- Pregnancy

Maternal diabetes and autism

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A LARGE new study adds to evidence that diabetes during pregnancy is linked with an increased risk of brain and nervous system problems in children, including autism, researchers say.



Whether diabetes actually causes those problems remains unclear.

But when mothers have diabetes while pregnant, children are 28% more likely to be diagnosed with a neurodevelopmental disorder, according to an analysis of data pooled from 202 earlier studies involving more than 56 million mother-child pairs.

The risks for children of mothers with diabetes during pregnancy were 25% higher for autism, 30% higher for attention deficit hyperactivity disorder and 32% higher for intellectual disability.

They were also 20% higher for trouble with communication, 17% higher for movement problems and 16% higher for learning disorders than in children whose mothers did not have diabetes while pregnant.

Diabetes diagnosed before pregnancy appeared to confer a 39% higher risk for one or more of these neurodevelopmental disorders compared with gestational diabetes that begins in pregnancy and often resolves afterward, the researchers reported in The Lancet Diabetes & Endocrinology.

Diabetes affects up to 9% of pregnancies in the United States, with the incidence rising, according to the US Centers for Disease Control and Prevention.

Familial factors

Seven of the earlier studies compared affected children with siblings.

These analyses did not find an effect from mothers' diabetes, which suggests that shared genetic or familial factors might be contributing to the increased risk, the authors noted.

The findings emphasise the importance of medical support for women at risk of developing diabetes and the continuous monitoring of their children, the researchers said.

The association of maternal diabetes with autism in offspring is well known, said Dr Magdalena Janecka of New York University Grossman School of Medicine, who studies links between in utero exposures and child development but was not involved in the new research.

A large "meta-analysis" like this one allows for analyses of subgroups, such as mothers with pre-existing vs gestational diabetes, or children with autism vs those with ADHD or movement disorders, but it cannot prove cause and effect, Janecka said.

"Meta-analyses allow us to compare groups more precisely. At the same time, they are not bringing us any closer to understanding the causes or the underlying mechanisms."

The study comes as Trump administration health officials have called for further research into whether vaccines are a cause of autism, a claim long championed by new Health Secretary Robert F. Kennedy Jr that has been debunked by established science. — Reuters