in the

*Journal of the American College of Cardiology.*

These results "highlight the importance of early screening for hypertension in women post-pregnancy complicated by HDP and the importance of initiating antihypertensive treatments to decrease the long-term risk of cardiovascular disease," Levine and team wrote, adding that many patients may not seek care because they are asymptomatic.

"Future studies should evaluate the optimal time period to screen for postpartum hypertension and a monitoring plan for these at-risk women," they concluded.

Of note, among those with a history of HDP, only 39% of patients with either stage 1 or 2 hypertension had a formal diagnosis.

In an [accompanying editorial](#), Josephine Chou, MD, MS, of Yale University School of Medicine in New Haven, Connecticut, emphasized that barriers to care may be related to the high rates of undiagnosed patients.

"Gaps in or loss of health care is another major barrier, particularly for low-income patients -- in states that have not expanded Medicaid, new birthing parents lose coverage after 60 days postpartum," she explained.

"Progress is being made to improve postpartum care, but as long as these barriers exist, they exacerbate health inequities which already burden high-risk populations," she continued.

HDP, which affects about [20% of pregnant patients](#), is a [major cause](#) of morbidity and mortality. A [previous meta-analysis](#) found that a history of HDP was associated with a higher risk of cardiovascular disease compared with no history of HDP.

The current study's results could be used to improve pregnancy care, Chou said.

This work "paves the way for future efforts to improve postpartum cardiovascular care, enabling us to grasp this opportunity of a lifetime to ultimately reduce maternal and pregnancy-related morbidity and mortality," she wrote.

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For this study, Levine and colleagues assessed 135 patients (84 with a history of HDP and 51 without); 85% of the patients were Black. Black patients had a higher prevalence of HDP history (92% vs 78% without HDP). There were no significant differences in maternal age, body mass index, tobacco use, and history of gestational diabetes, among others, between those with and without HDP.

"The importance of studying a more diverse population, including a larger percentage of Black patients, is of critical importance given that both HDP and cardiovascular disease disproportionately affect Black women," the authors wrote.

In an exploratory analysis, patients with chronic hypertension showed more left ventricular remodeling, including higher intraventricular septum, posterior wall, and relative wall thickness ( $P<0.001$  for all), as well as

worse diastolic function, including lower septal e', lateral e', and E/A ratio; more abnormal global longitudinal strain; and higher effective arterial elastance, compared with those without chronic hypertension.

A limitation to the study was a lack of data on pre-pregnancy cardiovascular abnormalities, which may have had downstream effects during pregnancy. Levine and team also noted that the sample size was largely from urban communities; therefore, the results may not be generalizable to other groups.

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### Disclosures

This study was supported by the NIH, the National Heart, Lung, and Blood Institute, and the American Association of Obstetricians and Gynecologists Foundation.

Levine reported no conflicts of interest. Co-authors disclosed relationships with Bayer, Sanifit, Fukuda-Denshi, Bristol Myers Squibb, Johnson & Johnson, Edwards Lifesciences, Merck, NGM Biopharmaceuticals, the Galway-Mayo Institute of Technology, Microsoft, and Abbott.

Chou reported no conflicts of interest.

### Primary Source

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### Secondary Source

*Journal of the American College of Cardiology*

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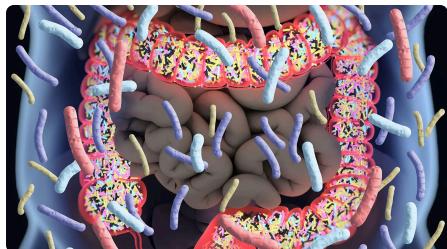
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