GI Disorders Found Common in Autistic Children

BY BETSY BATES

Children with autism spectrum disorders had a 5.3-fold greater probability of having a gastrointestinal disorder than their nonautistic siblings in a large study of families enrolled in the Autism Genetic Resource Exchange Consortium.

Based on these findings, physicians should educate families that gastrointestinal problems do appear to be common in children with autism spectrum disorder, many of whom may not be able to communicate their discomfort, according to Dr. Lulu W. Wang, who reported the findings at the annual Western regional meeting of the American Federation for Medical Research held in Carmel, Calif.

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DR. WANG

symptoms, compared with just 12% of 165 siblings, said Dr. Wang, a developmental behavioral pediatrics fellow at the M.I.N.D. (Medical Investigation of Neurodevelopmental Disorders) Institute of the University of California at Davis and University of California Davis Children's Hospital.

Constipation (20%) and chronic diarrhea (19%) were the most common GI diagnoses represented among children with autism spectrum disorders.

By contrast, gastroesophageal reflux disorder (4.9%) and constipation (3.7%) were the most common diagnoses among their siblings who did not have autism spectrum disorders, she found.

Children who met the full criteria for autistic disorder were quite low functioning and had few language skills. These children had the highest odds ratio for gastrointestinal disorders, 6.4.

Those who nearly met criteria for autism but were higher functioning had the next highest odds of having gastrointestinal problems, 4.5. Children with minimal deficits across the autism spectrum had a lower probability of having gastrointestinal disorders, at an odds ratio of 2.4, compared with siblings who had no autism spectrum disorder.

After controlling for possible confounders, a multivariate analysis showed that autism was significantly associated with GI disorders (OR = 5.3).

Genetic and dietary factors have been postulated as contributors to the high prevalence of gastrointestinal disturbances in children with autism spectrum disorders, but the problem remains largely a mystery, said Dr. Wang in a telephone interview following the meeting.

"We can only speculate, since we only found an association," she said of the study, coauthored by Dr. Dan Thomas, chief of the division of pediatric gastroenterology and nutrition at Childrens Hospital Los Angeles.

Asked to comment on how diet may play a role in gastrointestinal symptoms, Dr. Wang pointed to a controlled dietary diary study that found association between stool consistency and dietary intake. Children with autism were not consuming greater amounts of carbohydrates than recommended RDA values (Biol. Psychiatry 2007;61:492-7).

Laboratory studies of a randomly selected subset of 35 children with autistic disorder from Dr. Wang's cohort showed none had celiac markers. The small numbers make that finding statistically inconclusive, but the results agree with mounting evidence that celiac disease is not a likely contributor to the gastrointestinal or autistic symptoms of a majority of children with the disease.

"There are now more genetic studies coming out that may help explain why a subset of children with autism have more gastrointestinal disorders," she said.

Dr. Wang and Dr. Thomas reported no potential financial conflicts of interest concerning their study. ■