

## Hypertensive Disorders of Pregnancy Linked to Later Hypertension

— Postpartum, many patients go undiagnosed

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

June 14, 2022

---



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

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.

**Medical News from Around the Web** 

---

**CBS NEWS**

When a teen's medication stopped working, he decided to try a surgery that could stop his episodes for good

**USA TODAY**

The popular weight-loss drug Zepbound can now be used to treat sleep apnea

**CNN**

FDA approves weight-loss drug Zepbound for obstructive sleep apnea | CNN

---

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.



[Michal Ruprecht](#) is a medical student based in Michigan. He is a former reporting intern for MedPage Today. [Follow](#) 

---

### 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

*Journal of the American College of Cardiology*

[Source Reference](#): Levine LD, et al "Prospective evaluation of cardiovascular risk 10 years after a hypertensive disorder of pregnancy" *J Am Coll Cardiol* 2022; DOI: 10.1016/j.jacc.2022.03.383.

### Secondary Source

*Journal of the American College of Cardiology*

[Source Reference](#): Chou JC "Hypertensive disorders of pregnancy and cardiovascular risk" *J Am Coll Cardiol* 2022; DOI: 10.1016/j.jacc.2022.04.013.

**0 Comments**

---

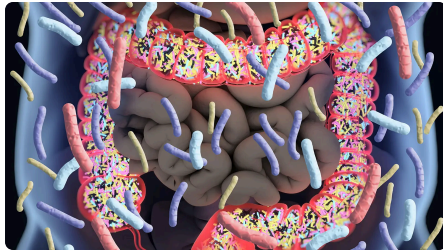
## Recommended For You



### Podcast

Electronic Sepsis Alerts;  
Reducing Plaques in  
Coronary Arteries

---



### Neurology

Are Antibiotics Linked to  
Dementia? New Study  
Weighs In

---



FDA  
APPROVED  
olezarsen (Tryngolza)

### Cardiology

First Drug Approved for  
Familial Chylomicronemia  
Syndrome

---



### AIBD

For IBD, No  
Cardiovascular Risk  
Difference Between JAK,  
TNF Inhibitors

---

### Endocrinology

FDA Says Compounded  
Tirzepatide Must Exit the  
Market

---

### Public Health & Policy

U.S. Deaths Are Down and  
Life Expectancy Is Up, but  
Improvements Are Slowing

---

## Medical News From Around the Web

### CBS NEWS

When a teen's medication stopped working, he decided to try a surgery that could stop his episodes for good

### USA TODAY

The popular weight-loss drug Zepbound can now be used to treat sleep apnea

### CNN

FDA approves weight-loss drug Zepbound for obstructive sleep apnea | CNN

### NPR

FDA approves weight loss drug Zepbound to treat obstructive sleep apnea

### CIRCULATION

Activation of Imprinted Gene PW1 Promotes Cardiac Fibrosis After Ischemic Injury.

### JOURNAL OF CLINICAL ONCOLOGY

Long-Term Follow-Up and Overall Survival in NRG258, a Randomized Phase III Trial of Chemoradiation Versus Chemotherapy for Locally Advanced Endometrial Carcinoma.