

ADHD Raises Children's Risk for Physical Injury

Megan Brooks

September 22, 2011 — Young adolescents with attention-deficit hyperactivity disorder (ADHD) are at increased risk for unintentional injury, but this risk can be mitigated by treating ADHD symptoms, new research suggests.

In a study published in the September/October issue of *Academic Pediatrics*, investigators found a significant association between ADHD symptoms and an increased risk for injury.

"Preventing injuries is probably not the primary reason to treat ADHD, but it is one of many positive consequences that should emerge if ADHD is properly treated," first author David C. Schwebel, PhD, professor and vice chair, Department of Psychology, University of Alabama at Birmingham, told *Medscape Medical News*. "Both psychotherapy and pharmacotherapy have evidence of efficacy," he added.



**Dr. David C.
Schwebel**

Furthermore, Dr. Schwebel suggested, it might be worthwhile to screen those children who experience injury, or frequent/repeated injuries, for ADHD and conduct disorder (CD) symptoms, so that they can be referred for treatment as needed.

Flaura Winston, MD, PhD, FAAP, director of the Center for Child Injury Prevention Studies at the Children's Hospital of Philadelphia, Pennsylvania, who was not involved in the study, agrees.

"Lots of injuries in a child should be a warning sign to start thinking about why this child is getting injured so much, and could this be a harbinger of ADHD," Dr. Winston told *Medscape Medical News*.

Broken Bones Most Common

Dr. Schwebel and colleagues investigated the association of externalizing behavior disorder symptoms and injury in 4745 fifth-grade boys and girls (mean age, 11 years). The children are participants in the University of Alabama at Birmingham's Healthy Passages Study, a long-term community-based study of adolescent health. Twenty percent are black, 42% Hispanic, 23% white non-Hispanic, and 5% multiracial or of other ethnicities.

Fourteen percent of study participants suffered 1 or more injuries requiring medical attention in the previous year. The most common injuries were broken bones (52%), joint injuries/sprains/strains (15%), and cuts/bruises (15%).

In bivariate analysis, the odds of injury increased as ADHD symptoms and CD symptoms increased, the investigators found.

Fifth graders at the ninetieth percentile of ADHD symptoms had odds of injury 1.9 times that of fifth graders at the tenth percentile of ADHD symptoms. Those at the ninetieth percentile of CD symptoms had odds of injury 1.5 times that of those at the tenth percentile of CD symptoms.

"These increased odds of injury are not insignificant," the investigators write.

In a multivariate analysis, only ADHD symptoms were associated with elevated likelihood of injury (odds ratio [OR], 1.22; 95% confidence interval [CI], 1.10 - 1.35).

Contrary to the study team's hypothesis, there was no statistically significant interaction between ADHD and CD symptoms.

"When you put ADHD and CD together, statistically, we did not see multiplication at all; ADHD is the primary issue," said Dr. Schwebel.

Boys at Greater Risk