



ILLUSTRATION AND DATA VISUALIZATION BY NICHOLAS RAPP

Medley of medical problems may precede autism features

BY [HANNAH FURFARO](#) / 21 JUNE 2017

Children with autism are more likely than their neurotypical peers to have any of a host of medical conditions in their early years, according to a new study.

The findings come from a review of health records from 42,520 children, 3,911 of whom have autism. Children with autism were more likely than controls to be diagnosed with 1 or more of 38 conditions, ranging from autoimmune disorders to muscle problems¹.

Studies have shown that many children with autism also have [epilepsy](#), [gut problems](#) and other health conditions. But much of this work has relied on reports from parents, who might misremember their child's medical history.

The new research strengthens the association between certain medical conditions and autism.

“It’s useful to demonstrate to clinicians that autism is not just core behavioral impairments,” says lead researcher [Lisa Croen](#), director of the Autism Research Program at Kaiser Permanente in Oakland, California.

The findings also raise the possibility that certain conditions signal autism early on. But Croen cautions that the study was not designed to find conditions that predict an autism diagnosis.

Digging up diagnoses:

Croen and her colleagues analyzed the electronic medical records of children enrolled in the Kaiser Permanente medical system in Georgia, Northern California, Oregon and Washington. The children ranged in age from 2 to 12 years. The average age of autism diagnosis was 4.

The researchers looked at each child’s medical records before autism diagnosis, as well as records of controls of the same age. They published their results 22 April in the *Journal of Autism and Developmental Disorders*.

Children with autism are 23 times as likely as controls to have language delay and 17 times as likely to have global developmental delay, the researchers found. This result meshes with findings showing an [overlap between language delay and autism](#). Children with autism also have a threefold elevated risk of seizures. The researchers also found a heightened risk of autoimmune disorders, eye conditions and musculoskeletal problems.

Although the study did not rely on parent reports, parent behavior could still have inflated these figures, says [Eric Fombonne](#), professor of psychiatry at Oregon Health & Science University, who was not involved in the study. Parents may be “worried, anxious, trying to find answers” for their child’s autism behaviors months or years before they receive a diagnosis, leading to unusually frequent visits to the doctor, he says.

Fombonne says he “would have much more trust in this data” if the researchers had looked at children younger than 2 — before autism features become obvious.

The researchers also found unusually high rates of some medical conditions, Fombonne says. For instance, they reported that about 25 percent of both children with autism and controls have asthma, compared with an estimate of 8.4 percent from the U.S. Centers for Disease Control and Prevention.

Still, the study is worthwhile because patterns in health problems early in childhood could tip off parents and doctors to autism, Croen says. Although the study wasn't designed to spot red flags for autism, Croen says she is seeking funding to pursue this research and perhaps create a predictive model.

REFERENCES:

1. Alexeff S.E. *et al. J. Autism Dev. Disorder.* **47**, 2067-2079 (2017) [PubMed](#)