ADHD Treatment Less Risky Than Nontreatment

The risk for substance abuse in untreated patients is 75%, compared with 25% in treated patients.

BY SHARON WORCESTER
Southeast Bureau

MIAMI BEACH — The risks of not treating attention-deficit hyperactivity disorder are far greater than the risks involved in treating the disorder, Dr. David Goodman reported at the annual meeting of the American Society for Adolescent Psychiatry.

ADHD persists into adulthood in about 50% of cases, and adults who present with previously untreated ADHD often present with comorbid psychiatric disorders and substance abuse disorders. Preventing these problems early by treating ADHD is far more effective and cost-effective than attempting to treat them later, said Dr. Goodman of Johns Hopkins University, Baltimore.

Smoking and substance abuse, sexual activity and related risks, and driving accidents have specifically been shown to be reduced by ADHD treatment.

Studies show that compared with treated ADHD, untreated ADHD is associated with greater risk of smoking at age 11 years and greater risk of substance abuse at age 13.

Preventing smoking in children with ADHD is important because it has been linked with increased risk of drug and alcohol abuse.

In a study of 100 ADHD patients and 200 controls, ADHD smokers were shown to have a significantly higher rate of alcohol and drug abuse, Dr. Goodman noted at the annual meeting, which was cosponsored by the University of Texas at Dallas.

Also, some opponents of treating ADHD argue that misuse and diversion of medication is "rampant," but research does not bear this out, he said.

In a survey of more than 13,000 high school students, 9% said they had used nonprescribed stimulants, 15% of those who had been prescribed stimulants had given them away, and 13% who had been prescribed stimulants had sold them.

This is a problem that deserves careful consideration when prescribing, but it is not "rampant," Dr. Goodman said, explaining that the risks of substance abuse in ADHD patients who are not treated outweighs the risk of such misuse and diversion of prescribed medications.

In fact, one study with 5-year follow-up showed that the risk for substance abuse in untreated patients was 75%, compared with 25% in treated patients—a rate not significantly different from that in the general population.

Furthermore, a metaanalysis of seven studies with a total of about 1,000 patients demonstrated that at 4-year follow-up, there was a twofold higher risk of developing substance abuse in untreated vs. treated ADHD patients. The risk was reduced twofold in treated patients. A third study showed no increased risk at ages 15-21 in treated patients.

"Treating is not a gateway to drug abuse, and we need to convey that to parents," Dr. Goodman said.

Untreated ADHD also has been linked with greater likelihood of being sexually active and becoming pregnant by age 15.

Untreated patients generally have intercourse earlier, and have more sexual partners, which leaves them at fourfold increased risk of sexually transmitted diseases, according to at least one study. These patients also are at substantially increased risk of pregnancy.

In a birth registry study of 160 ADHD patients and 76 controls, there were 43 pregnancies, of which 42 were to adolescent ADHD mothers. Fewer than half maintained custody of their children, Dr. Goodman noted.

Driving also is a problem in untreated ADHD adolescents. At age 17, children with untreated ADHD begin having car accidents, and multiple accidents are not uncommon, as shown by several studies, including driving simulation tests of treated and untreated patients.

Reports analyzing national highway safety data have also shown that ADHD is a significant contributor to motor vehicle accidents.

In fact, the risk of a fatal car accident is far greater than the risk of a patient dying from taking an ADHD drug, Dr. Goodman said.

Other risks associated with untreated ADHD include dropping out of high school and college.

Increased high school dropout rates are seen in untreated ADHD at around age 17, and at ages 19-20, those who have made it to college are at greater risk of dropping out. "Adolescent untreated ADHD is not a benign exercise," Dr. Goodman said. "We're not supposed to stick our heads in the sand and cross our fingers and pray to God that our children will come out of it at the other end of that adolescent tunnel. It's a very, very dark cave." ■

Risk Factors for Persistent ADHD

At least a dozen longitudinal studies show that ADHD persists past age 18 in about half of all cases.

Clinicians can no longer tell parents that their children will definitely grow out of ADHD, but it also is not necessary to shrug one's shoulders and say that only time will tell if the child will grow out of it. Family history can help identify children whose conditions might persist, Dr. Goodman said.

The data suggest that if a parent has ADHD and a child has ADHD, the child has a high likelihood of having adult ADHD. If the parent had ADHD but no longer has ADHD, the child is likely to grow out of it.

Other factors associated with increased risk of persistent ADHD include living in a chaotic and tumultuous environment, and having comorbid psychiatric conditions, Dr. Goodman noted.

Study Strongly Links Adenotonsillectomy With Improved ADHD

BY ROBERT FINN
San Francisco Bureau

Half of all children undergoing adenotonsillectomy who were found to have attention-deficit hyperactivity disorder before the surgery no longer met the diagnostic criteria a year later, according to a prospective, controlled study.

The study strengthens previous observations linking sleep-disordered breathing—a major reason for adenotonsillectomy—with attention and behavior problems.

The investigators, who were led by Dr. Ronald D. Chervin of the University of Michigan in Ann Arbor, acknowledged that their study does not prove cause and effect.

In addition, they acknowledged that their study still leaves an important puzzle:

Children slated to undergo adenotonsillectomy were significantly worse than the control children on several measures of sleep-disordered breathing.

Although they found a strong link between adenotonsillectomy and neurobehavioral improvements (behavior, cognition, and sleepiness), they also found that sleep-disordered breathing at baseline and its subsequent improvement did not predict either baseline neurobehavioral morbidity or its improvement in any area aside from sleepiness (Pediatrics 2006; 117:e769-e778).

The study involved 78 children between 5 and 13 years of age who were scheduled for adenotonsillectomy for any indication.

These children were compared with 27 control subjects in the same age range who were recruited from other surgical clinics.

Among the children who received adenotonsillectomy, 71 (91%) were judged to have a nocturnal upper airway obstruction.

Children were excluded from the study group if they required a polysomnogram for clinical purposes, if they had a history of treatment for sleep-disordered breathing, or if they had severe medical or neurologic conditions. Children were excluded from the control group for those reasons and also if they had a history of large tonsils, frequent throat infections, adenoidectomy, or tonsillectomy.

At baseline—generally within 1 month before scheduled surgery—all children underwent full-night polysomnography, and the next day received a battery of neurobehavioral assessments including the multiple sleep latency test of daytime sleepiness and a number of neuropsychological tests, Dr. Chervin and his associates said.

Polysomnography and neurobehavioral assessments were repeated at follow-up, approximately 1 year after surgery.

Before surgery, children scheduled to undergo adenotonsillectomy were significantly worse than the control children on several measures of sleep-disordered breathing, including minimum oxygen saturation, an index of obstructive apnea, a respiratory disturbance index, and the apnea-hypopnea index (AHI).

For example, the average AHI of the adenotonsillectomy children was 7.3 events per hour, compared with an average AHI of 1.2 events per hour for the control children, the investigators reported.

A year later, there were no significant differences between the adenotonsillectomy children and the control children on any polysomnographic measure. The average AHI of the control children remained 1.2 events per hour, while that of the adenotonsillectomy children declined to 1.1 per hour.

A total of 22 (28%) of the adenotonsillectomy children had ADHD at baseline, compared with only 2 (7%) of the control children, a significant difference. Of those 22 children, 11 no longer qualified for the diagnosis a year later, and there was no significant difference between the frequencies of ADHD in the two groups.

However, there was no significant association between measures of sleep-disordered breathing and either baseline or follow-up neurobehavioral morbidity.

The lack of an association could reflect inadequate sample size, Dr. Chervin and his associates said, but they noted that the sample size was more than sufficient to identify statistically significant postoperative changes in several other variables.

Another possibility is that standard measures of sleep-disordered breathing may not adequately assess the mild form of this condition that is common among children referred to adenotonsillectomy.

There is also the possibility that some correlate of sleep-disordered breathing, rather than sleep-disordered breathing itself, is the true cause of the neurobehavioral morbidity, the researchers suggested. ■