

Gestational diabetes and diabetes before pregnancy associated with several poor outcomes for baby

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New research presented at this year's European Association for the Study of Diabetes (EASD) meeting in Munich, Germany (12-16 Sept) shows that both gestational diabetes (which develops during pregnancy) and pre-gestational diabetes (present before conception) in a pregnant woman are associated with a range of poor outcomes for her child. The study is by Dr Basilio Pintuadi, Niguarda Ca' Granda Hospital, Milan, Italy, and colleagues.

Both [gestational diabetes](#) (GDM) and pre-gestational diabetes in pregnancy (DM - meaning the woman has diabetes before she conceives) are associated with worse [neonatal outcomes](#) compared with normal pregnancy. Other clinical conditions, primarily represented by hypertensive and thyroid disorders, could complicate pregnancy outcome. In this study, the authors estimated the risks of adverse neonatal outcomes of pregnancies complicated by GDM and DM, also considering the role of other important concomitant diseases.

The authors used a decade of administrative data of the Italian Puglia region from 2002 until 2012 in their analysis. Single pregnancies complicated by GDM and DM and their neonatal outcomes were selected. Risks of adverse neonatal outcomes for GDM and DM compared with normal pregnancy were estimated by computer modelling after adjusting for age, hypertensive and thyroid disorders and drug use (with drug use indicating higher pregnancy complexity).

From a total of 135,163 pregnancies 1,357 complicated by GDM and 234 by DM were selected. Compared with pregnancies in which the mother had normal blood sugar tolerance, both GDM and DM were associated with higher risks of neonatal hypoglycaemia (10 times risk for GDM and 36 times for DM); small for gestational age

(GDM 1.7 times; DM 5.8); large for gestational age (1.7 times GDM, 7.9 DM); jaundice (GDM 1.7, DM 2.6); fetal malformations (GDM 2.2, DM 3.5), low levels of calcium and magnesium (GDM 1.8, DM 9.2) and Caesarean section delivery (GDM 1.9; DM 8.5). DM but not GDM was associated with high risk of respiratory distress (2.7 times) and excess amniotic fluid (polihidramnios) (46.5 times increased risk).

The authors conclude: "Both gestational diabetes and diabetes in the mother when she becomes pregnant are associated with adverse outcomes in the baby independently of the presence of other clinical conditions complicating the [pregnancy](#). Greater attention should be placed to the care of pregnant women with gestational diabetes or diabetes."

Provided by Diabetologia

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