

'Social stories' technique used to prevent tantrums

Social stories, often used to teach new skills to autistic individuals, also can prevent behavior problems, according to a new study.

Peggy Lorimer and colleagues tested the usefulness of social stories in reducing tantrums, and the inappropriate verbalizations that preceded them, in a five-year-old high-functioning autistic boy. The boy threw long, violent tantrums several times a day, often initiating the tantrums when his parents were speaking with other adults or the child's brother. He often preceded the tantrums by interrupting his parents' conversations with comments such as "Stop talking!" Attempts to reduce the boy's tantrums and interruptions with other interventions had failed.

Lorimer et al. created two social stories, "Talking with Adults" and "Waiting," combining written text and line drawings. The stories offered simple explanations about a situation (e.g., "Adults like to talk... sometimes they talk to each other"), offered ideas about what the boy could do while waiting for his turn to talk (e.g., watch videos or play games, or say "Excuse me" and then talk),

outlined the rewarding nature of good behavior ("I like it when people listen"), and offered mnemonic devices for remembering the stories' lessons (e.g., "ants go marching one by one; people talk one by one").

Therapists or the boy's parents read the social stories to the boy each morning and at the beginning of each therapy session. They also read one of the stories to him each time an adult planned to have a conversation with another adult during his therapy sessions. The stories, written on poster board and bound in book form, were kept on a table where the boy had access to them at all times.

Lorimer et al. say the technique dramatically reduced the boy's tantrums. Tantrums occurred on five of seven days before the intervention began, but on only one of seven days during the first intervention. The researchers stopped the intervention briefly, and the boy had tantrums on two of three days; when they re-initiated the social stories, his tantrums again occurred on only one of seven days. In addition, his inappropriate interrup-

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Enzymes and the GF/CF diet: an expert opinion

Editor's Note: The following, excerpted from the Autism Network for Dietary Intervention (ANDI) newsletter, is reprinted with permission of the editors as a service to parents of autistic children who benefit from a gluten-free, casein-free diet. Lisa Lewis and Karyn Seroussi are leading authorities on the GF/CF diet.

We continue to hear reports of parents being told that enzymes can replace the gluten-free/casein-free (GF/CF) diet for autistic spectrum kids. In fact, there is so much potentially harmful misinformation being spread that we feel we must speak out. Parents must understand that for most kids, enzymes are not a substitute for dietary intervention.

Since 1996, we have answered over 40,000 letters from parents. Hundreds have reported that enzymes seem to improve digestion, reduce the severity of a withdrawal when the diet is first started, and reduce the duration of infringement-related adverse reactions. We have spoken at great length with several scientists and enzyme manufacturers who agree that enzymes are meant to be a useful complement to dietary intervention, but that no enzyme supplement can be guaranteed to digest every trace of gluten or dairy in the diet. It is equivalent to doing the diet partway, or to giving the poison along with the antidote.

For children who are not yet gluten- and casein-free, a significant response to the enzymes would be expected. But there is a vast difference between a 90 percent elimination of gluten and dairy peptides and 100 percent adherence to the diet. A study of children who had responded to a strict GF/CF diet and were switched to the enzymes would tell a very different story.

We have only heard from a handful of parents who claim that their children can substitute enzymes for the GF/CF diet, and two of these parents may be linked to financial interests with a particular enzyme manufacturer. To be fair, we assume that there are more people who have genuinely found this to be true, but there may be other reasons. For some children, once the gut is healed, the diet may no longer be necessary if there is no true allergy to milk or wheat.

However, a great number of "diet responders" who go off the diet suffer from a severe regression days or even weeks later—with or without enzymes. The letters we receive about this are heartbreaking, and many parents tell us they are extremely angry with the enzyme manufacturer or other professional who told them that it was okay. Until we know which autistic children can safely deviate from GF/CF intervention, we think it is irresponsible to advocate that people give gluten and dairy to dietary responders.

—Lisa Lewis and Karyn Seroussi

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Agencies issue warnings about olanzapine risk

Britain's Medicines Control Agency is warning doctors who prescribe the drug olanzapine (Zyprexa), a drug estimated to be the second-most prescribed atypical antipsychotic for autistic patients, that the medication can cause life-threatening changes in blood sugar regulation.

The agency says it has received 40 reports of "hyperglycemia (elevated blood sugar), diabetes mellitus, or exacerbation of diabetes" linked to the drug. Of these, the report adds, "Four were associated with ketoacidosis and/or coma, including one with a fatal outcome."

In April, the Japanese Health and Welfare Ministry issued an emergency safety report to the drug's manufacturer, Eli Lilly, after two diabetics taking the drug died. The Japanese agency reported that over a ten-month period, seven other patients had become comatose or lost consciousness while taking olanzapine.

The British agency says, "An increase in body weight, which may be marked or rapid in onset, may follow initiation of olanzapine and this may precede the development of hyperglycemia or exacerbation of pre-existing diabetes." Atypical antipsychotics often cause large weight gains (see ARRI 15/4, 13/3), a risk factor for diabetes.

In related research, K. A. Liebzeit and colleagues conducted a literature search from 1966 through June 2000, and analyzed reports of blood sugar regulation problems associated with either older antipsychotics or newer "atypical" antipsychotics such as olanzapine, clozapine, and quetiapine. Of the 35 cases of induced or exacerbated diabetes reported in the literature, the researchers say, "the vast majority of cases implicate clozapine and olanzapine." They note that many patients who suffered blood sugar problems presented to doctors with diabetic ketoacidosis, and that all were taking drug doses in the range considered acceptable.

Symptoms of diabetic ketoacidosis, which occurs when the body does not have enough insulin to function properly, include upset stomach, thirst and frequent urination, a "fruity" breath smell, drowsiness, deep breathing, nausea, vomiting, and dehydration. The disease can progress to coma if not treated.

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 "New onset diabetes and atypical antipsychotics," K. A. Liebzeit, J. S. Markowitz, and C. F. Caley, *European Neuropsychopharmacology*, Vol. 11, No. 1, February 2001, 25-32. Address: K. A. Liebzeit, College of Pharmacy, Medical University of South Carolina, Charleston, SC 29425.

—and—

"Britain alerts doctors over schizophrenia drug," Richard Woodman, Reuters Health, May 3, 2002.