

Signs of Autism in Infancy

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Abstract

The first three years of life are when signs of Autism Spectrum Disorder begin to appear(1). Early diagnosis of children with Autism Spectrum Disorders (ASD) by their families is crucial, as it is becoming increasingly clear that early intervention is essential in promoting better development for these children(2). In many instances, the early signs of autism may be the absence of a skill or ability that typically develops at a given age rather than the appearance of the unexpected behaviours which are commonly present in Autism Field(3). Paediatricians should monitor infant's development carefully since the early signs may be evident if one is aware of what to look for.

Keywords: Autism, Spectrum, Centres for Disease Control (CDC)

Introduction :

The Centres for Disease Control (CDC), Atlanta, reports that most parents with autistic children notice some signs within the first year, and 80 to 90 percent observe developmental differences by the time their child is 2 years old. Retrospective videotape analyses and parental report studies suggest that symptoms can be seen during infancy. Parental recall of abnormalities in the first year of life includes poor eye contact and lack of response to the parents' voices or attempts

to play and interact(4,5). Extreme temperament and behaviours such as irritability or passivity, have also been described. Reviewing home videos of the first year of life, several authors reported significantly reduced social interaction and orienting to faces and absence of social smiling as well as lack of spontaneous imitation, abnormal posture and movement patterns(6–8). Based on the sequential review of the video material, they suggested three categories of onset patterns: “early-onset” presentation with low levels of social communication from early life, a “regression” category displaying initial high levels of social communicative behaviour followed by significant decrease over time, and a “plateau” trajectory characterized by normal initial levels of behaviour but little progress in social communication with age (9).

Discussion :

Prospective studies followed up infants discharged from the nurseries have shown the following, 1. infants who were later diagnosed to have autism, looked at bright lights longer than controls(10) 2. Infants later identified with ASD showed a mean decline in their eye fixation from 2 to 6 months of age(11) 3. high risk infant siblings (siblings of children who had Autism) took with low-risk infants between 6 and 12 months, longer latency to disengage attention

compared with normal children(12). Also restricted and repetitive behaviours, including atypical sensory responsivity, have been reported as elevated at age 12 months in high-risk infants later diagnosed with ASD(12). Some of home videos found that 12 months old infants later diagnosed with autism displayed lower quality of affect, less frequent orientation to name, and less looking at others compared to typically developing age matched peers later diagnosed with Developmental disorders(7).

Signs of Autism Spectrum Disorder seen in infancy are:

1.Declining eye contact

From young age ,babies often make eye contact with others . By the age of 2 months, babies can typically locate faces and smile when you talk to or smile at them. Later eye contact becomes means of establishing social connections and learning more about one's environment. The decrease in eye contact could be a precursor to Autism (13).

2.Limited or no response to their name

Most infants begins to respond their own names by the time they are 9months , especially when their mother calls them. Developmental trajectories of infants with Autism can vary, many do not turn or stop when they called by their own names even after 9 months of age. Researchers say this usually appears as a pattern of nonresponse, rather than a single instance(3).

3. Gesturing and joint attention

Babies usually learn to gesture before they learn to talk. In fact, gesturing is one of the earliest forms of communication. Baby usually start waving bye by 10 months. Autistic children generally gesture much less than children with

normal development trajectory. Children points to objects they want by the end of first year. Many children with autism don't point to the object, but they may hold their parents hand and directs them what they need. During this action they do not look at the parents face(this sometimes called "instrumental pointing")(14). The ability to focus on an object or area when another person points at it is known as joint attention. Infants typically developing display joint attention as early as 6 to 9 months of age. Infants with Autism have difficulties with displaying joint attention(3). They tend to look somewhere else when parents are pointing to something or may look at the parents' fingers or arms. Showing joint attention is a critical step within a child's social and language development.

4.Delayed or absent development of speech

Babies typically begin speaking one or two meaningful words by the end of their first year. The first words are usually kinship words ("mama", "pappa", "dadda" or word approximation for what they want – "mumumm" for food). Parents frequently misinterpret the meaningless babbling of many autistic youngsters. A word or sound needs to have a purpose (to ask something more to indicate something ,or to have the chance to engage with another person) in order to be considered meaningful. Many infants with early autism symptoms don't start using words with meaning until later in life, and they have delay expressive and receptive language(12).

5. Lack of interest in people

Many infants who have early features of Autism avoid activities with children normally enjoy, like cuddling or kissing. They often ignore their family members or caregivers. Sometimes they don't cry or show any signs of apprehension

even left with strangers. By age of 9 months reduced eye gaze, facial expressions, gestures and vocalizations during interactions have been observed in infants later diagnosed with Autism(13).

6. Difficulty with social play

Peekaboo is a game that most parents or caregivers play with their infants and babies enjoy playing peekaboo as early as 6 months. The mother hides her face, babies become excited. However, a lot of autistic infants do not react enthusiastically when they see their mother's face and instead turn away or focus on the cloth.

7. Temperaments

Researchers discovered that there were some behaviours that set apart infants with autism from their siblings even at age of 6 months of age(15). At 6 months age, they have a docile temperament and showed less interest in their environment. Later, as they got closer to 12 months age, they became extremely irritable, had the propensity to focus on things, engaged in less social interaction, and lacked facial expression. In addition, temperament differences can impact behaviours and psychopathology indirectly by changing the way in which adults interact with the infant, altering their experiences(16).

8. Unusual body movements

Babies with autism before 12 months may display unusual body movements, such as hand

flapping, rocking, or spinning(12). Unusual responses to sensory input, such as avoiding touch or being hypersensitive to certain sounds also noted in first year(17).

9. Unusual play patterns

Children love exploring new toys and look at parents frequently when they are playing with toys. By first year, they start using toys in functional way. Infants who develop autism either avoid toys or do the same action (eg. keep banging the toy every time in a similar way) or they may do unusual things like turning a the toy car over and playing only with wheels of the car(18).

10. Delayed motor skills

By age of 6-9 months, delayed sitting, delayed reach to grasp and delayed goal directed reaching observed in infants with Autism(19). However delayed motor skills should be considered high risk for autism only if there is delayed or deviant social and language milestones.

Conclusion

There are many early clinical features that are predictive of autism. A high index of suspicion, an open mind, and frequent follow-up of the infant who has unusual behaviours are extremely important in making early diagnosis of Autism.

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