

Autism Research Review

I N T E R N A T I O N A L

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Reviewing biomedical and educational research in the field of autism and related disorders

Ear infections: Traditional therapy comes under fire

Autistic children appear to be more prone to ear infections, and to problems from antibiotic use, than other children—reasons for their parents to take a look at new research questioning traditional treatments for the problem.

Robert Williams et al. recently analyzed 27 studies on the effectiveness of antibiotics commonly used to treat otitis media (inflammation of the middle ear). While several studies showed short-term improvement in children treated with antibiotics, they say, "eight studies that examined long-term patient outcome found no significant difference between treatment with an antibiotic and treatment with a placebo." Only one of every nine children given antibiotics for acute otitis media showed improvement, and only one of every six patients taking antibiotics for otitis media with effusion (fluid blocking the eardrum) got better.

Another study, by Howard Faden and colleagues, found that all of the three types of bacteria that cause most middle ear infections have developed resistance to commonly used antibiotics. They conclude that "some commonly used drugs are no longer valuable in certain areas of the country."

As for the tympanostomy—the surgery in which tubes are implanted in the ear to drain fluid blocking the eardrum—A. Scheck and colleagues report that the tubes may actually cause hearing loss. Their findings support an earlier study by A. Schilder et al., who found that 87% of children who received ear tubes between the ages of 2 and 4 showed structural damage of the eardrum at age eight, and that the children had a mean hearing loss of 13 dB.

Lawrence Kleinman et al. examined the records of 6,611 children recommended for the surgery, and found that about 25 percent of the procedures were inappropriate, and that in another 30 percent of cases the risks of the procedure equalled the benefits. "The effectiveness of tube insertions is not certain," the researchers says, "and complications of the surgery can include persistent discharge of fluid, perforation and scarring of the tympanic membrane and long-term hearing loss. Such surgeries should be reserved for cases of chronic infection which antibiotic treatment has failed to remedy."

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Risperidone reduces PDD symptoms in small-scale study

Risperidone may be helpful in treating pervasive developmental disorder (PDD) in adults, according to Scot E. Purdon et al. The Canadian researchers tested the drug on two men with PDD and mental retardation.

Prior to treatment, the researchers say, both men exhibited high levels of stereotyped behaviors including jumping, rocking, and grimacing. Seven to eight months of treatment with the drug, they report, caused "a marked improvement in behavioral symptoms, including a reduction in motor and facial stereotypies and in other autistic behaviors." In addition, the researchers say, "follow-up neuropsychological assessment showed improvement in both cases in mental competency, with Case 1 achieving scores above the mental retardation range."

Marked improvements in memory were also seen, and the subjects exhibited fewer obsessions and preoccupations. Little change occurred in language and visuospatial skills.

The researchers caution that this was a non-placebo-controlled study, and that both subjects were taking additional psychotropic medications which may have interacted with risperidone.

Risperidone, a fairly new drug, blocks the action of the brain messenger chemicals dopamine and serotonin. To date it has been used primarily to treat schizophrenia. Side effects of the drug (commonly known by its

brand name, Risperdal) include menstrual irregularities, weight gain, abnormal breast enlargement in males, heart palpitations, constipation, fatigue, low blood pressure, and mild postural hypotension (dizziness upon standing). At high doses, extrapyramidal symptoms (muscle stiffness, body shakes and tremors) may occur, but these are less common than with Haldol. Sedation and tardive dyskinesia also appear to be less of a problem with risperidone than with many other psychotropic drugs.

There is little information about how risperidone may interact with other drugs, particularly dopamine agonists or drugs that can cause postural hypotension. Risperidone is not for use with children.

"Risperidone in the treatment of pervasive developmental disorder," Scot E. Purdon, Wilson Lit, Alain Labelle, and Barry D.W. Jones; *Canadian Journal of Psychiatry*, September 1994, Vol. 39, pp. 400-405. Address: Scot E. Purdon, Neuropsychology, Alberta Hospital Edmonton, Edmonton, Alberta, Canada, T5J 2J7.

"Risperidone," Martin Livingston; *The Lancet*, February 19, 1994, Vol. 343, No. 8895, pp. 457-460. Address: Martin Livingston, University Department of Psychological Medicine, Gartnavel Royal Hospital, 1055 Great Western Road, Glasgow, G12 0XH, UK.

"Fact sheet: Risperidone," David Pickar, NAMI Advocate, July/August 1994.

Full inclusion debate spreads

The debate over "full inclusion"—the practice of placing even severely disabled children in regular education classrooms—continues to spread across the United States and Europe, with several cases making newspaper headlines and generating debate on morning talk shows. Some of these cases involve an interesting twist: school districts, many of which initially pushed full inclusion—frequently over the objections of parents and teachers—are now fighting parents to have severely disabled children removed from regular education classes and placed back into special education programs.

Among the cases spotlighted by the national media:

—Mark Hartmann, a nine-year-old autistic boy, currently is enrolled in a regular-education classroom in Loudoun County, Virginia. He is unable to speak or write, and his behavior problems include crying, tantrums, pushing, and pinching. Mark's teacher, Diane Johnson, wants the district to transfer Mark to a special education classroom, saying that he is learning nothing, that his screeching frequently disrupts her class, and that she is forced to neglect other students in order to work with him.

Mark's parents, who are fighting the move in court, say that their son was successfully included in kindergarten and first grade classes in another state, and blame the school district for what they say is insufficient

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