



AUTISM SPECTRUM DISORDERS (ASD) SPECIALLY VISION ON MANAGEMENT

Pathology

Mr. Kamal Sharma Audiologist and Speech Language Pathologist(ASLP)

ABSTRACT

Autism Spectrum Disorder is a developmental disorder which is generally develop in school aged children , which is generally seen in maximum population of child in 20th century. Those children may have some undesirable behaviors such as self stimulation, self harming, excessive playing with saliva, repetition behaviors and lots. Which also have self talking behaviors which is meaning less in nature which is known as jargon. In some cases we can find that Autism features were developed due to over television and mobile using, which develops child lack of attention and one side communication and others learning difficulties. Some of the children contains features of ADHD along with Autism and Cerebral Palsy which is known as Global Developmental Delays(GDD). Its may or may not be due to prenatal peri-natal or postnatal causes. In some cases its also known as sensory processing disorders(SPD)(1) This child also may have hypersensitive or hyposensitivity to any sounds, noise smell or the touch. Generally the child also develop olfactory(smelling) behaviors in growing age periods those child generally don't want to attached with anyone for long times.

KEYWORDS

INTRODUCTION

Definition: Autism is a **pervasive developmental disorder**. Its symptoms include differences and disabilities in many areas including **social communication skills, fine and gross motor skills, and sometimes intellectual skills.**(Greenspan, Stanley, "The Child with Special Needs." C 1998)(2)

In between are a variety of pervasive developmental disorders including Rett syndrome, Fragile X Syndrome, and pervasive developmental disorder not otherwise specified (PDD-NOS). (3)

Causes:

- Its may cause because of Prenatal Causes(Before Delivery), such as:
 - Low Maternal Ages
 - Mal Nutrition
 - Alcohol or smoking consumptions
 - Oto-toxics drugs with out Doctor Prescriptions
 - Mental stress or others many factors
- Prenatal causes(During delivery)
 - Types of delivery(Normal, Cesarean delivery, Forceps delivery, Breech delivery)
 - Delivery at home, Hospital.
 - During of Pregnancy(Premature, post mature)
- Post natal Causes(after delivery) Till one months
 - Birth Cry(Anoxia/Hypoxia)
 - Birth weight(LBW/HBW)
 - Neonatal Jaundice
 - MMR (Mumps-Measles-Rubella) vaccine(may cause intestinal problems leading to the development of autism).

Examinations for ASD:

Autism Spectrum Disorders is the team based assessment where a Neurologist, Psychiatrists, Radiologists, Psychologist, Speech Language Pathologists, Audiologists, and Special Education should be involved. Where They have there own examinations which helps others professionals to find out the real problems of the individuals.

Speech Language Pathologists will assess the child behaviors and skills on Visual, Auditory, Tactile/kinetics, olfactory, Gustatory, and general behaviors and Skills. The SLP also Assess the child Behaviors patterns, Motor Patterns, Social Behavior's, Speech and Language behaviors, and Supra segmental Aspects of speech and learning behaviors of Child.

The SLP Use REELs (Receptive expressive Emergent language scales) (updated version 3) Developed by Kenneth R. Bzoch, Richard League, Virginia L. Brown(4) (and Extended REELS for Expressive and Receptive Language Assessment to find out the child Receptive language Age(RLA) and Expressive language Age(ELA).

There is Another's test called Childhood Autism Rating Scales (C.A.R.S) developed by Eric Schopler, Robert J. Reichler, and Barbara

Rothen Renner(5) which is used to administered to find out the following Characteristics:

- Relationship to people
- Imitation
- Emotional Response
- Body Use
- Object use
- Adaptation To Change
- Visual Response
- Listening Response
- Taste-Smell-Touch Response and use
- Fear and Nervous
- Verbal Communication
- Non-verbal communication
- Activity level
- Level and consistency of intellectual response
- General Impressions (6)

MANAGEMENT OF ASD:

There are number of different approaches by which a speech language pathologist can tackle an ASD Patient. Some of them are below:

1. **NATURAL LANGUAGE METHODS:** Speech language pathologists often integrate communication training with the child's behavioral program to provide a coordinated opportunity for structured and naturalistic language learning. (7)

2. **MANAGEMENTS OF ECHOLALIA:** In Echolalia parallel talking is most important where the Speech language pathologist will asked question and will answer with gap of few seconds. Kanner also observed that autistic children sometimes alter aspects of the utterance echoed(8). Specifically, they may reverse pronouns or repeat what is heard adding affirmation or negation, rather than say "yes" or "no." This has since been described as "mitigated echolalia," a term 'used by Pick (1924) to define the slightly modified echoic responses observed in the speech of some of his aphasic patients.(9)

3. **ADVANCING LINGUISTIC PROCESSING:** The echolalia child applies more sophisticated linguistic processing strategies in which previously unemployed echolalia phrases are modified. The child moves from using the primary pure form of echolalia, to mitigated echolalia to eventual creative and flexible verbal productions.

Techniques used in controlling echolalia in ASD children (10)

1. **TEACHING VERBAL IMITATION SKILLS:** Teaching appropriate speech to echolalia children can be viewed as the teaching of increasingly refined discriminations between appropriate and inappropriate speech imitation.

2. **PROMPTING AND PROMPT FADING:** Prompt fading is used to teach the child discriminations between those conditions in which it

is not (discrimination stimulus i.e 'what is this?' presented almost inaudibly whereas the answer- 'this is a ball' is presented loudly such that only the prompt is initiated.

3. And others are:

Parallel talk
Self talk
Repetition
Expansion
Questioning
Extension

Intervention approaches to facilitate communication and language:

1. PICTURES AS COMMUNICATION: Many children with ASDs are much stronger visually than they are verbally. The following approaches focuses on teaching communication skills through the use of visual icons for those children who are visually strong, and who are preverbal.

2. VIA (VISUAL INTERACTION AUGMENTATION): A strategy in which pictures of desired objects are exchanged by the child for the desired object itself. It addressed lack of facial expressiveness, lack of gestural communication, & lack of verbal language. The best known method for doing this is a model known as PECS (Picture exchange communication system).

PLAY THERAPY: Play designs allow the clinician to structure activities to accommodate the child's level of functioning and create unique opportunities for new skills (11) Where the therapist makes goal which will makes the child entertained along with improvement. In initial stage the therapist should build rapport with the child then the therapist will play game as throwing ball in basket, Dragging a hole in the land, Play clay modeling and etc.

MUSIC THERAPY: In music therapy there are some steps which will help therapist to build socialization and to remember the rhymes and again for revised. In some area the therapist sing songs by himself in front of child along with some activities.

BEHAVIORAL MODIFICATION THERAPY: Behaviors Modification Therapy is the procedure to decreased undesirable behaviors and to increased desirable behaviors by using Reinforcements. In BMT there are some therapy which is developed to control the undesirable behaviors and to develop Attention/ concentration, to Improve Sitting Span, To improve Eyes contacts and eye hand co-ordination and to modify his/her Perception towards any activities.

During Clinical Practice I have done research that those kids who have ASD can be controlled by using reinforcements but stubborn may increased for that negative reinforcements should be ready. I Used to Advised parents to brings Marble, empty water bottles and others stuffs through which the child can involved in the activities and can build his/her attention and also can develop following problems of them:

- Eye contacts
- Eye Hand Co-ordinations
- Sitting span
- Can Reduces Self Harming behaviors
- Can Reduces Repetitive behaviors
- Can Reduces Olfactory behaviors
- Number concepts
- Alphabets concepts
- Parallel talking
- Colors concepts and so on.

PRECAUTIONS: After the child delivery most of the parents gives songs, video in mobile and left for work and for hours the child only learn to receptive but not to expressive because at initial periods when he tries to imitates something he doesn't get appreciation and then he stops imitates. In every initial periods mothers and father should play with child and to give sufficient time rather than Television, Mobiles or others kit materials. In Initial periods only single language should be exposed to the child.

CONCLUSIONS: I have found that by this techniques(BMT) the child have improved his/her many behaviors but the negative point is that the child will have expressive crying to fit in that environment

because this therapy techniques administered alone with the speech language pathologists. There Expressive crying is may be due to there stubborn but within two or three session the child fits in the activities and builds improvements. There was a kid who had Mild to moderate Features of Autism while doing C.A.R.S and by using BPT I have found that child have developed questioning, drawing, attempting homework, playing with friends and the main points is the child have improved in Echolalia and he don't have Echolalia with Family and now the child is having pragmatics problems. So Those kids with ASD can start Behaviors modification Therapy along with speech therapy but the child should go to Psychologist for IQ assessment and to Occupational Therapist For Sensory processing Disorders (SPD) and other sensory integration. If any of the child is having A.S.D then the child should meet Speech Language Pathologist or to Psychologist as early as possible before the neuroplasticity get matured or reached to critical periods, its doesn't mean that neuroplasticity will end at the critical periods but before age of 7 the brain is work and catch everything very actively and kept everything's in brain for long time, so Early Diagnosis and Early Intervention should be maintained.

REFERENCES

1. Mary Elizabeth Dallas
2. Greenspan, Stanley "The Children with Special Needs" 1998
3. Lisa Jo Rudy April 13, 2009
4. Richard League, Kenneth R. Bzoch, Virginia L. Brown
5. Caldwell College, Faculty Caldwell Education
6. Caldwell College, Faculty Caldwell Education
7. Parker, 1996
8. Kanner
9. Peak 1924
10. Feyt Et. All 1980
11. Kickman, 1997