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Super Speciality Hospital

DEVELOPMENT CLINIC

Department of Neonatal, Pediatrics and Adolescent Medicine

COMPREHENSIVE DEVELOPEMENTAL ASSESSMENT

Name: Anviti
Age: 5 Years 9 months
Sex: Female
Date of Birth: 1/9/2011
Informant: Parents
Date of assessment: 2/6/2017
Referred by: Dr. R. K. Sabharwal

REASON FOR REFERRAL:

For comprehensive developmental evaluation

BACKGROUND INFORMATION:

Birth, Developmental and Medical history:

Anviti is the ~~second~~ first child in birth order of two children and born of non consanguineous marriage. She was born at term gestation with normal birth weight. No significant antenatal and postnatal history was reported. She started walking independently by 1.5 years of age. She started speaking single words by 2 years 3 months and could make short phrases by 4.5 years. She has mostly need based communication at present and also does irrelevant talking. She tends to repeat words spoken to her and cannot answer simple "what, where, when" questions. She has less in seat behavior and is always moving about. She is fond of music and has limited pretend play. She is not able to play independently with peers of her age and will mostly play with girls.

Anviti is studying in Grade UKG, in Moradabad. There have been concerns from the school regarding her academic difficulties. She is not able to follow instructions in the class, has less in seat behavior and limited participation.

BEHAVIORAL OBSERAVATIONS AND TESTING

Observations during Testing:

Anviti came across as a pleasant child during assessment. She had a limited eye contact and was less integrated with her conversations. She demonstrated overactive behaviors and had lot of self talking. She also smiled in response at times and had echolalia.

ON EXAMINATION:

Head size: 52 cm
No pallor, icterus, lymphadenopathy
Neurological examination: Tone reduced, Power grade 5 in all four limbs, DTR elicitable, no asymmetry
Per Abdominal: No hepatosplenomegaly
CVS and RS: No abnormality detected.
Domain Left Handedness

TOOLS USED/ ADMINISTERED:

- Clinical interview with parents and child

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- Developmental Profile (DP-III)
- Childhood Autism Rating Scale-Second Edition ST (CARS-2)

INTERPRETATION OF ASSESSMENTS

DEVELOPMENTAL PROFILE-3 (DP-3)

The Developmental Profile evaluates children's functioning in five key areas, in just 20 to 40 minutes. The DP-3 is designed to evaluate children from birth through age 12 years, 11 months, and includes 180 items, each describing particular skills. The respondent simply indicates whether or not the child has mastered the skills in question. It provides a **General Development score** as well as the following scale scores: **Physical**- Large- and small-muscle coordination, strength, stamina, flexibility, and sequential motor skills. **Adaptive Behavior**- Ability to cope independently with the environment--to eat, dress, work, use modern technology, and take care of self and others. **Social-Emotional**- Interpersonal abilities, social and emotional understanding, functional performance in social situations, and manner in which the child relates to friends, relatives, and adults. **Cognitive**- Intellectual abilities and skills prerequisite to academic achievement. **Communication**- Expressive and receptive communication skills, including written, spoken, and gestural language. Within each scale, basals and ceilings are used; therefore one does not have to administer all 180 items. And because each scale has its own norms, one does not have to use all five scales if interested in just one. Anviti's parents along with the examiner filled the parent/caregiver checklist. The results are shown below:

Scale	Standard Score	Age Equivalent (years-months)	Descriptive Category
Physical	63	3-0	Delay
Adaptive Behavior	60	2-10	Delay
Social Emotional	<50	2-4	Delay
Cognitive	56	3-0	Delay
Communication	61	2-7	Delay
General Development Score	42		Delay

As per Developmental Profile 3 (DP-3), Anviti's General Development standard score is 42 and falls in the delay range. The standard scores for physical, adaptive behavior, cognitive, social emotional and communication domain show significant delays.

THE CHILDHOOD AUTISM RATING SCALE

The Childhood Autism Rating Scale, Second Edition (CARS 2) includes three forms. The three forms are the two Rating Booklets- Childhood Autism Rating Scale, Second Edition- Standard Version (CARS2- ST; formerly titled CARS) and the Childhood Autism Rating Scale, Second Edition- High Functioning Version (CARS2- HF)- and the Questionnaire for Parents or Caregivers (CARS2-QPC). The CARS2- ST and CARS2-HF are not intended as screeners for use in the general population. Their primary value lies in their providing brief, quantitatively specific and reliable yet comprehensively based summary information that can be used to help develop diagnostic hypotheses among referred individuals of all ages and functional levels.

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CARS2-ST and CARS2-HF ratings are made based not only on the frequency of behaviors, but also on their intensity, peculiarity and duration. This allows for great flexibility in integrating comprehensive information about a case, and at the same time yields consistent quantitative results. Professionals can also use CARS2 results to help in giving diagnostic feedback to parents, characterizing functional profiles, and guiding intervention planning. The CARS2-ST and CARS2-HF each include 15 items that ask respondents to rate an individual on a scale from 1 to 4 in key areas related to autism diagnosis. *The ratings were done by the examiner based on Anviti's parents interview and her observations.* ***Anviti obtained a rating of 28 on CARS 2- ST, which places her in Minimal Symptoms of Autism Spectrum Disorder at this time.***

Severity Group:

Minimal Symptoms of Autism Spectrum Disorder	**15-29.5**
Mild to Moderate Symptoms of Autism Spectrum Disorder	30-36.5
Severe Symptoms of Autism Spectrum Disorder	37 and higher

ON EXAMINATION:

Anviti was observed to be self absorbed and not as responsive to the adult as is typical child her age. She is able to imitate but after delay and requires prodding. Her emotional reactions are somewhat inappropriate type or degree to certain objects of events. Anviti indulges in some repetitive behaviors like hand movements and clapping. Anviti demonstrates poor imagination and does not play with peers and toys age appropriately. She plays immaturely with toys and likes to play with only sound based toys. She has difficulty adapting to new environments. Both visual and listening responses are limited. Her eye contact is fleeting and she occasionally stares off in space and she avoids looking in the eye. She also demonstrates poor joint attention. No significant sensory difficulties are reported. Anviti is afraid of loud noises and is nervous while going downstairs. Her verbal communication is limited and she only indulges in need based communication. She usually calls herself as third person and some peculiar speech like jargon and echolalia is prominent. She speaks in high pitch voice and mostly repeats ads and tv dialogues. Her nonverbal communication use is also immature and has difficulty understanding the nonverbal communication of others. Her activity levels are high. Anviti's cognitive abilities appear to be in borderline to below average range but some unusual skills have been reported. She is reported to have excellent memory. Anviti remembered name of states and their capitals. Some features of ASD are prominent.

Anviti is presently in UKG and has been repeating same class. Presently, as reported she has developed pre academic skills like names of colors, shapes, letter names and some counting. She has difficulty communicating with her peers and she also tends to have difficulty with fine motor skills. She is unable to copy from board. She is left handed.

CLINICAL FINDINGS AND DIAGNOSTIC IMPRESSIONS:

- Minimal features of Autism Spectrum Disorder are prominent

RECOMMENDATIONS:

1. ***Continue education in regular classroom but interventions outside school are highly recommended at this time.***
2. ***Speech and Language therapy and behavior therapy i.e ABA to be considered.***
3. ***Occupational Therapy.***
4. Parent guidance regarding management of behavior and development of appropriate developmental skills. Continue stimulation at home.
5. Consistent human interactions, learning experiences and playing with your child is very important.

6. Multisensory instruction can be used like visual, auditory, or tactile and kinesthetic modalities.
7. To increase Anviti's recognition ability: 1. Point to pictures of objects in a picture book and say the names of objects he knows and can say. 2. Point to few common objects in the house or outside and say their names.
8. **Follow a less desirable task with a more desirable task. Make completion of the first necessary to perform the second. Use the statements if-then.**
9. **Talk, talk, talk.** Narrate the day as it evolves. Tell your child, for instance, "Now we're going to take a bath. Can you feel the warm water on your belly? When we dry off, we'll get dressed and take a walk."
10. ***Read to your child. Ask your child, "What's this?" and encourage naming and pointing to familiar objects in the book.***
11. Sing simple songs and recite nursery rhymes to show the rhythm and pattern of speech.
12. **Enjoy music together.** Young children love music and movement. When they listen to lively songs, like "Old McDonald Had a Farm," they learn about the world around them and the rhythm of language.
13. **Use television, phones, tablets or computers (screens) sparingly.** The American Academy of Pediatrics recommends that children younger than 2 not watch television at all, and that children 2 and older view no more than two hours of quality programming a day. While some educational programs can be beneficial to kids, TV shows don't interact with or respond to children, which are the two catalysts kids need to learn language. Computer games are interactive, but they aren't responsive to a child's ideas.
14. **Label feelings as they occur**: For example, if your child is reaching for food in the fridge, label the feeling. For example, say "You are hungry". The more your child hears the particular feeling with a specific behavior, the better they will be able to understand that feeling.

SOCIAL SKILLS AND COMMUNICATION:

1. The "confusion" and social awkwardness she displays are real and unintentional; they should not be viewed as conduct to be penalized.
2. Verbally teach (don't expect the child to observe) cognitive strategies for the skills of conversational pragmatics (the "give and take" and comfortable beginnings and endings of a conversation, how and when to change the subject, formal versus informal conversational idiosyncrasies, tone and expression of voice, etc.) and nonverbal body language (facial expressions, correct social distance, when the limit or cut-off point has been reached, etc.).
3. All expectations need to be direct and explicit. Don't require Anviti to "read between the lines" to glean your intentions.
4. Avoid sarcasm, figurative speech, idioms, slang, etc., unless you plan to explain your usage.
5. Write out exact expectations for any situation where the child may seriously misperceive complex directions and/or proper social cues. Feedback given to Anviti should always be constructive and encouraging or there will be no benefits derived.
6. Provide ongoing social skills training. Frequent feedback on how Anviti's behavior impacts himself and others will be helpful along with suggestions for more appropriate behavior.
7. Teach Anviti to recognize and state her feelings, starting with very basic ones.
8. ***Help her to develop socially appropriate ways of coping with stressful situations, such as removing himself from the situation, asking for help etc.***
9. **Some of the goals for social skills training to be considered are as follows:**

Social Emotional Skills:

- Encourage Anviti to appreciate the company and activities of other children by creating opportunities to spend time with other children.

- Encourage her to play in group games (not just activities) without constant direct supervision by an adult.
- Help Anviti learn to enjoy times of independent play.
- Help her learn and be comfortable talking about her body.
- Teach her about ownership.

Communication skills:

- Encourage her to retell the plots of T.V. shows, movies, plays and stories
- Encourage Anviti to tell a story by looking at the pictures in a familiar story book
- Teach her to use of logical words and phrases, such as because or it makes sense to

MANAGEMENT OF BEHAVIOR:

10. Redirect physical energy, or ignore it.
11. Find ways to take frequent breaks from seatwork or if needed from the classroom. For example, give Anviti an errand to do, have her hand out materials etc.
12. Allow Anviti to move in and around her seat as long as he is not disruptive to others.
13. Praise appropriate behaviour and ignore inappropriate behaviour.
14. Isolation, deprivation, and punishment are not effective methods to change Anviti's behavior as he may already be trying her best to conform (but misinterpreting all kinds of nonverbal cues).
15. ***Effective positive reinforcers are the keys to a successful behavioral intervention. Check with the student to ensure that the selected reinforcers are highly motivating.***
16. **State corrections and redirections in a positive, non-humiliating manner.** State what you would like the student to do rather than what you want her to stop doing.

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