Volume 13, No. 1 1999

Autism Research Review

INTERNATIONAL

A quarterly publication of the Autism Research Institute

Reviewing biomedical and educational research in the field of autism and related disorders

Video study hints that autism can be spotted in babies

The signs of autism can be detected even in very young infants, "and sometimes even at birth," according to a new study by Philip Teitelbaum and colleagues.

The researchers obtained home videos of 17 autistic children, taken when the children were babies. Careful analysis of the films, they say, revealed "disturbances... in the shape of the mouth and in some or all of the milestones of development, including lying, righting, sitting, crawling, and walking."

For example, the researchers say, none of the autistic babies rolled normally. At an age when other babies were using a "corkscrew" method to roll, autistic babies would raise their heads and pelvises and topple over, moving all parts of their bodies in unison. Autistic babies also tended to fall easily when they sat, failing to catch themselves with their arms. In addition, the autistic children moved assymetrically when crawling and walking.

The researchers say that abnormalities were clearly visible by the age of four to six months. "Our findings support the view that movement disturbances play an intrinsic part in the phenomenon of autism, that they are present at birth, and that they can be used to diagnose the presence of autism in the first few months of life," they conclude. Such early diagnoses, they say, would allow therapy to be started while autistic children are still infants.

In earlier research (see ARRI 8/3), Julie Osterling and Geraldine Dawson studied videos of 11 autistic children and 11 nondisabled children taken during their first-year birthday parties. The researchers reported that almost all of the autistic children could be identified by observers, based on the presence or absence of behaviors such as pointing, eye contact, and responding to their names.

—

"Movement analysis in infancy may be useful for early diagnosis of autism," P. Teitelbaum, O. Teitelbaum, J. Nye, J.

continued on page 6

Huge increase in autism incidence reported in California; autism cluster investigated in Brick, New Jersey

The long-awaited California study of "Changes in the Population of Persons with Autism and Pervasive Developmental Disorders" documents a shocking recent upsurge in California's population of autistic individuals. The report, prepared by the Department of Developmental Services, was mandated by the State Legislature, and is based on analysis of data from California's 21 Regional Centers, which serve a population of almost 140,000 developmentally disabled clients. The data show that the population of autistic clients rose from 3,864 in 1987 to 11,995 in 1998—an increase averaging 26 percent per year. In contrast, increases of only 3 to 4 percent per year were reported for cerebral palsy, epilepsy, and mental retardation, the other developmental disabilities used as statistical controls, which increased only in proportion to the population growth of California.

By the end of 1998, nearly half the population of persons with autism in California consisted of children between birth and nine years. Analysis of the trend in the period covered by the report suggests the increase may be expected to continue.

Autism experts in many countries have engaged in controversy over reports of increasing incidence of autism. Most feel the perceived increase is real, while others argue that there is merely an increase in awareness. While a single study rarely settles a controversy to the satisfaction of all parties, the new California study in many ways presents the most credible finding yet reported, strongly supporting the view that for reasons not yet established, the population of autistic children—especially those at the higher end of the autistic disability sprectrum—is increasing at an alarming rate.

In related news, officials from two federal agencies are studying what appears to be a cluster of autism cases in Brick, New Jersey (first reported in ARRI, Vol. 11, no. 4, 1997). At least 40 children in the 6,000-person township have been identified as autistic, a rate more than 3 times the national average.

Researchers from the Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substance and Disease Registry are analyzing the surface and ground water in Brick, and attempting to determine if the parents of Brick's autistic children were exposed to chemicals from industrial sites, waste dumping, or other sources. They expect to report initial findings by summer.

Jacquelyn Bertrand, who is heading the CDC's investigation, says, "I think there is a cluster here. I don't know why." And Sandra Lee Harris, an autism expert at Rutgers University, says, "There certainly does, on the face of it, appear to be a disproportionate number of children with a diagnosis of autism."

Brick is only eight miles south of Toms River, a community where a higher-than-average number of children have reportedly been diagnosed with cancer.

The autism increase story is just beginning to unfold. Watch the ARRI for more information as it develops.

—

Copies of "Changes in the Population of Persons with Autism and Pervasive Developmental Disorders" may be found on the ARI website, www.autism.com/ari/, or can be requested from the California Department of Developmental Services (attn: Paul Verke), 1600 9th Street, Room 240, Sacramento, CA 95814.

—

"U.S. officials investigate 'cluster' of autism in New Jersey town," CNN, February 1, 1999; "Autism cluster?," MSNBC, January 18, 1999; and, "Autism 'cluster' investigated," ABC News, January 18, 1999.