Serum prolactin in pregnancy predicts prediabetes / diabetes

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(HealthDay)—Serum prolactin in pregnancy predicts the risk of

postpartum prediabetes/diabetes, according to a study published online April 26 in *Diabetes Care*.

Ravi Retnakaran, M.D., from Mount Sinai Hospital in Canada, and colleagues measured fasting serum prolactin, human placental lactogen (HPL), and 3-carboxy-4-methyl-5-propyl-2-furanpropanoic acid (CMPF) in 367 women in the late second/early third trimester. Participants underwent an oral glucose tolerance test (OGTT) at three months postpartum.

The researchers identified 301 women with normal glucose tolerance (NGT) in the postpartum OGTT and 66 with prediabetes or diabetes. Women with postpartum NGT had higher serum prolactin in pregnancy than those with postpartum prediabetes/diabetes; no differences were seen for HPL and CMPF between the groups. Antepartum prolactin was an independent determinant of postpartum, insulin secretion-sensitivity index-2 on multiple linear regression analyses. Independent prediction of a reduced risk of postpartum prediabetes/diabetes was possible with higher serum prolactin (odds ratio, 0.5).

"Higher prolactin in pregnancy is an independent predictor of both better β-cell function and a lower likelihood of prediabetes/ diabetes after complete adjustment for type 2 diabetes risk factors," the authors write. "It thus emerges that serum prolactin in pregnancy is a previously unrecognized factor that can provide novel insight into postpartum diabetes risk in young women."

Retnakaran is part holder of a patent for CMPF as a biomarker for diabetes.

More information: Abstract
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