Med-Start Kids: Pros, cons of Ritalin for preschool ADHD

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The stimulant known as Ritalin displays pluses and minuses in preschoolers receiving the drug for attention-deficit hyperactivity disorder (ADHD), according to the first large, long-term study of the drug's effects in such youngsters.

In many cases, low doses of the medication, methylphenidate, safely quelled 3-to-5-year-olds' ADHD symptoms, the government-funded investigation revealed. However, preschoolers more often developed stimulant-related side effects, including irritability, insomnia, and weight loss, than older children with ADHD have in prior studies.

Preschoolers with ADHD also experienced slowed growth rates during the year after starting stimulant treatment, reports a team led by psychiatrist Laurence Greenhill of the New York State Psychiatric Institute in New York City. By the end of the 70-week study, these children were one-half inch shorter in height and weighed 3 pounds less than expected, based on average growth data for same-age U.S. children.

"Preschoolers with severe ADHD symptoms can benefit from [Ritalin], but doctors should weigh that benefit against the potential for these very young children to be more sensitive than older children are to the medication's side effects," Greenhill says.

His team presents its findings in five papers published in the November Journal of the American Academy of Child and Adolescent Psychiatry.

The researchers conducted the six-site study to address growing concerns over the safety and effectiveness of prescribing Ritalin to treat ADHD in preschoolers. Several sources of medication data have indicated that the number of prescriptions for Ritalin and other stimulants to 2- to 4-year-olds began increasing sharply around 15 years ago. However, it's unclear how many preschoolers with ADHD receive prescription stimulants.

ADHD affects about 2 percent of 2- to 4-year-olds. Symptoms include an inability to concentrate on tasks, restlessness, and extreme disorganization and forgetfulness.

The study began with 303 preschoolers who, according to teachers, parents, and clinicians, had exhibited moderate-to-severe ADHD symptoms for at least 9 months. The children and their parents first participated in a 10-week training program designed to alter ADHD behaviors. Only the 165 children who showed no gain from the training and whose parents consented to their treatment with Ritalin then received medication.
For the first week, each preschooler received daily Ritalin doses ranging from 3.75 milligrams to 22.5 mg. In contrast, elementary school students with ADHD typically receive daily doses of between 15 mg and 50 mg.

For the next year, preschoolers randomly received either the daily Ritalin dose that they had tolerated the best or placebo pills.

ADHD symptoms declined more in children taking Ritalin than they did in those taking placebos, the researchers report. However, only 22 percent of the children receiving Ritalin and 13 percent of those receiving placebos shed most or all of their ADHD symptoms, a difference that the analysis found wasn't significant.

About 1 in 10 kids dropped out of the study because of medication side effects. No instances of mania, depression, or suicidal thinking occurred among participants.

The new findings emphasize the need for physicians to monitor preschoolers with ADHD who take Ritalin, remarks psychiatrist Thomas R. Insel, director of the National Institute of Mental Health in Bethesda, Md.

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References:


Further Readings:


Sources:

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