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Prenatal Depression and Risk of Incident Heart Disease in Postpartum Period

Prenatal depression is associated with incident cardiovascular disease (CVD) within 2 years after childbirth, according to the results of a study of more than 1,00,000 pregnancies published in the *Journal of the American Heart Association*.¹ The association was found to be strongest for ischemic heart disease with 83% higher risk.

To determine the association between prenatal depression and risk of incident CVD within the first 2 years after childbirth compared with patients without depression diagnosed during pregnancy, a team of researchers from the United States analyzed data of pregnant women with deliveries from 2007 to 2019 sourced from Maine Health Data Organization database.

Analysis of data of 1,19,422 pregnancies revealed that the risk of all six CVDs examined in the study namely heart failure, ischemic heart disease, arrhythmia/cardiac arrest, cardiomyopathy, stroke and high blood pressure was significantly increased in pregnant women with prenatal depression within 2 years of delivery.

Women with prenatal depression had an 83% increase in the risk for ischemic heart disease with adjusted hazard ratio (aHR) of 1.83. The risk for arrhythmia/cardiac arrest was increased by 60% with aHR of 1.60.

For cardiomyopathy, the risk was elevated by 61% (aHR 1.61) and for hypertension; the risk was 32% higher (aHR 1.32). These risks were found to be still present for some CVDs when hypertensive disorders of pregnancy were excluded from the analysis with 85% higher risk for arrhythmia/cardiac arrest (aHR 1.85), 84% higher risk of ischemic heart disease (aHR 1.84), 42% higher risk of stroke (aHR 1.42), 53% higher risk of cardiomyopathy (aHR, 1.53) and 43% higher risk of a new-onset hypertension (aHR 1.43). The risk of heart failure was comparable between the two groups with aHR of 1.39.

This study shows that pregnant women with prenatal depression are at a higher risk of being diagnosed with a heart disease within 2 years of childbirth compared to those without prenatal depression. The highest risk was seen for ischemic heart disease. Women should be screened for symptoms of depression during pregnancy as it has bearing not only on their mental health, but also heart health as illustrated in this study.

REFERENCE

1. Ackerman-Banks CM, Lipkind HS, Palmsten K, Pfeiffer M, Gelsinger C, Ahrens KA. Association of prenatal depression with new cardiovascular disease within 24 months postpartum. *J Am Heart Assoc.* 2023;12(9):e028133.

