

Autism Spectrum Disorders

All of us are well aware that autism is a spectrum disorder, that encompasses a wide continuum of behaviors, the core features including impaired social interaction, impaired verbal and nonverbal communication and restricted and repetitive patterns of behavior. The most unfortunate aspect of autism is the ambiguity surrounding the genetic and environmental etiological pre-determinants. However there is clear agreement that the disorder may be associated with structural and functional abnormalities in several areas of the brain, suggesting that a disruption in fetal brain development contributes to the disorder(1). Chromosomal abnormalities and other neurological problems are also more common in families with autism(2). The previous observation that MMR vaccine may be associated with autism has been proved untrue(3). But what bothers the practicing pediatricians is the fact that there is a definite increase in the incidence of Autism Spectrum Disorders that cannot be explained by better detection facilities alone.

How can the parents recognize autistic features?

Parents are usually the first to notice unusual behaviors in their child. In some cases, the baby seemed "different" from birth, unresponsive to people or focusing intently on one item for long periods of time(4). The first signs of an autism spectrum disorder can also appear in children who had been developing normally. When an affectionate, babbling toddler suddenly becomes silent, withdrawn,

self-abusive, or indifferent to social overtures, something is wrong. The impairment in social interaction can be elicited by lack of appropriate eye contact, enjoying playing alone not mixing with other children of his/her age, although the child may enjoy the company of children younger or elder. "They are in their own world and withdraw into themselves".

The absence of normal pretend play is common in autistic children. Odd play may take the form of interest in parts of objects instead of functional uses of objects. These children may enjoy repeatedly spinning or rotating objects such as wheels, fans and other moving objects(5). They may not use language meaningfully such as in conversations or asking questions in a logical sequence. These children may continuously repeat certain songs; words or rhymes (echolalia) and they may not begin or continue conversations. Pronominal reversals are common in autistic children, including saying "you" instead of "I". The protodeclarative pointing is absent in autistic children. These children may respond to questions by gestures or leading adults by the hand. Some autistic children are non-verbal. Many autistic children seem to have dysfunction in sensory integration, the sensory experiences being tactile, vestibular, olfactory, auditory, visual, proprioceptive and pull of gravity. In autistic children these senses may be hyperfunctioning or hypo functioning or may result in the person experiencing interference. Some children with autism may show hyperactivity or extreme restlessness and others may show over passivity. Early TV exposure at ages 1 and 3 is associated with attention problems at age seven(6).

Autism may/may not be associated with a

wide range of fine and gross motor impairments such as skilled movement and eye-hand co-ordination, speed praxis and imitation, gait, posture and balance. 70% of autistic children have nonverbal IQ below 70, about 50% below 50 and only 5% above 100. Occasionally some autistic children are relatively high functioning with speech and intelligence intact and some are supra normal with or without defects in executive functions. Some autistic children may show good pictorial memory(2). In short they may have many of the skills in isolation, but not "connecting well", when it is actually required.

Screening for Autism

"Developmental Friendly Well Baby Clinic" check-up should include a developmental screening test. Your own observations and concerns about your child's development will be essential in helping to screen your child(4). Reviewing family videotapes, photos, and baby albums can help parents remember when each behavior was first noticed and when the child reached certain developmental milestones. Several screening instruments have been developed to quickly gather information about a child's social and communicative development within medical settings. Currently, most of the medical practitioners follow DSM-IV criteria to diagnose Autism. These criteria are little complex to understand and can be used only by medial practitioners, because of which many children remain undiagnosed. Hence there is a need for developing a user-friendly behavioral checklist to detect autism that can be used by health workers and anganwadi workers, who come in contact with these children and their parents quite often. This will help for early detection and thus for early intervention. Trivandrum Autism Behavioral Checklist (TABC) is one such simple tool

developed at Child Development Center that has shown results comparable with Childhood Autism Rating Scale (CARS)(7).

Intervention Strategies for Autism

There is no single best treatment package for all children with Autism Spectrum Disorder. Decisions about the best treatment, or combination of treatments, should be made by the parents with the assistance of a trusted expert diagnostic team. The major treatment modalities are Pharmacotherapy, Sensory Integration Therapy, Auditory Integration Therapy, Diet Therapy, Mega Vitamin Therapy, Lovaas Behavioral Modification, Applied Behavior Analysis, *etc.*(8).

Unfortunately, the practicing pediatricians in the community do not have easy access to most of these therapy modalities. We should be focusing much more on screening for Autism Spectrum Disorders, keeping in mind a possible strong association between prolonged TV watching below 3 years, absence of siblings to play with, poor parental communication skills and Autism Spectrum Disorders. The Indian Academy of Pediatrics having seized the gravity of the situation request the Government of India to include care of below 3 as a special program in the ICDS. May I request each state, district and city branch of IAP to create public awareness on Autism Spectrum Disorders.

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