**Autism Symptoms at 18 Months Predict Dx at Age 3**

*By Robert Finn*

**San Francisco** — Eighteen-month-old children who scored above the threshold for autism spectrum disorders on the Autism Diagnostic Observation Schedule (ADOS) were more than six times as likely to have a clinical diagnosis of autism spectrum disorder at the age of 3 years than those who scored lower, Dr. Lonnie Zwaigenbaum reported in a poster presentation at the annual meeting of the Pediatric Academic Societies.

Nevertheless, scores on the Autism Diagnostic Observation Schedule (ADOS) must be interpreted with caution in children who are 18 months old, wrote Dr. Zwaigenbaum of McMaster University, Hamilton, Ontario, and his colleagues. ADOS scores should be interpreted in the context of an overall clinical assessment, because the test has a high sensitivity but a relatively low specificity, missing more than 50% of the children with diagnoses at 3 years.

The study involved 101 children who were at increased risk of autism by virtue of having an older sibling with autism. Also included in the trial were 42 control children with no increased risk of autism.

The children were assessed with ADOS and the MacArthur Communication Development Inventory at the average age of 18 months, and they received a blinded diagnosis by an expert clinician at an average age of 39 months.

The diagnostic interview was based on the clinician’s best judgment after a comprehensive assessment that included the ADOS, the DSM-IV, and the Autism Diagnostic Interview–Revised. The ADOS scoring algorithm includes one cutoff score for autism spectrum disorders (ASDs) and a higher cutoff score for autism. Only one of the control children scored in the ASD range at 18 months, but that child was not in the ASD range at 24 months and did not have a diagnosis of ASD at 3 years.

Using the autism cutoff, the 18-month assessment identified 9 of 20 children who ended up with a clinical diagnosis at 3 years (sensitivity of 45%) and 6 of 81 children who did not receive a diagnosis at age 3 (specificity of 93%).

With the less-stringent ASD cutoff, the 18-month assessment identified 16 of 20 children who ended up with a clinical diagnosis at 3 years (sensitivity of 80%) and 23 of 81 children who did not receive a diagnosis at age 3 (specificity of 72%). The relative risk of a clinical diagnosis at 3 years given a score above the ASD cutoff at 18 months was 6.4, which was statistically significant.

There were four false-negative children with clinical diagnoses at 3 years who scored below the ASD cutoff at 18 months. Two of these children had very low scores—6 and 1 on the ADOS, in which the ASD cutoff is a score of 7.

Of those one children deteriorated markedly by 24 months and was diagnosed with autism. The second child had moderate progressing impairments between 18 and 36 months, and his ADOS score at 24 months was still below the ASD cutoff.

More longitudinal research is needed to better understand the sources of disagreement between the diagnostic assessments, the investigators said.