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Naltrexone: opioid blocker still looking good

In late 1991, the *Los Angeles Times* published an extremely favorable article about the use of naltrexone in autism that was picked up and republished, over a period of many weeks, by other newspapers throughout the U.S. The Autism Research Institute was flooded with inquiries about what had been described as, in effect, a new drug that was a cure for autism.

As readers of the ARRI know, naltrexone is not exactly a new drug—we have published at least six articles about it since 1987. Nor is naltrexone the "miracle cure" for autism—although, judging from the information available, it may very well be one of the safest and most effective drugs for autism. (However, see Letters section for information on safe and effective non-drug approaches.)

Despite its enthusiasm for naltrexone, the *Times* article did not mention that it is a highly promising treatment for self-injurious behavior (SIB), one of autism's hardest to treat and most distressing symptoms.

The *Times* article was based on a newly completed study by Barbara Herman on 13 autistic children. Naltrexone reduced the children's hyperactivity and inappropriate vocalizations, and increased their sociability and attention spans, with no adverse effects.

Why naltrexone?

Naltrexone works by blocking neuron receptors for opioids, natural opium-like substances in the brain. Interest in opioid-blocking treatments for autism was sparked in the late 1970s and early 1980s by observations by Barbara Herman and Jaak Panksepp that neonatal rats and chicks exposed to high levels of opiates showed autistic-like withdrawal.

Curt Sandman notes, in the *Journal of Child and Adolescent Psychopharmacology*, that the link between self-injury and opioids also intrigued researchers. "The repetitive, often compulsive, or ritualistic nature of self-injurious behavior," he points out, "has been observed to be similar to patterns associated with addictive behaviors." Researchers noted behavioral similarities between autistic individuals and opium addicts, who exhibited withdrawal, self-stimulation, and high levels of pain tolerance.

Panksepp, one of the original investigators of the opioid/autism link, also observed that opiate-treated animals exhibit "unusual motor flurries" much like autistic children's hyperactivity, walk on their toes, exhibit other unusual postures and perseverative behaviors, and fail to evince normal separation anxiety when removed from their mothers. In addition, he noted that seizures are a common symptom of autism, and opiates — particularly B-endorphin — "are very effective in promoting convulsive activity in the brain."

Panksepp speculated that disturbances in brain opioid levels "may block psychosocial development at its earliest stages — leading to failures in language acquisition and other idiosyncracies in learning."

There are two leading theories, Sandman says, as to why abnormal opioid levels could cause self-injury, and why opioid-blocking drugs may reduce it:

—The pain theory, which "posits that self-injurious behavior is a form of self-stimulation, possibly elicited in response to reduced sensory stimulation, and that opiate blockers may attenuate self-injurious behavior by enhancing the feeling of pain."

—The addiction theory, in which "the purpose of self-injurious behavior is to promote pain-induced release of opiates in order to achieve a 'high'" — an effect opioid-blocking drugs would prevent.

Naloxone studies

Naloxone, a drug used to treat heroin addicts, was the first opioid-blocking drug tested as a treatment for self-injury. Of eight early studies of the effects of naloxone on self-injurious behavior (in both autistic and non-autistic subjects), Sandman notes, six found that the drug reduced or eliminated self-injury. Of the two studies which found no improvements, one involved two non-autistic subjects, and the other found no improvement with naloxone but did see improvement when naltrexone was used.

In the mid-1980s, naltrexone — a drug which can be taken orally and is much more potent and long-lasting than naloxone — became available. Of 45 autistic patients treated with naltrexone in various studies, Sandman says, "about 38 of these patients have had positive responses, including significant reduction of self-injurious behavior in at least 24 patients."

In addition, as noted by the *Times* article, naltrexone shows promise in reducing autis-

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A facilitated communication "horror story"

An Australian family has been awarded full guardianship of their 29-year-old retarded daughter after spending more than a year fighting charges, made via facilitated communication and later proven untrue, that they sexually abused the girl.

The Australian newspaper *The Sunday Age* reports that the daughter, "Carla," was removed from her home on two separate occasions after she typed out messages (with the physical help of facilitators who held her arm) saying that she wanted to leave home to escape sexual abuse. Both times, the woman was distraught when she was taken away from the family from whom she had supposedly asked to escape. The nine facilitators working with Carla included Rosemary Crossley, director of the DEAL program, who is one of the most well-known proponents of facilitated communication.

The government called in two facilitators — one working with the DEAL program, and an "independent" facilitator trained by the same program — who worked with Carla, producing the same results reported by the facilitators making the initial allegations: accusations of abuse typed by Carla. But this communication came under question when Carla was asked simple questions, such as the name of the family dog, and responded, "I do not know the answer to that question." Carla also repeatedly referred to her father as "Joe" (which is not his name), and, while using sophisticated grammar and spelling, consistently spelled her own name wrong.

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To resolve the question of who was communicating — Carla or her facilitators — the Phillip Institute conducted tests agreed upon by both parties. Forty questions to which Carla knew the answers were prepared by the staff of the center she attended. The questions were taped by her usual facilitator, who then supported Carla's

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