

Amino acid formula dramatically reduces tardive dyskinesia symptoms in males

Tarvil, a mixture of branched-chain amino acids, can significantly reduce the symptoms of tardive dyskinesia, according to a new report.

Tardive dyskinesia is a neurological side effect, often permanent, that occurs in 15 to 20 percent of people taking antipsychotic drugs for long periods. People with the disorder suffer from involuntary muscle movements that can be disfiguring and make eating, writing, and other activities difficult.

Mary Ann Richardson and colleagues administered Tarvil (at three different dose levels) or a placebo to 48 male subjects, 36 of whom completed the entire three-week double-blind trial. The researchers report that participants taking the amino acids showed an average 36.5 percent reduction in tardive dyskinesia movements, while the placebo group worsened slightly. (Only one patient in the Tarvil group exhibited an increase in abnormal movements.) Of those on the highest dose of Tarvil, one third experienced at least a 60 percent reduction in abnormal movements.

No changes were seen in blood levels of participants' antipsychotic medications, in blood glucose levels, or in blood chemistry or urinalysis tests. Participants reported no adverse effects other than temporary gastrointestinal upsets immediately following administration of Tarvil.

Richardson et al. say several subjects began improving within the first week of the study, and improvements lasted for the entire three weeks with some subjects showing reductions of as much as 86 percent in abnormal movements. "The magnitude of the clinical response on a subject-by-subject basis in the [Tarvil] group... demonstrates the strong clinical efficacy of the amino acids in treatment in a majority of patients," the researchers conclude.

Research indicates that tardive dyskinesia is associated with a decreased ability to remove the amino acid phenylalanine from the plasma, and that branched-chain amino acids reduce plasma levels of phenylalanine—a biochemical effect that they detected in their own subjects. Richardson and colleagues note that their results apply only to males, and that there is some evidence that altered phenylalanine metabolism may not play the same role in tardive dyskinesia in women. However, they note that two women given Tarvil showed "substantial" improvement in tardive dyskinesia symptoms.

Tarvil, a powder that can be mixed with water to make a fruit-flavored drink, is classified as a "medical food" by the Food and Drug Administration. No prescription is necessary in order to obtain Tarvil, but the FDA requires a consent form from an individual's doctor.

Editor's Note: Other nutrients that research demonstrates can dramatically reduce symptoms of tardive dyskinesia include vitamin B6 and vitamin E (see ARRI 12/3 and 13/3, and related article on p. 5 of this issue).

"Efficacy of the branched-chain amino acids in the treatment of tardive dyskinesia in men," M. A. Richardson, M. L. Bevans, L. L. Read, H. M. Chao, J. D. Clelland, R. F. Suckow, T. J. Maher, and L. Citrome, *American Journal of Psychiatry*, Vol. 160, No. 6, June 2003, 1117-24. Address: Mary Ann Richardson,

Division of Movement Disorders and Molecular Psychiatry, Nathan S. Kline Institute for Psychiatric Research, Orangeburg, NY 10962, marich@nki.rfmh.org.

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"Tardive dyskinesia improves with amino acid cocktail," Jim Rosack, *Psychiatric News*, August 1, 2003.

—and—

"NKI research leads to new medical treatment for management of TD symptoms," news release, New York State Office of Mental Health, August 2003.

LETTERS TO THE EDITOR

Editor's note: We have received several letters in response to Dr. Darold Treffert's comments on our editorial on marijuana use in autism (ARRI 17/1 and 17/2). Below are two of these responses, as well as a reply from Dr. Treffert.

To the Editor:

I read with great dismay Dr. Treffert's letter to you re medical marijuana. Without ingesting the pure plant in various ways that their loving parents have to devise, [some children currently using marijuana] are so agitated that they cannot stop themselves from hitting those they love, hitting themselves, biting themselves. Their parents have tried every drug on the market, every single one. Shall they think about their children's future in an institution, being locked up, injured or tied down and drugged into a stupor so that they will not hurt themselves or others?

We have tried Marinol. For whatever the reason, as with so many of the other drugs that have been prescribed, it has caused our children to become only more agitated. [On marijuana] these children do not become stoned... they become calm, they return to their sweet beings, and they are grateful.

East Coast Mother

To the Editor:

Marinol was effective for my son for a very few months. I now believe that this medication was effective only because he was also receiving the full cannabinoid profile through other means. Marinol has been of no value to other boys and of limited value to one young woman. I consider it a total waste of time.

My son and other boys use [marijuana] cookies, candies and Happy Caps. Cooking oils and tincture are used by some other children. The race to find effective and simple methods of delivery never stops.

Cannabis is a safe and effective alternative to the potential liver- and brain-damaging psychiatric drugs. We also need to understand that the drug companies are the major

beneficiaries of this use and not our children. Cannabis use puts no money into the major drug companies' pockets, so it will always be attacked by the establishment. This is NOT a pro/anti drug issue. This is a medical and scientific issue and patients' welfare and indeed lives depend upon rational and compassionate decisions versus the drug war farce that has warped the debate.

Yes, parents who have experienced cannabis helping their children when nothing else did, want to use it legally, of course! MS patients feel the same way. So do patients with chronic arthritis, hepatitis C, diabetes, Crohn's, irritable bowel syndrome, Parkinson's, and so many other illnesses for which there is little relief or the medicines are terribly toxic.

Joe's Mom

Dr. Treffert's reply on page 7

Autism 'plateau' doubted (continued from page 2)

tism, or looser criteria for diagnosis (see ARRI 16/3).

Editor's Note: Brent Taylor, the lead author of the new study claiming that autism rates have leveled off, is the same researcher who has refused to supply the data supporting his earlier study claims either to this Institute or to a Congressional committee investigating the autism epidemic.

"Prevalence of autism and parentally reported triggers in a north east London population," R. Lingam, A. Simmons, N. Andrews, E. Miller, J. Stowe, and B. Taylor, *Archive of Diseases of Childhood*, Vol. 88, No. 8, August 2003, 666-70. Address: Brent Taylor, Centre for Community Child Health, Royal Free and University College Medical School, Royal Free Campus, University College London, London NW3 2PF.

—and—

"How can everyone else be so wrong?" F. Edward Yzback (reply to Taylor study) in the *British Medical Journal*, Vol. 327, August 2, 2003 (online). Address: F. Edward Yzback, Director, TL Autism Research, 70 Viewcrest Drive, Falmouth, MA 02540.