
Hospitalisation for CVD Year After Delivery of Twins



Mothers of twins are twice as likely to be hospitalised with heart disease within a year after childbirth compared to those who have singleton births, according to new research published in the *European Heart Journal*. The risk is even higher for mothers of twins who experienced high blood pressure conditions during pregnancy.

The rate of twin pregnancies has increased in recent decades due to fertility treatments and older maternal ages. Previous studies have suggested no long-term increased risk of cardiovascular disease for twin pregnancies, but this contradicts what is seen in clinical practice. Given the high rate of maternal mortality in the first year postpartum due to cardiovascular disease, a study was conducted to investigate whether twin pregnancies contribute to this risk.

Researchers analysed data from 36 million hospital deliveries recorded in the U.S. Nationwide Readmissions Database between 2010 and 2020. They categorised pregnant individuals into four groups:

1. Twin pregnancies with normal blood pressure
2. Twin pregnancies with hypertensive disease of pregnancy (HDP)
3. Singleton pregnancies with normal blood pressure
4. Singleton pregnancies with HDP

Hypertensive disease of pregnancy includes conditions such as gestational hypertension, pre-eclampsia, eclampsia, and superimposed pre-eclampsia. The study measured hospital readmissions for cardiovascular events—such as heart attack, heart failure, or stroke—within one year of childbirth.

Findings show that the rate of cardiovascular-related readmissions was significantly higher for twin pregnancies (1,105.4 per 100,000 deliveries) compared to singleton pregnancies (734.1 per 100,000). Mothers of twins with normal blood pressure were nearly twice as likely to be hospitalised for cardiovascular disease compared to those with singleton pregnancies and normal blood pressure. For mothers of twins who had high blood pressure during pregnancy, the risk was over eight times higher. However, one year postpartum, overall mortality—including from heart disease—was higher in those who had singleton pregnancies with high blood pressure compared to those with twin pregnancies and high blood pressure. This suggests that, over time, twin pregnancy risks may decrease, while pre-existing cardiovascular risk factors may play a greater role in singleton pregnancies.

These findings highlight the importance of monitoring mothers of twins postpartum. The maternal heart works harder during twin pregnancies and takes weeks to recover after delivery. Even for those without pregnancy-related high blood pressure, the risk of cardiovascular complications remains elevated in the first year.

Study authors also note that patients undergoing fertility treatments—particularly those with other cardiovascular risk factors, such as obesity, diabetes, high blood pressure, or pre-existing heart disease—should be informed that twin pregnancies may increase short-term cardiovascular risks. Healthcare providers and insurance companies should ensure continued postpartum care for up to a year after birth, especially for high-risk pregnancies like twin pregnancies.

An accompanying editorial has also highlighted the significance of this research. Around 33% of pregnancy-related deaths in the U.S. are due to cardiovascular events. Twin pregnancies make up 3.1% of births, with about a third conceived through assisted reproductive technologies like

IVF or ovulation induction. However, the impact of twin pregnancies on cardiovascular health remains understudied. Hence, there is a need for a stronger focus on postpartum care.

The fourth trimester is a critical window for improving long-term cardiovascular health. Collaboration among obstetricians, cardiologists, and other specialists is essential to reducing maternal mortality and postpartum complications by improving access to high-quality postpartum care.

Source: [European Society of Cardiology](#)

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