Watch Out for Avoidance After Traumatic Injury

ARTICLES BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — Children who are hospitalized for moderate to severe physical injuries face a high risk of posttraumatic stress disorder symptoms and psychological impairment if they display certain avoidance behaviors, Dr. Christopher Peterson said in an interview during a poster session at the annual meeting of the American Academy of Child and Adolescent Psychiatry.

Examples of such behavior include the child saying it's difficult to feel happy or staying away from reminders of the event that led to his or her injury.

The finding "confirms some of the things we know about adults that we’ve been trying to apply to children," Dr. Peterson said. “That is, out of avoidance, hyperarousal, and reexperiencing, avoidance seems to be the factor that most likely goes with [psychological] impairment.”

He and his associates also found no correlation between the level of a child’s physical trauma and the severity of subsequent psychological impairment or PTSD symptoms.

“We thought that the kids who had major physical trauma would be more traumatized psychologically, but that’s not necessarily the case,” said Dr. Peterson of the department of psychiatry at Pennsylvania State University in Hershey. “There are other factors playing into that.”

The researchers studied 28 children who were hospitalized for moderate to severe injuries: 22 were injured in motor vehicle accidents, 5 during sports, and 1 in a fall from a second-story window.

The mean age of the children was 13 years, and more than half (16) were boys.

Among children, the rate of psychiatric hospitalization, averaged over the three time periods, rose 40% from 18 per 10,000 in 1996-1998 to 25 per 10,000 in 2002-2004.

The mean length of hospital stay dropped 12% from 12 days in 1996-1998 to 11 days in 2002-2004.

Among adolescents, the rate of psychiatric hospitalization rose 30% from 62 per 10,000 in 1996-1998 to 86 per 10,000 in 2002-2004. The mean length of stay dropped 8% from 8 days in 1996-1998 to 7 days in 2002-2004.

Among adolescents, the rate of psychiatric hospitalization rose 10% from 112 per 10,000 in 1996-1998 to 123 per 10,000 in 2002-2004. The mean length of stay dropped 14% from 8 days in 1996-1998 to 7 days in 2002-2004.

Dr. Blader, and Dr. Carlson also noted that increased hospitalization rates corresponded with an increasing number of bipolar disorder diagnoses made in children and adolescents. "Whereas in 1996 the most common diagnostic combination was ADHD plus disruptive disorder, by 2003 bipolar disorder plus either ADHD or a disruptive disorder was most common," they wrote in their poster.

"One inference is that the bipolar diagnosis has supplanted one element of the earlier ADHD plus [opposition defiance disorder/conduct disorder] constellation to denote similar clinical phenomenology. This shift may reflect greater appreciation of the importance of this construct and in this patient group or ‘upcoding’ to putatively more severe conditions for reimbursement.”

Dr. Peterson noted that the PTSD subscales of avoidance and hyperarousal were significantly correlated with the Columbia Impairment Scale score, but the reexperiencing subscale was not.

"Watch for kids who have avoidance symptoms and advise, ‘If those symptoms persist beyond 30 days, those are the kids you really need to track or get into treatment early’,” Dr. Peterson added, young people “who are dealing with [the physical trauma] over and over again, talking about it, struggling with it, maybe getting angry or tearful—those are kids who are more likely to work through it.”

The researchers also found that high levels of physical trauma severity were not associated with high levels of psychological impairment or PTSD symptoms, a finding they did not expect.

"Is that because a lot of these children may have been traumatized by the experience in the hospital with surgeries or interventions compared to the original physical trauma, or is that because of previous trauma that they had?" Dr. Peterson asked. “We don’t know.”

He and his associates are in the process of conducting the study in a larger patient population to see whether the findings bear out.

The study was funded by grants from the Pennsylvania State University, Youth, and Families Consortium and the Penn State Children’s Miracle Network.

In addition, funding was provided by a grant from the American Academy of Child and Adolescent Psychiatry that was supported by McNeil Consumer and Specialty Pharmaceuticals.

Psychiatric Hospitalization Up 40% for Kids, 39% for Teens

SAN DIEGO — Between 1996 and 2004, the rate of psychiatric hospitalization for children increased 40% while the rate for adolescents increased 39%, according to an analysis of National Hospital Discharge Survey data.

At the same time, the hospitalization rate for adults increased by 10%, Joseph C. Blader, Ph.D., reported during a poster session at the annual meeting of the American Academy of Child and Adolescent Psychiatry.

The findings are surprising, said Dr. Blader, considering efforts over the past decade by health insurers and advocacy groups to reduce reliance on restrictive settings that separate children from their families to address psychiatric emergencies and psychiatric illness.

“[T]here’s a tendency to regard psychiatric inpatient care as kind of old school and say, ‘Well, it’s really not something that we should be devoting a lot of resources to studying or learning about outcomes. We should be devoting attention to community resources,’” Dr. Blader, of the department of psychiatry at Stony Brook (New York) University School of Medicine, said in an interview. “That’s a very worthy goal, but the reality is, utilization of inpatient hospitalization continues to proliferate. In some respects it’s still a broken system [for the very ill].”

In a study funded by the National Institute of Mental Health, Dr. Blader and his associate Dr. Gabrielle A. Carlson examined National Hospital Discharge Survey data between 1996 and 2004 to compare the rates of psychiatric admission among children aged 5-13 years, adolescents aged 14-19 years, and adults aged 20-64 years. They grouped their analysis into three time periods: 1996-1998, 1999-2001, and 2002-2004.

Among children, the rate of psychiatric hospitalization, averaged over the three time periods, rose 40% from 18 per 10,000 in 1996-1998 to 25 per 10,000 in 2002-2004. The mean length of hospital stay dropped 12% from 12 days in 1996-1998 to 11 days in 2002-2004.

Among adolescents, the rate of psychiatric hospitalization rose 30% from 62 per 10,000 in 1996-1998 to 86 per 10,000 in 2002-2004. The mean length of stay dropped 8% from 8 days in 1996-1998 to 7 days in 2002-2004.

The mean length of hospital stay dropped 14% from 8 days in 1996-1998 to 7 days in 2002-2004.

Of the 26 patients who received an IM Ziprasidone treatment with 10 mg, 37% experienced acute dystonia, especially in drug-naive patients, Dr. Drew H. Barzman said in an interview during a poster session at the annual meeting of the American Academy of Child and Adolescent Psychiatry.

“We’re dealing with a younger population who are more prone to acute dystonia and acute EPS. Ziprasidone is a possible option.”

He and his associates reviewed the medical records of 59 children with a mean age of 14 years who were admitted to the psychiatric unit of Cincinnati Children’s Hospital Medical Center for acute agitation between Jan. 1, 2002 and July 11, 2005 and who received intramuscular ziprasidone (Geodon). The study marks an off-label use of the drug, according to prescribing information from the ziprasidone’s manufacturer, Pfizer Inc., the safety and efficacy of the drug in pediatric patients has not been established.

The most common primary diagnosis in patients was bipolar disorder (37%), followed by major depressive disorder (20%), mood disorder not otherwise specified (20%), and psychotic disorder (20%).

The researchers used the Behavioral Activity Rating Scale (BARS) to assess clinical response.

Patients received either 10 mg or 20 mg of intramuscular ziprasidone. Sixty-two (81%) of 77 episodes were treated with 20 mg while 15 (19%) were treated with 10 mg, said Dr. Barzman, a child and adolescent psychiatrist at the University of Cincinnati College of Medicine.

The mean BARS score decreased from 6.3 to 3.1. As for adverse events from the drug, 21 patients (30%) reported sleepiness or falling asleep, while 1 reported an increase in seizure frequency, 1 reported dizziness, 1 reported sore muscles and general aches, and 1 reported confusion.

Of the 26 patients who received an electrocardiogram after ziprasidone administration, only 1 patient had a QTc above 500 milliseconds, but that patient did not have a baseline EKG before administration.

Key limitations of the study, Dr. Barzman said, were its retrospective design and lack of a control group.

He disclosed that Pfizer supported the study and that he has received research support and consulting fees from Pfizer.

IM Ziprasidone Effective for Youth With Acute Agitation