Therapy Linked to Autism Recovery

By Jeff Evans

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Baltimore — Growing evidence suggests that a small minority of children with autistic spectrum disorder can recover from the condition to near-normal levels with only mild residual symptoms. Dr. Dan Fein, Ph.D., said at a meeting on developmental disabilities sponsored by Johns Hopkins University.

“We have no idea yet [whether recovery] is due to maturation of kids who have a certain type of autism or treatment effects.” There are very few people who are looking at this, but there are a few groups that are starting to look at it now,” said Dr. Fein, professor of psychology at the University of Connecticut, Storrs.

Early studies of the late 1960s and early 1970s included a small minority of children who moved off the spectrum, but in most cases the researchers only suspected that those children were misdiagnosed. More recent studies have found that early diagnoses are stable in most children with autistic spectrum disorders (ASDs), but there is a subgroup that moves off the autistic spectrum. These children have been regarded as misdiagnosed by some, but evidence from other studies suggests that these children had unstable autism and “probably were not misdiagnosed,” she said.

In one study, recovery from autism was reported in 9 of 19 children who received 40 hours per week of applied behavior analysis therapy (ABA). These children successfully completed normal first grade in a public school and had normal or above average IQ scores. They gained an average of 30 IQ points more than their counterparts in a control group of 48 children who received 10 hours per week of ABA; only 1 child in the control group recovered. Of the 10 other children in the intense ABA therapy group, 8 remained in the mildly impaired range, and 2 were profoundly retarded (J. Consult. Clin. Psychol. 1987;55:3-9).

In two attempts to replicate this study, there was substantial improvement in ABA-treated autistic children in areas such as cognition and academics, but not in adaptive skills and behavior. Yet ABA therapists in the two studies did not report recovery among any of the children. One recent study did replicate the results of the positive study with ABA therapy. After 4 years of treatment with ABA, 11 of 23 children with autism were in regular classes and scored normally on tests of IQ, language, and socialization. At 2 years of age, the 15 children in that study who left the spectrum were indistinguishable on measures of communication, socialization, symptom severity, and ability from children who remained autistic. But at 4 years of age, the “recovered” children reached almost normal levels on these measures.

The only major difference between these groups at 2 years of age was in motor skills, in which recovered children had significantly higher scores that reached near-normal levels at 4 years of age.

In another study that will appear in the Journal of Autism and Developmental Disorders, Dr. Fein and her associates reported on 14 children aged 5-9 years with prior ASD diagnoses. These children had IQ scores in the normal range, were placed in age-appropriate mainstream classes, and were considered to be generally functioning at the level of their normally developing peers.

They had normal performance on many measures, including different aspects of linguistic ability, expressive vocabulary, sentence morphology, and socialization.

But these children still had impairments in knowing the difference between mental state verbs (know, guess, estimate) and in reasoning about animate objects (not including people). They failed to produce good narratives, judged by such factors as being less likely to discuss major events and characters’ motivations. They also did not understand “second order theory of mind,” such as knowing “what does Johnny know that Susie knows about what Rick thinks,” Dr. Fein said.

But follow-up visits with these children aged 9-12 years of age indicated that they were “closing the gap” between themselves and normal children because their only remaining deficit was with mental state verbs.

Misdiagnosis of children who leave the spectrum appears unlikely, so the reasons why a small minority of autistic children can recover may lie in the possibility that they have a form of autism that can be alleviated with maturational or therapeutic intervention.

Among nonautistic children.

In general, parents of children with autism judged their child’s health to be significantly worse than did parents of children without autism. Parents judged 3.5% of their children to be in poor health and 7.9% to be in fair health, compared with 0.6% and 2.9%, respectively, among nonautistic children.

After adjusting for child age and gender, primary household language, highest household educational attainment, and insurance status, autistic children had 21 times the risk of being judged in poor health and 7.7 times the risk of being judged in fair health, compared with nonautistic children.

Children with autism were 23 times more likely to be diagnosed with a behavioral or conduct disorder, 8 times more likely to have a diagnosis of ADHD, 15 times more likely to have a diagnosis of depression or anxiety, 4.5 times more likely to have a food allergy, and 2.4 times more likely to suffer from headache.

Children with autism had much more interaction with the medical system than those without, with parents mentioning significantly more preventative care visits, nonemergency visits, and emergency visits during the previous 12 months. Ten percent of children with autism paid two or more visits to the emergency department during that period, compared with 4.9% of children without autism.

Although not directly addressed in the study, these results suggest that parents bear in caring for a child with autism, Dr. Gurney said at the meeting sponsored by the American Pediatric Society, Pediatric Academic Societies, the American Academy of Pediatrics. “I bring this up because it’s not unusual to hear that these parents are very high maintenance.”