New York City Department of Health

CULTURALLY AND LINGUISTICALLY APPROPRIATE EVALUATIONS: WHAT EVERY EI EVALUATOR IN NYC NEEDS TO KNOW

Module 7: Apraxia: Diagnosis and Treatment

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Apraxia: What is it? How to identify it?

Childhood apraxia of speech (CAS) is a motor speech disorder. Children with CAS have problems saying sounds, syllables, and words. This is not because of muscle weakness or paralysis. The brain has problems planning to move the body parts (e.g., lips, jaw, tongue) needed for speech.

http://www.asha.org/public/speech/disorders/Childhood Apraxia/

Diagnostic indicators of apraxia with young children

Difficulty in achieving and maintaining articulatory configurations

Presence of vowel distortions

Limited consonant and vowel repertoire

Use of simple syllable shapes

Difficulty completing a movement gesture for a phoneme easily produced in simple context but not in a longer one

http://www.apraxia-kids.org/library/apraxia-speech-therapy-and-treatment-for-toddlers-and-young-children/ (Strand, 2003, p. 77)

Diagnosing Apraxia with young children

There is great concern among speech-language pathologists and others regarding the overdiagnosis or misdiagnosis of childhood apraxia of speech (CAS). Specifically, it is questioned as to whether children under age 3 should be given the diagnosis of apraxia of speech and if so when.

http://www.apraxia-kids.org/library/apraxia-speech-therapy-and-treatment-for-toddlers-and-young-children/

NYCDOH EI Apraxia evaluation: 24 mths

It is important to note that her performance on the receptive language section of the REEL-3 is judged to be somewhat of an underestimation of her actual receptive language skills. *Of additional and significant note is that fact that there is greater than one full standard deviation between receptive and expressive language skills with an expressive language deficit evident.* **[BUT there is no difference between receptive and expressive considering confidence intervals]**

NYCDOH EI Apraxia evaluation: 24 mths

CHILD presented as a somewhat verbal child whose output consisted of jargon and words. Most of what she said was unintelligible, even to her mother. Based on parental report, he has an expressive vocabulary of ***15 true words as well as additional word approximations*** **[which ones? List them. Describe how the word approximations are produced.]** that are unintelligible without a shared referent (ie: /be-buh/ for /boo-boo/, /i-ee/ for /Fraidy/ - her sister, /ehmuh/ for /Elmo/[Developmentally appropriate]. Although within her jargon, she presented with a **variety of sounds** [which ones], within words multiple omissions, substitutions and distortions were noted **[give two examples of each].** Her primary method of communication was via gesturing, pointing and use of some word approximations. Use of gesturing to assist in communication was evident. Imitative skills were weak. While she would sometimes spontaneously attempt to imitate (though it typically did not come out correctly) **[Give specific examples. How do you spontaneously imitate?]** , imitation on command was very difficult for her. **[Is she imitating speech or movement/gestures? Which ones?]** Difficulty motor planning verbal output on command was evident **[Which ones. How? Give examples?]**.

NYCDOH EI Apraxia evaluation: 24 mths URDU

Urdu speaker so did not do the Kaufman. As a result, CHILD's behaviors were compared against the list of characteristics of Developmental Apraxia of Speech found in the Diagnostic Criteria of Developmental Apraxia of Speech Used by Clinical Speech-Language Pathologists in the American Journal of Speech-Language Pathology.

Inconsistent productions (CHILD inconsistently grunted when shown pictures of VC words such as "up," VCV words such as "apple" and CV words such a "boo")

Unable to imitate sounds (while CHILD can produce "b" in "baby," "m" in "mommy," and "p" in "papa," she could not produce these isolated sounds on request)

Low phonemic inventory (CHILD produces three consonants in three isolated forms)

Vowel errors (CHILD vocalized "uh" when asked to imitate vowels such as "a " in "bay" and "I" in "eye."

Expressive language worse than receptive (while CHILD 's receptive language skills are up to the 27-30 month level based on the Rossetti Infant-Toddler Language Scale, the core of her expressive language skills are at the 6-9 month level with few emerging skills noted at the 9-12 month and 12-15 month levels)

Apraxia videos

https://www.youtube.com/watch?v=dVeW9uzCu0Y 21 month old

https://www.youtube.com/watch?v=o6tJS0zTE_s 24 month old

https://www.youtube.com/watch?v=GrWETkIaUyc 25 month old

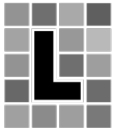
Apraxia: Sequencing and Planning of Sounds, Syllables, and Words

While Alex can produce all the phonemes that would be expected for his age, his speech-language impairment lies in the coordination and placement of the sounds within a word, of omission and addition of syllables, and even of words in sentences. For example, he named his favorite toy, Thomas the Tank as "Thomas che chen" and "Thomas a ten" and for the name of the book "Click Clack Boo," Alex variously described the book as "Cick Cack Boo" and "Chee Chah Boo." An example of the syllable addition was in how he said the sentence "Farmer Brown locks the door." Alex said, "Fama Bown woks do-ey." While the deletion of the /r/ and w/r substitutions are age appropriate, the addition of the syllable, causing the word "door" to have two syllables is not typical.

Apraxia: Sequencing and Planning of Sounds, Syllables, and Words

A final example of this occurred when the evaluator read Alex the book, "From Head to Toe." In that book there is a movement made and the child is asked, "Can you do it?" to which the child responds, "I can do it." During the first read-through of the book, Alex hesitated greatly in saying, "I can do it." His repetitions of the sentence were so variable that it was often difficult to realize that he was attempting to say, "I can do it." Each time was different and greatly variable in length and number of syllables and the phonemes used. The second time the book was read, however, Alex waited for the evaluator to give him the prompt of "I" and to give him some intonation prompts and tap out the syllables on his arm. When the story was read a second time, Alex had all the words in place and only occasional minor variability in the first phoneme and last syllable. This indicated that Alex has great potential for a multisensory approach, has high modifiability and is stimulable.

You can see this entire evaluation and receive free ASHA CEUs at LEADERSproject.org



Nonspeech oral motor exercises for apraxia

Do not approve goals for children with apraxia of speech that involve blowing horns, sucking on straws, chewing on various chew toys, or massage.

These non-speech oral motor exercises have no relation to speech production.

In fact, SLPs should not be doing nonspeech oral motor exercises for any speech and/or language delays!

The parts of the brain that control movements for speech are different from the parts that control nonspeech movements.

These exercises are not needed to "warm up" the mouth for speech. Limited strength is needed to speak so a warm-up is not necessary.

Sadly, the use of whistles, z-vibes, toothettes, chewy tubes, horns, straws, "Talk Tools", and massages to address speech and language delays is widespread in NYC SLP EI services.

These children deserve better.

No more nonspeech oral motor exercise goals to address speech or language delays.

You can download documents on how to answer parent questions about nonspeech oral motor exercises at LEADERSproject.org

http://www.leadersproject.org/2013/07/08/parent%E2%80%0friendly-information-about-nonspeech-oral-motor-exercises/

The change needs to happen in the trenches.

www.LEADERSproject.org

Grammar Fundamentals for a Pluralistic Society

Differential Diagnosis in a Preschool Evaluation

Disorder, Difference, or Gap? A School-Age Disability Evaluation

Model Speech-Language and Psychological Evaluations

Test Reviews of most commonly used tests

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Additional Video Tutorials, Materials, and Resources Available From:

www.LEADERSproject.org