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Campbell: Good autism drugs not yet here

New "wonder drugs" for schizophrenia, obsessive-compulsive behavior and manic-depression are making headlines, but there are not yet good drug treatments for autism. That's the conclusion of researcher Magda Campbell, who recently noted in *Clinical Psychiatry News*, "There is no single treatment that will produce a dramatic or even very significant change in most autistic children."

Campbell and others point out, however, that certain autistic children with specific symptoms can be helped, at least in the short term, by current drugs. Among the drugs which new studies show may be beneficial in some cases:

HALOPERIDOL

Recently Edwin J. Mikkelsen reported in the *New England Journal of Medicine* that low doses of haloperidol (more commonly known by its brand name, Haldol) quickly and dramatically reduced the self-injury of six severely retarded individuals. Mikkelsen reports that his patients have been followed for up to five years, and all appear healthier, more alert, and more responsive than before treatment. In addition, none of the side effects commonly associated with higher doses of haloperidol have appeared.

Campbell says studies show haloperidol can reduce behavior problems, facilitate learning, and increase language use and vocabulary in some autistic children—particularly older autistic children and those who are hyperactive. She warns, however, that a number of children taking haloperidol will develop tardive dyskinesia—involuntary muscle movements such as twitching or jerking—which can be permanent.

NALTREXONE

The drug naltrexone has significantly reduced an autistic woman's self-injury, according to a case study reported in the *American Journal of Psychiatry* by John Lienemann and Frank Walker. Previous studies have shown that naltrexone is very effective in some cases of self-injury, but has little effect in other cases (see ARRI 1/2, 2/2, 3/3).

Lienemann and Walker report that their 27-year-old patient struck herself in the jaw repeatedly, often causing bleeding and dislocation. The staff of the woman's institution had unsuccessfully tried to treat her self-injury with medications, behavior modification, and restraint.

"We considered the possibility that [she] was not experiencing pain but was instead gaining a powerful internal biochemical reward," the doctors note.

"There is no single [drug] treatment that will produce a dramatic or even very significant change in most autistic children."
— Magda Campbell

(Naltrexone reduces the effects of opioids, opium-like substances produced naturally by the body. Researchers theorize that autistic individuals injure themselves either because they have abnormally high levels of opioids and do not feel pain to the degree that other people do, or because self-injury releases large amounts of opioids which provide a natural "high.")

Lienemann and Walker started their patient on 50 mg. per day of naltrexone, and saw "dramatic improvement" beginning the first day. For 14 days, the woman did not injure herself; afterward her self-injury returned gradually but was much less intense and did not cause bleeding or dislocation. When naltrexone was discontinued, the woman again began injuring herself severely; the behavior diminished again when naltrexone was reinstated.

In addition to injuring herself less while taking naltrexone, the woman cried or screamed when she did hurt herself. The researchers comment that "this would support

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Fragile X: Two surprising reports

Two new reports offer contradictory information about the link—if any—between autism and Fragile X syndrome, a constriction on the X chromosome.

Fragile X, a leading genetic cause of mental retardation, also has been strongly linked to autism in boys. Now, however, researchers Ira Cohen et al. offer more evidence that Fragile X syndrome may be as common in autistic girls as in autistic boys.

Cohen and colleagues screened . 33 females with autism and found that 12.1% were positive for Fragile X. Even when related subjects with Fragile X were eliminated from the study, the rate of Fragile X among autistic girls was 9.4%, comparable to the figure for males.

The researchers say more study is needed to see if there is a link between autism and Fragile X in females, and they suggest that physicians consider Fragile X as a possible diagnosis for autistic females as well as males.

But does Fragile X cause autism....?

Researchers Stewart Einfeld et al., on the other hand, offer a surprising argument: that there is no link, or at best only a weak link, between autism and Fragile X syndrome.

Comparing subjects with Fragile X to a control group of retarded individuals, the researchers "failed to find a higher prevalence of autism among Fragile X individuals." They found no significant differences between the groups, and ratings on autism scales indicated that the control group actually tended to have *more* autistic behaviors than the individuals with Fragile X.

Two typical autistic behaviors—hand-flapping and gaze avoidance—were somewhat higher in the Fragile X group, leading Einfeld et al. to speculate that these two symptoms alone "may have misled clinicians into thinking that autism and Fragile X are associated."

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"Fragile X syndrome in females with autism" (letter), *American Journal of Medical Genetics*, 34, pp. 302-303, 1989. Address: Ira Cohen, Inst. for Basic Research in Dev. Disabilities, 1050 Forest Hill Rd., Staten Island, NY10314.

—and—

"Autism is not associated with the Fragile X syndrome," Stewart Einfeld, Helen Molony, and Wayne Hall; *American Journal of Medical Genetics*, 34, 187-193, 1989; no address listed.