



Name: Martha

Age: 3;0

Language: English

Speech Diagnosis: Severe Language Delay

Diagnosis: Blind with Multiple Handicaps

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### Background History

Martha has been attending the center-based early intervention program at United Cerebral Palsy where she received speech-language therapy, occupational therapy, and physical therapy, as well as educational services. This evaluation is for Martha's transition from EI to CPSE.

Martha was born premature, at 25 weeks of gestation via vaginal delivery. She weighed only 1 lb. 3 oz. and was incubated for 5 weeks as a result. Ms. X reported that Martha had "bleeding on the brain."

Martha has a diagnosis of Retinopathy of Prematurity and Developmental Delays. She is blind in her left eye and has limited vision in her right eye.

Recently, an augmentative evaluation was completed to determine the appropriate devices, if any, for Martha. Recommendations were made and submitted for approval. The devices and therapy-based toys ordered will continue to support the cause and effect, music-related communication skills Martha is developing.

Martha lives with her mother, her father, and her siblings; two brothers ages 4 and 14 and two sisters ages 20 and 24. The sisters live together and the older sister has two children. Martha's mother is of Puerto Rican heritage, was born in New York, and has never visited Puerto Rico. Martha's father was born in New York and is of Portuguese/Italian heritage. Her mother ended school when she was in tenth grade and her father finished ninth grade. The three older children are of African American and Puerto Rican heritage. Martha and the four year old are of Portuguese/Italian and Puerto Rican heritage.

In 1991, the mother was pregnant with twins who were born at 25 weeks, but did not survive because their lungs had not developed.

Martha's maternal grandparents live in New York and only speak Spanish. She sees them about three times a year and on holidays.

### Language Background and Use

According to her mother, English is the only language spoken in the home. The mother said that



when she was a child, her mother spoke to her in Spanish but she responded in English. Martha's mother has limited skills in Spanish. She said that she was brought up in an African American community. She said none of her children speaks Spanish. Thus, except for the occasional visits by the grandparents, the only language Martha hears is English.

## Evaluation

### *Hearing*

The mother believes that Martha's hearing was tested and was within normal limits. She is checking to confirm this. If it has not been tested, a hearing test is strongly recommended.

### *Oral Peripheral Mechanism and Feeding*

Martha presents with poor lip and tongue coordination and limited lip and tongue control. Jaw stability is also poor. Martha does not drool and can hold her mouth in a closed mouth posture most of the time.

Martha eats pureed foods. She will gag when there are any granules in the puree. She tends to munch her food, and does not form a bolus. Martha resists drinking any liquids, even thickened liquids. Her mother forces her to drink from the bottle.

In addition to the pureed foods, Martha is given a bottle of Neosure at 2:30 pm because her mother is concerned about whether Martha is receiving the proper nutrients. Martha is large for her age and seems to be taking in more calories than she needs.

A modified barium swallow study and nutritional consultation has been recommended to the mother to:

- 1) determine whether Martha can physically manage non-pureed foods;
- 2) determine whether she is receiving appropriate nutrients in her diet;
- 3) provide requested counseling to Martha's mother on how to prepare foods for her using a food processor.

The mother understands the need for this study, but has missed one appointment for the study. The mother agreed to schedule another appointment.

### *Fluency*

Could not assess due to lack of verbal language.

### *Behavior*

Martha's behavior has improved significantly. Most significantly, Martha has decreased the constant head banging she did by throwing her head back against her chair. The chair was

modified, but Martha also does this only sometimes when she is uncomfortable or unhappy. More on her behavior will be covered in the Language section of this report because Martha is in the pre-linguistic stage.

In the past few weeks, Martha has been sick with typical childhood diseases, such as colds and ear infections. Also in the past few weeks, Martha has again increased her behaviors of hand biting, banging her head on the floor, and throwing her head back when in her chair. These behaviors appear related to her overall physical condition due to her illnesses.

In a meeting in December, her mother said she was concerned about Martha's teeth grinding and hand biting. When she becomes agitated, her mother gives her a teaspoon of "Gripe," a West Indian medicinal water that she purchases at the fruit stand in her neighborhood. Martha's mother said that the Gripe makes her more comfortable. She said the Gripe is for constipation, gas, teething, and discomfort.

#### *Articulation and Intelligibility*

Could not assess due to lack of verbal language.

#### *Language*

##### Assessment Materials

- Rossetti Infant-Toddler Language Scale (Rossetti)\*
- Observations with peers, teacher, and teaching assistants
- Classroom observations
- Interview with mother
- Interview with teacher and teaching assistants
- Interview with physical therapist
- Clinical judgment

\*The Rossetti is a criterion-referenced test that has not been normed on bicultural children to determine cultural biases, or on physically involved children to determine biases due to limited physical mobility. Therefore, the Rossetti is only used as a general guide, with clinical judgment and the other testing tools used as primary diagnostic tools.

#### *Receptive Language*

Martha is at the prelinguistic level. She shows some understanding of cause and effect. For example, when she wants something that she cannot reach, she will grab someone's hand to move it to the desired object. She also has recently begun playing a game where she will throw a six-inch colorful plastic star and then crawl after it.

Martha expresses her basic feelings strongly and clearly. She will cry or make a particular sound when she is uncomfortable. She smiles and laughs when she is happy.



Martha has shown increased understanding of cause and effect. For example, Martha has begun to show an interest in the big mack switches and uses them sequentially to put parts of a familiar song in order. She also has begun to make choices using a three-object choice by touching the appropriate key on a basetrainer. Finally, she has sufficient vision to choose particular keys on an electronic piano to create the sound that she wants.

In her behavioral issues, Martha also has shown an understanding of cause and effect. For example, before she would throw her head back continually and hit it without understanding that she was causing herself pain. Now when she does this, she does it once and then rubs her head and makes a sound indicating that she knows it hurts. She also does not do throw her head back again, for a time.

Martha does not know how to comfort herself or communicate her wants or needs. So, when she is tired, she will cry, bite her hand, and bang her head. This only makes it more difficult for her to sleep because now she is tired and in pain. She exhibits similar behaviors when she is hungry or when she is frustrated because she wants something she cannot have.

Martha has also begun to show her wants and interests. For example, just this week she reached out to someone to hold her. When she is upset, she will hit the person holding her. But, when she is calm, she will gently put her head down on the person's shoulder and pat her gently.

Martha's greatest strength is in her musical ability. Martha will hum approximately ten different songs including, "Twinkle Twinkle," "Old MacDonald," and "London Bridge." She learns these songs quickly and hums them to herself. She also anticipates the actions of some songs, such as the falling down at the end of "London Bridge." She does not do any of the typical hand gestures that go with the songs.

Martha loves to play electric pianos, will explore the different buttons, and appears to know the function she wants. For example, if Martha is pushing one button and someone comes and pushes another button that changes the song or the rhythm, Martha will make an annoyed sound, push the person's hand away, and push the button she wants.

Martha demonstrates her understanding of object permanence in different ways. For example, she will look towards her mother when she walks away. She also will get angry and cry if her mother doesn't come back.

Martha has begun playing games. She loves to be bounced and will laugh out loud. She will wait in anticipation for the next bouncing set. When her mother says, "Give me a kiss" in a funny voice, Martha will laugh and move her arms close to her body, but she does not move toward her mother to give her a kiss. Martha does not initiate any games by signing "more" or other symbolic gesture or sound that she wants the game again. The way she initiates games is by moving the person's hand to her or the object she wants manipulated or by making an imploring



sound.

Based upon the Rossetti and clinical judgment, Martha appears to be functioning at the 4 to 9 month level, with some scattered skills at the 9-12 month level, in both receptive and expressive skills.

### *Expressive Language*

Due to Martha being at the pre-linguistic level, she has very limited expressive language skills. The extent of Martha's attempts to communicate with others include pushing their hand away or guiding it towards a desired object. She has recently begun to reach out to adults to be held.

### Conclusions

1. Martha has profound language delays in all areas tested. She is essentially non-verbal and in the prelinguistic stage. She anticipates some activities, and demonstrates the beginnings of understanding of cause and effect and object permanence. Martha's connection to music, especially her ability to hum songs and sequence familiar tunes, is by far her greatest strength.
2. Martha presents with poor lip and tongue coordination and limited lip and tongue control. Jaw stability is also poor. Martha does not drool and can hold her mouth in a closed mouth posture most of the time. Her oral musculature presents with moderate hypotonicity. She eats pureed foods.

### Recommendations

Individual speech-language therapy is recommended three times a week for thirty minutes.

Follow-up to confirm a full audiological evaluation has been completed and to determine its results.

A modified barium swallow study and nutritional consultation to:

1. Determine whether Martha can physically manage non-pureed foods
2. Determine whether she is receiving appropriate nutrients in her diet
3. Provide requested counseling to Martha's mother on how to prepare foods for her using a food processor. The mother is already following up on this.

A referral to Martha's pediatrician to determine whether the use of Gripe by the mother to calm Martha is safe and effective to continue.

A referral to a psychologist or MSW for a consultation on how to develop a plan to modify Martha's behaviors.



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