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**Intervention in Infants Showing Early Signs of Autism Reduces Symptom Severity, Odds of Diagnosis by Age 3**

Receipt of a pre-emptive intervention for autism spectrum disorder (ASD) from age 9 months among a sample of infants showing early signs of ASD led to reduced ASD symptom severity across early childhood and reduced the odds of an ASD diagnosis at age 3 years, according to a study published in *JAMA Pediatrics*.

The intervention, Interaction to Promote Positive Parenting (iBASIS-VIPP), was tested in a blinded, randomised clinical trial at 2 sites in Australia, and included 104 infants aged 9 to 14 months showing early behaviours associated with later ASD.

“The use of iBASIS-VIPP resulted in 3 times fewer diagnoses of autism at age 3 years,” said Andrew J. O. Whitehouse, PhD, Telethon Kids Institute, Nedlands, Western Australia. “No trial of a pre-emptive infant intervention, applied prior to diagnosis, has to date shown such an effect to impact diagnostic outcomes -- until now.”

For the study, infants were randomised 1:1 to receive usual care, with or without the iBASIS-VIPP over a 5-month period. The pre-emptive intervention group received a 10-session social communication intervention; usual care comprised services delivered by community clinicians. Infants were assessed at baseline (approximate age, 12 months), treatment endpoint (approximate age, 18 months), age 2 years, and age 3 years.

The primary outcome was the combined blinded measure of ASD behaviour severity (the Autism Observation Scale for Infants and the Autism Diagnostic Observation Schedule, second edition) across the 4 assessment points.

A total of 89 participants (45 in the iBASIS-VIPP group and 44 in the usual care group) were reassessed at age 3 years. Infants who received the pre-emptive intervention had lower odds of meeting diagnostic criteria for ASD (7%) than those who received usual care (21%) at age 3 years, with a number needed to treat of 7 participants.

“We also found increased parental sensitivity to their baby’s unique communication and an increase in parent-reported language development,” said Dr. Whitehouse. “Other general aspects of development were not affected. The children falling below the diagnostic threshold still had developmental difficulties, but by working with each child’s unique differences, rather than trying to counter them, the therapy has effectively supported their development through the early childhood years.”

“Autism is not typically diagnosed until age 3; however, interventions commencing during the first 2 years of life -- when the first signs of development difference are observed and the brain is rapidly developing -- may lead to even greater impact on developmental outcomes in later childhood,” he added. “This is a genuine landmark moment for child health research. Our aim is to understand each child’s strengths and challenges so that we can better support and nurture the unique abilities they bring to this world. This is an important step forward in what we hope is an opportunity to develop new clinical models that use very early intervention in babies showing early behavioural signs of autism.”

Reference: <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2784066>

SOURCE: Telethon Kids Institute