

Folic acid effective?

Two cases reported by Jerome Lejeune of France indicate that folic acid may be helpful in treating autism in children without Fragile X, a chromosome abnormality. (Several studies have already shown that folic acid may aid Fragile X autistics.)

Lejeune reports that in two cases — a seven-year-old girl and a three-year-old boy — folic acid treatment (.7 mg/kg/day, and .42 mg/kg/day) caused dramatic improvement. In each case, the folic acid treatment was suspended by the researchers twice; both children began exhibiting severe behavior problems within a week after the treatment was stopped each time, and improved when folic acid was administered again.

Lejeune notes that the girl, who suffered from cyclical behavior problems, had been tested three times for chromosomal abnormalities before treatment. One test, performed during a "good" behavior phase, was normal; two others done during "bad" phases (one before and one after the normal test) showed chromosomal breaks.

Lejeune cautions that his findings are preliminary, but believes the results warrant further investigation.

Editor's note: Dr. Lejeune is the renowned researcher who discovered, in 1959, that Down Syndrome results from a chromosomal error. His pioneering work on the use of folic acid was cited in ARRI #1. The above finding that folic acid, a non-toxic B vitamin, helps some non-Fragile X autistic children, is an exciting and important development.

"Psychotic behavior and folic acid medication: preliminary report on two cases," J. Lejeune; *Jour. of Orthomolecular Med.*, 1988, in publication. Address: Jerome Lejeune, M.D., Inst. de Progenese-45, rue des Saints Peres, 75270 Paris Cedex 06 France.

"Theory" (continued)

"perspective-taking ability was found to be a better predictor of level of social skills than were measures of receptive vocabulary and nonverbal intelligence."

"Does the autistic child have a 'theory of mind'?", S. Baron-Cohen, A. Leslie and Uta Frith, *Cognition*, No. 21, 1985, pp. 37-46; and, "Pretense and representation: the origins of 'theory of mind'," A. Leslie; *Psychol. Rev.*, in publication. Address: Alan M. Leslie, MRC Cog. Dev. Unit, Univ. of London, 17 Gordon Street, London WC1H 0AH.

— and —

"Perspective-taking ability and its relationship to the social behavior of autistic children," G. Dawson and M. Fernald, *Journal of Aut. and Dev. Disorders*, Vol. 17, No. 4, 1987, pp. 487-498. Address: Geraldine Dawson, Dept. of Psychology, NI-25, Univ. of Washington, Seattle, WA 98195.

Left, right or ambidextrous: hand choice linked to symptom severity

It may be possible to identify certain subtypes of autism by "handedness", according to California researchers.

The researchers found that an unusually high percentage of autistic children are left-handed, and also that a very high percentage demonstrate "mixed-handedness" or lack of preference for either hand. They speculate that in both of these groups, hand preference has been altered by early brain injury.

A right-handed person generally has a dominant left brain hemisphere, but injury to the left hemisphere might cause a right-hander to become left-handed instead. The researchers theorize that while right-handed autistic children may have defects primarily in the right brain hemisphere, left-handed autistic individuals are more likely to have predominantly left brain lesions which have caused them to switch handedness; and autistic children with "ambivalent" hand use may have more severe damage to both hemispheres of the brain.

The investigators speculate that right-handed autistic individuals may have better language ability than the other groups since

the left brain, which may be less damaged in this group, seems to be more directly related to speech and language. They have found that mixed-handed children have significantly lower IQs than children in the other groups and that more of the mixed-handed children had suffered birth complications — data compatible with the theory that these children have damage to both sides of their brains.

"Handedness subtypes in autism," Paul Satz, Henry V. Soper, Donna L. Orsini, Roland R. Henry, and Jennifer C. Zvi; *Psychiatric Annals*, July 1985, pp. 447-450. Address: Paul Satz, Neuropsychiatric Institute, UCLA, 760 Westwood Plaza, Los Angeles, CA 90024.

— and —

"Handedness patterns in autism suggest subtypes," same authors with Marion Schulman; *Journal of Autism and Developmental Disorders*, Vol. 16, No. 2, 1986, pp. 155-167. Address: Henry V. Soper, Department of Neuropsychology, UCLA-NPI, 760 Westwood Plaza, Los Angeles, California 90024.

Letter

Editor's note: The following letter is from Temple Grandin, a recovered autistic woman who runs a successful stockyard designing firm and frequently lectures on her experiences as an autistic child. The "squeeze machine" she refers to is a device she invented as a young girl to provide the tactile stimulation she craved. Her book, Emergence: Labelled Autistic, is #74 on our publication list (see insert).

To the Editor:

I read your excellent editorial on holding therapy, and I agree with your conclusion that possible beneficial effects may be due to cerebellar stimulation rather than maternal bonding. In my own case, deep pressure over a large area of my body from the squeeze machine had a calming effect. Pressure has a calming effect on humans and animals (Takagi and Kobagasi, *Acta Medica et Biologica*, 1956; Kumazawa, *Electroencephalography and Clinical Neurophysiology*, 1963).

In my opinion a gradual gentle holding therapy would be just as effective. Horse trainers have found that there are two effective methods of breaking a wild horse. The first is 'horse holding therapy,' in which the horse is cast on the ground and its legs are tied, and the trainer sits on the horse and pets it all over until it stops resisting. The second method is a gradual taming approach which is less stressful. I think there are parallels between wild animals and autism; I used to flinch and pull away when touched, like a wild horse.

Occupational therapists are using deep pressure and vestibular stimulation with autistics; the stimulation is calming, and it is never forced upon the client. I designed my squeeze machine so I could control the pressure while I was in it.

Horse trainers have found that calming stimulation such as daily grooming improved the effectiveness of behavior modification methods for controlling stallions. Highly agitated and abusive behavior in an adult autistic man was reduced by rubbing his body several times each day with soft brushes.

Many research studies have shown that autistics have sensory processing defects. I feel that sensory treatment used in conjunction with other treatments would improve treatment effectiveness. Further research is needed.

Temple Grandin

Letters to the editor are welcome. Letters intended for publication must be signed and should not exceed one page in length, including references. Letters may be edited without consulting the authors. Please do not submit letters which have already been submitted to other publications.

News and notices also may be submitted for publication. 1988 publication dates are March, June, September, and December.