

Baby's immune system might hint at autism risk

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(HealthDay)—While the origins of autism remain mysterious, new



research points to the infant immune system as a potential contributing factor.

A team of Swedish and American researchers said levels of certain protein "markers" in newborns' <u>blood</u> seemed to predict which children would go on to develop an autism spectrum disorder.

This is "important evidence that the immune system in early life may be a key determinant of later risk of autism spectrum disorders," wrote the team led by Dr. R. M. Gardner of the Karolinska Institute in Stockholm.

The researchers examined blood from nearly 900 children who developed some form of autism. The children were born in Sweden between 1998 and 2000. The researchers compared those blood samples to blood from more than 1,100 kids who didn't develop the disorder.

While the study can't prove cause-and-effect, babies who went on to develop autism had higher blood levels of certain proteins that signaled inflammation, the researchers said.

However, there's not yet enough evidence "to use such a profile to precisely predict which children would go on to develop [autism]," Gardner's team stressed.

Still, the researchers said the new finding supports previous observations that infection during pregnancy and other conditions that can lead to increased inflammation have been linked to a higher risk of autism spectrum disorders.

Two experts said the findings were intriguing. But they added that much more research is needed.

"This study probably presents more questions than it answers," said Dr.



Victoria Chen of Cohen Children's Medical Center, in New Hyde Park, N.Y.

"There is not much known about what causes neonatal inflammation to increase or decrease in general," explained Chen, an attending physician in the hospital's division of developmental behavioral pediatrics.

"Overall, this is an exciting finding," she said, "but there needs to be more work done to understand whether these proteins have a causal role—and what role it plays in the development of <u>autism spectrum</u> <u>disorder</u>."

Alycia Halladay is chief science officer with the Autism Science Foundation. She agreed that while the findings are interesting, only more research will show if spotting and lowering inflammation in pregnancy might "mitigate the risk of autism spectrum disorders."

The study was slated for presentation Wednesday in Baltimore at the International Meeting for Autism Research. Findings presented at medical meetings are typically considered preliminary until published in a peer-reviewed journal.

More information: There's more on research into the causes of autism at the <u>U.S. National Institute of Neurological Disorders</u>.

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