Naltrexone: improvement noted by one study, violent reaction by another

Several previous articles in the ARRI have reported on the use of the drug naltrexone, a drug that blocks the effects of natural opium-like chemicals in the brain, to reduce self-injury in autistic individuals. According to a new double-blind, placebo controlled study by Barbara Kolmen et al., the drug also can improve behavior and social communication in young children with autism.

Kolmen and colleagues tested naltrexone on 13 autistic children between the ages of three and eight, and report that eight of their subjects showed significant improvement. "Parent, teacher, and clinical measures suggested modest improvement in...on-task behavior and social communication initiations," they say, "and a decrease in the negative behaviors of hyperactivity, restlessness, and disruptive behavior." Side effects of the drug were generally mild and transient, although two children became more aggressive while taking naltrexone.

Kolmen et al. say one problem they encountered was the bitter taste of the naltrexone tablets. "Two parents delighted with their children's responses declined to participate in a longer trial because of struggles with [administering the pills]," they say.

A separate report, by Sheldon Benjamin et al., warns that naltrexone administration may lead—at least initially—to a dramatic increase, rather than a decrease, in self-injurious behavior. One patient given naltrexone by the researchers responded violently, they say, "necessitating two-to-one supervision and nearly continual restraint by the end of the trial to prevent serious injury." Benjamin et al. describe a similar report by other researchers of a 15-year-old who initially responded violently to the drug naloxone (also an opioid blocker), but then reduced his self-injury significantly.

Noting that self-injury may result in a "high" because it releases natural narcotic-like substances, Benjamin and colleagues suggest that temporary increases in self-injury when naltrexone or naloxone administration begins may be caused by a phenomenon known as "extinction burst." When naltrexone blocks the effects of natural opioids, they say, "the self-injury theoretically should diminish and eventually disappear. During the initial period of non-reward, the target behavior may increase, as the subject seeks to reestablish the previous reinforcement."

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"Naltrexone in young autistic children: a double-blind, placebo-controlled crossover study," Barbara K. Kolmen, Heidi M. Feldman, Benjamin L. Handen, and Janine E. Janosky; *Journal of the American Academy of Child and Adolescent Psychiatry*, 34:2, February 1995, pp. 223-231. Address: Barbara Kolmen, Child Development Unit, Children's Hospital of Pittsburgh, 3705 Fifth Avenue, Pittsburgh, PA 15213-2583.

—and—

"Case study: paradoxical response to naltrexone treatment of self-injurious behavior," Sheldon Benjamin, Andrea Seek, Lucy Tresise, Ellen Price, and Maureen Gagnon; *Journal of the American Academy of Child and Adolescent Psychiatry*, 34:2, February 1995. Address: Sheldon Benjamin, Dept. of Psychiatry, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655.

Tourette's surgery: safety, value questioned

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misdiagnosed and that other treatments are not effective.

Rauch et al. note that some patients have benefitted greatly from surgical procedures for TS. For instance, Korzen et al. reported on one patient with severe tics, phobias, aggressive behaviors, and compulsive swearing, whose tics virtually disappeared after he underwent two thalamic surgeries. The patient became outgoing, was able to obtain full-time employment, and suffered no adverse effects.

However, they note that a number of other patients have shown little or no improvement from surgery, and some have suffered severe side effects. In addition, some patients show significant improvement immediately following surgery, but then experience a reemergence of symptoms.

Rauch et al. conclude that "there are serious uncertainties regarding any experimental neurosurgical procedure to the extent that such procedures produce irreversible changes, unknown adverse consequences, and questionable benefits."

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"Neurosurgical treatment of Tourette's syndrome: a clinical review," Scott L. Rauch, Lee Baer, G. Rees Cosgrove, and Michael A. Jenike; *Comprehensive Psychiatry*, Vol. 36, No. 2, March/April 1995, pp. 141-156. Address: Scott L. Rauch, Dept. of Psychiatry, OCD Unit, 9th Floor, Massachusetts General Hospital-East, 149 Thirteenth Street, Charlestown, MA 02129.

The Irlen Institute in Long Beach, California, is conducting research into the theory that sensory overload contributes to the learning and behavior problems of autistic individuals. The Institute uses glasses with filtered lenses as part of its treatment process.

For a fee of $28, Institute director Helen L. Irlen will send evaluation forms and an individualized report of results to parents interested in pursuing this type of therapy. Contact the Institute at 5380 Village Road, Long Beach, CA 90808.

Landau-Kleffner: more cases seen

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dividuals, children with LKS can also appear to be deaf to some noises and yet respond to others; in fact, many are misdiagnosed as deaf.

An important symptom of LKS is an abnormal EEG pattern (typically bilateral paroxysmal spike or spike-and-wave discharges from the temporal lobes), with or without seizures. The EEG abnormalities of LKS patients may be detectable only on extended sleep EEGs, and accurate readings may require implanted electrodes and evaluation by specialists trained in diagnosing LKS.

If diagnosed early, Landau-Kleffner can be treated by a surgical technique known as a "multiple subpial transection," in which surgeons make multiple tiny horizontal cuts in the areas of the brain where EEG abnormalities are detected. The disorder can also be treated with corticosteroid drugs. Some children can be cured completely, while others show great improvement but remain disabled.

"It is usually very persistent parents and physicians who arrive at the diagnosis of LKS," according to Jane Rudick, the mother of a recovered child with LKS.

Unfortunately, LKS is rarely diagnosed in its early stages. Jane Rudick, mother of a recovered child with LKS and director of CANDLE (an organization which disseminates information about LKS), notes that "there is a 'let's wait and see' attitude when a child fails to reach normal developmental milestones, particularly in speech and auditory comprehension." In addition, she says, "Most physicians have never seen a Landau-Kleffner case and those [who] have are often locked into the belief that each one is alike"—meaning that children without classic symptoms of LKS may go undiagnosed. She adds that "it is usually very persistent parents and physicians who arrive at the diagnosis of LKS or a variant."

Additional information about LKS, including the names of doctors and facilities that can diagnose and/or treat LKS, is available from Rudick at CANDLE, 4414 McCampbell Drive, Montgomery, Alabama 36111.

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"Surgical treatment of epilepsy in the context of autistic-like regression in young children," B.G.R. Neville, W. Harkness, J.H. Cross, H.C. Cass, V.C. Marmion Burch, and D.C. Taylor; *Developmental Medicine and Child Neurology*, Abstracts 1995 (European Paediatric Neurology Society Meeting), Vol. 37, No. 3(Supp), April 4, 1995. Address not listed.