High rate of gastrointestinal problems identified in autism spectrum children

Gastrointestinal (GI) symptoms are significantly more common in autistic children than in non-disabled children or children with other developmental disorders, according to a new report.

Maria Valicenti-McDermott and colleagues compared 50 children with autism spectrum disorders (ASD) to 50 typically developing children and 50 children with other major developmental disabilities, matching the children for age, sex, and ethnicity. The researchers conducted structured interviews with parents to identify any past or current digestive symptoms experienced by the children. They also assessed the children's family histories of autoimmune diseases, to investigate the possibility of an association between digestive disorders and altered immunity.

"A history of GI symptoms was elicited in 70% of children with autism spectrum disorders compared with 28% of children with typical development and 42% of children with other developmental disabilities," Valicenti-McDermott and colleagues report. Differences were not related to medication use, toilet training patterns, or a history of food allergies.

The researchers did not detect an elevated frequency of food allergies in ASD children in comparison to the control groups. They also did not find an association between autism and a family history of autoimmune disease, or between gastrointestinal symptoms (in any of the three groups) and a family history of autoimmune disease.

The researchers conclude that specific GI symptoms may point to subgroups within the broad category of children with autism, and that identification of these symptoms could lead to better treatment for the children in these subgroups.

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"Frequency of gastrointestinal symptoms in children with autistic spectrum disorders and association with family history of autoimmune disease," Maria Valicenti-McDermott, Kathryn McVicar, Isabelle Rapin, Barry K. Wershil, Herbert Cohen, and Shlomo Shinnar, *Developmental and Behavioral Pediatrics*, Vol. 27, No. 2, April 2006, S128-S136. Address: Maria Valicenti-McDermott, Children's Evaluation and Rehabilitation Center, 1410 Pelham Parkway South, Bronx, NY 10461, rvalicenti@hotmail.com

Vitamin B6 effectively treats drug-induced akathisia

Akathisia—an intense feeling of restlessness, tension, or panic accompanied by rocking, foot shuffling, or other movements—is a serious side effect of many neuroleptic drugs, affecting as many as 30 percent of individuals using these drugs. The risk is purportedly lower with newer atypical antipsychotics, but one study found that 13 percent of people taking risperidone (Risperdal) and 7 percent of people taking clozapine (Clozaril) suffered from akathisia. Doctors typically treat akathisia with other drugs, but treatment is often unsuccessful and can cause additional side effects.

Searching for a safer alternative, Chanoch Miodownik and colleagues—who reported earlier that vitamin B6 is an effective treatment for tardive dyskinesia (another neurological side effect of psychotropic drugs)—recently investigated the effects of the vitamin on symptoms of akathisia. In a double-blind, placebo-controlled study of 60 schizophrenic, schizoaffective or bipolar patients with drug-induced akathisia, the researchers compared the effects of B6 to those of an antidepressant drug, mianserin, previously shown to reduce symptoms of akathisia. Patients undergoing active treatment received either 1,200 mg/day of vitamin B6 or 15 mg/day of mianserin for five days, and were assessed before and after treatment with the Barnes Akathisia Rating Scale (BARS).

Compared with the placebo group, Miodownik and colleagues say, patients taking either B6 or mianserin showed significant reductions in inner feelings of restlessness and distress, as well as significant improvement on a global symptom assessment. In addition, patients undergoing either treatment exhibited a trend toward reduction of restless movements. The researchers note that a reduction of at least two points on the five-point global assessment subscale of the BARS occurred in 56% of B6-treated patients and 65% of mianserin-treated patients, compared to only 6% of the placebo group. "A complete disappearance of neuroleptic-induced akathisia occurred in five patients (21.7%) in the vitamin B6 group, four in the mianserin group (20%), and none in the placebo group," they say. Participants taking B6 or mianserin also showed improvements in tests measuring their mental state.

Miodownik and colleagues comment, "The high dose of vitamin B6 for the [akathisia] treatment was chosen on the basis of previous studies as well as over three years of clinical experience in one of our centers. The lack of significant adverse effects of vitamin B6 and high efficacy at this dose justify its use." The nutrient's effects, they say, may stem from its influence on neurotransmitter metabolism and its role as an antioxidant and free radical scavenger.

Editor's note: A study in 2004 by the same research group reported a reduction of at least two points on the global assessment subscale of the BARS in 80 percent of patients treated with B6, a higher percentage than responded to mianserin in the current study. Thus, vitamin B6 treatment is potentially more successful than mianserin treatment—and without the potential side effects of mianserin, which include seizures, bone marrow suppression, dizziness, edema, mania, and disturbances of liver function.

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"Vitamin B6 versus mianserin and placebo in acute neuroleptic-induced akathisia: a randomized, double-blind, controlled study," C. Miodownik, V. Lerner, N. Statsenko, T. Dwolatzky, B. Nemets, E. Berzak, and J. Bergman, *Clinical Neuropharmacology*, Vol. 29, No. 2, March/April 2006, 68-72. Address: Chanoch Miodownik, Mental Health Center, Faculty of Health Sciences, Ben-Gurion University of the Negev, Be'er-Sheva, Israel.

—and—

"Vitamin B6 treatment in acute neuroleptic-induced akathisia: a randomized, double-blind, placebo-controlled study," V. Lerner, J. Bergman, N. Statsenko, and C. Miodownik, J*ournal of Clinical Psychiatry*, Vol. 65, No. 11, November 2004, 1550-4. Address: Vladimir Lerner, Mental Health Center, Faculty of Health Sciences, Ben-Gurion University of the Negev, Be'er-Sheva, Israel, lernervld@yahoo.com.

"Black box" warning for ADHD drugs vetoed by FDA committee

The Pediatric Advisory Committee of the the Food and Drug Administration (FDA) has overruled an early FDA panel's recommendation that ADHD drugs come with a black box warning because of their potential to cause heart attacks, strokes and sudden death.

The earlier panel based its recommendation on an FDA review which uncovered 25 sudden deaths due to cardiac arrest involving children and adults taking stimulant drugs between 1999 and 2003. The review also cited 54 non-fatal cases of heart attack, stroke, hypertension, arrhythmia, or heart palpitations occurring in patients taking ADHD drugs. One panel member commented that the drugs may prove to be more dangerous than Vioxx, the arthritis drug taken off the market when it was linked to strokes and heart attacks.

The Pediatric Advisory Committee, however, called the black box recommendation excessive, instead suggesting that the FDA "improve its communications" to doctors and patients regarding the drugs' risks. Said Robert Nelson, chair of the committee, "Do parents need to worry about the risks? In a word, no."

FDA officials say they are asking companies to change their labels to warn against prescribing stimulant drugs to any patients with structural defects of the cardiovascular system. Nelson commented to the *New York Times*, however, that "you can't screen 2.5 million children" for heart defects.

continued on page 7