Genetic risk linked to T2DM in women with history of gestational diabetes

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(HealthDay)—Among women with a history of gestational diabetes

mellitus (GDM), a genetic risk score (GRS) is generally positively associated with type 2 diabetes (T2D) risk, according to a study recently published in *BMJ Open Diabetes Research & Care*.

Mengying Li, Ph.D., from the Eunice Kennedy Shriver National Institute of Child Health and Human Development in Bethesda, Maryland, and colleagues conducted a cohort study involving 2,434 white women with a history of GDM from the Nurses' Health Study II (NHSII) and the Danish National Birth Cohort (DNBC). Using 59 candidate single nucleotide polymorphisms for T2D, a GRS was calculated.

Women were followed for an average of 21 years in NHSII and 13 years in DNBC; during this time, 23.7 and 28.2 percent developed T2D, respectively. The researchers found that in both cohorts, the GRS was generally associated with T2D risk. The relative risks for increasing quartiles of GRS were 1.00, 0.97, 1.25, and 1.19 in a pooled analysis. The correlation seemed stronger among women with poorer versus better dietary quality in both cohorts, although the interaction was not significant.

"There was also suggestive evidence that a healthful dietary pattern might mitigate the excessive risk of T2D related to greater genetic susceptibility, which supports public health efforts of encouraging a healthful diet to prevent T2D among the high-risk population—women with a history of GDM," the authors write.

More information: Abstract/Full Text

t2dm-women-history.html