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New naltrexone report positive

The self-injury and social withdrawal of a 14-year-old autistic boy were reduced significantly by naltrexone, Anne Walters et al. report in the latest in a series of studies on this drug.

Walters says the long-standing, constant self-injury of the boy in this study was considered life-threatening. He required one-on-one supervision, and continually restrained himself in an attempt to stop his self-injury. During naltrexone treatment, the subject's self-injury dropped to near-zero levels; his panic attacks also dropped to almost zero, and he became noticeably less withdrawn. The boy's increased socialization, Walters notes, "provides tentative support for the notion that endogenous opiates may contribute to social withdrawal."

Drug blocks effects of natural opioids

Naltrexone blocks the effects of opioids, which are opium-like substances produced by the body. There are several opioid-related theories:

—that high opioid levels prevent self-injury from being painful to the individual with autism;

—that when an autistic person becomes upset or aroused, self-injury causes the release of opioids which calm the individual;

—and, that individuals with autism may actually be addicted to their own opioids, and injure themselves in order to raise their bodys' levels of these substances.

To date, several studies have shown that naltrexone reduces self-injury and/or increases sociability, while several others have shown little or no effect. These differing findings, Walters suggests, may be due to different drug forms and dosages, variations in study design, and the different rates and intensities of self-injury in study subjects.

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"A case report of naltrexone treatment of self-injury and social withdrawal in autism," Anne Walters, Rowland Barrett, Carl Feinstein, Arthur Mercurio, and William Hole; *Journal of Autism and Devel. Disorders*, Vol. 20, No. 2, 1990, pp. 169-176. Address: Rowland Barrett, Emma Pendleton Bradley Hospital, 1011 Veterans Memorial Parkway, East Providence, RI 02915.

600-child study underway in Japan

R-THBP: Early results promising

In 1987 a Japanese research team announced that it had succeeded in developing a method for mass-producing the enzyme tetrahydrobiopterin (R-THBP), and had begun a series of studies designed to evaluate its effectiveness as a treatment for autism.

R-THBP is not a drug, but rather a natural enzyme which the body produces for use in the synthesis of neurotransmitters. Some individuals, perhaps including those with autism, produce less R-THBP than they require.

The 1987 report presented preliminary findings of a double-blind, placebo-controlled study. Hiroshi Naruse and fellow researchers administered R-THBP to 84 autistic subjects for 12 weeks. They found that 53.7% of subjects receiving the substance showed significant improvement, compared to 30.9% on the placebo, and that only one child's behavior worsened on R-THBP. The researchers reported that "an especially marked effect of R-THBP was observed in the group under the age of five years."

They added that while tranquilizers treat only the symptoms and not the causes of autism, "R-THBP was most effective in improving those abnormal behaviors of autistic patients which seemed to be the core symptoms of the disease."

The research team has released two additional papers, providing more detailed findings on the initial autistic subjects, including the results of related trials of L-dopa and serotonin on some of the subjects. Significant positive effects were seen in some children. Translations of these papers from the original Japanese are being prepared for ARRI, and our readers will be provided with the information as soon as it is available.

Although the report of the third phase of the Japanese study, involving approximately 600 autistic children, is not yet completed, ARRI has learned that the initial good results of the R-THBP with young autistic children are holding up very well. ARRI readers will be kept informed of these developments, and closely related developments, at the earliest possible date.

Bruno Bettelheim dead at 86

Psychoanalyst Bruno Bettelheim, the leading proponent of the psychogenic theory which blamed autism on emotional trauma inflicted by "refrigerator mothers," committed suicide March 13 in a Maryland rest home at the age of 86. He had recently suffered a stroke.

Bettelheim directed the Sonia Shankman Orthogenic School in Chicago from 1944 to 1973 and wrote a number of books about autistic children, including *The Empty Fortress*. While his theories were abandoned by virtually all researchers more than two decades ago, when researchers first began uncovering evidence that autism is a biological disorder, Bettelheim never changed his view that autism was the result of emotional trauma.

A *New York Times* editorial, while calling Bettelheim a "pioneer" in treating childhood mental disturbances, noted that Bettelheim's claims that his treatment was effective have been criticized as "inflated," and that his theories are now considered outmoded and even misogynistic. The *Times* noted that Betteleheim's views are felt by many to have "not only [been] misguided but needlessly provoked guilt in parents."

While a number of obituaries praised Bettelheim for his work with autistic children, psychotherapist Phyllis-Terri Gold commented recently in *Newsday* that Bettelheim was "adamant and relentless in maintaining and propagating his unproven, unscientific theory . . . This 'refrigerator mother' hypothesis proved devastating to many mothers of autistic children."

Bettelheim's school was designed to provide a plush and nurturing atmosphere to help children whom he claimed were unused to attention and affection. However, following Bettelheim's death, the Chicago *Reader* published a series of letters from former

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