

Intervention with infants and toddlers

General principles:

Parents can be the best therapists!

Goals should focus on education, and increasing frequency of vocalizations/sounds and increasing communication opportunities.

Language targets are to increase consonant and vowel productions, increase expressive language and teach oral versus nasal airflow after palatal repair.

Before palatal surgery, advise parents to encourage sounds that the baby can make such as w, m n and l sounds in consonant vowel combinations, for example wawa, mama, lili, etc

To promote language and communication in infants:

- Imitate sounds to encourage vocal turn taking of his/her sounds and introduce new sounds (vowel-consonant combinations).
- Make silly sounds and noises with your mouth, tongue, and lips and encourage the child to imitate you – try playing this game in front of a mirror.
- Play nursery games and finger plays. Sing songs with hand gestures and words that repeat over and over.
- Acknowledge the child's sound making, by giving him/her attention, talking back, nodding, and smiling.
- Use gestures when talking to the child and acknowledge his/her gestures.
- Reading: Looking at books is a great activity!. Try books that have things to touch and feel. Label the pictures in the book. You don't have to read the word - instead you can describe what is happening. Encourage the child to point using his/her whole hand.
- Using colorful books with simple pictures. Point to pictures, label objects and use actions words and sounds to describe objects (e.g., "moo" for cow and "vroom-vroom" for car).
- Make personal-familiar books using a scrapbook or picture album and photos of family members, pets and pictures of common and familiar objects. Use verbal and nonverbal communication by naming and pointing to the pictures.
- Talk with the child during feeding, bathing and play – make sounds to represent actions and movements. Use an expressive voice and vary your pitch and tone.
- Imitation: Encourage imitation of motor actions such as raising his/her arm up, waving bye-bye, hitting the table and kicking with feet. You do it, label it, and encourage the child to repeat it. As he/she does it - consistently make your movements more complex or subtle. Always pair. With sound/words
- Work on baby signs; you move his/her hands first in context so he/she learns to associate the sign with the meaning. Start with simple signs such as: Arm(s) up for being "picked up"; Left hand patting right for "more" ; Moving her left arm outward to communicate she is "all-done" with something; Waving "bye-bye" when someone leaves; Blowing kisses, etc

To promote language and communication with toddlers:

- Create a sound bag, in which you fill a bag with objects (toys and household items) that all start with the same target sound (e.g., ball, baby, book / cookie, cup, coat). Using large expressions and waiting time for anticipation, slowly pull an item out of the bag and say the word. Bring the toy up to your face as you say the word. Encourage your child to imitate the word without pressure. As your child becomes more familiar with the items, wait before saying the word to see if they will say it first. As your child becomes more familiar begin to expand the vocabulary by providing information about the item (e.g., “you read it”) to see if they will label the item independently
- Remind your child to use their words and provide a verbal cue for imitation as necessary. For example, when your child points, ask them “what do you want...I want...” If your child brings a toy to you, pause to elicit intentional verbal communication before starting to play.
- While playing or during daily activities around the house when your child makes a request or statement using a single word, increase it by adding a filler or context word and prompt imitation to encourage use of expanded utterances. For example, “milk” becomes “more milk”/“more milk please”, “ball” becomes “roll ball” /“roll blue ball”/ “roll ball fast”.
- Provide your child with lots of language input that is simple and facilitates opportunities for imitation. This may be encouraged by using fill-in-the-blank activities (e.g. Ready...set...Go!) or leaving off key words at the end of songs or nursery rhymes (“The itsy bitsy spider went up the water ____”)
- Read with your child often. Model pointing to and labeling the pictures and provide your child with opportunities to label pictures (words/signs). If your child does not fill in the word, label the item for them. When reading a book, change the way the story is told each time you read the story. This will increase flexibility and use of differing vocabulary.
- Talk about all of the things your child is doing and encourage verbal interaction and imitation. Give open ended prompts and not direct questions to encourage verbalizations; “I wonder what that puppy is doing”
- Sabotage the environment to encourage verbalizations. Give your child a fork instead of a spoon for yogurt or put their sock on your head instead of their foot.
- If it sounds like a word, make it a word and it will become a word.
- Use dollhouses, toy kitchen sets, dress-up clothes, cars, trucks, trains, stuffed toys, and similar items (toys/household items) to act out typical scenarios, such as going to sleep, cooking dinner, or going to the store. Use both words and corresponding sounds to increase and encourage development of verbal communication; “shhh – I hear the water. We are making pasta. “mmm” – I love pasta. “ding ding ding” – its finished “ow ow ow” the pot is hot. “mmm- yummy” – this is so good.

Activities to stimulate new consonants:

-Model lip and tongue movements in a mirror while sitting side by side with the child in front of the mirror and encourage imitation

-Puff up cheeks with air and then tap the cheek repeatedly to release air through the lips in small bursts

Pucker or protrude your lips while producing ‘uuu’ and then pat your mouth repeatedly to say ‘w’

Cleft Palate Speech Strategies (English)

-Model specific speech targets in consonant vowel syllables as in “pa”, “da” to encourage imitative production

Use specific play activities and “use bilabial language” with these activities

-Using bubbles –say :blow bubbles”, “bubbles”, “POP”, “me blow bubbles”, “mommy blows bubbles”

Facilitating consonant production in early speech:

To increase length and rhythm of production:

-use simple repetitive motor activities-bouncing on a ball while repeating syllables in time with the child’s movement

To connect sounds with meaning

-use songs that included versus with simple sound or repeating sound

sequences

To facilitate consonants

-use stressed syllables -**ba**by

To facilitate k and g consonants

-use words with k and g at the ends of words/syllables and words preceding

vowels

To facilitate tongue tip consonants (t and d)

-use t and d preceding a vowel

To facilitate production of a consonant at a new place of articulation

-use a word that contains another consonant at the same place of articulation

To facilitate s, z, sh fricatives

-use words with s, z, sh between vowels

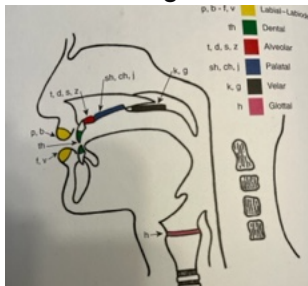
Speech Therapy Techniques for Compensatory Articulation:

Glottal stops are generally substituted for oral stop consonants. The place of articulation is the voice box using vocal fold valving. Glottal stops can be co-produced with any oral placement, meaning the child postures the tongue or lips so that it looks like she is producing the consonant accurately but simultaneously is producing (co-producing) the glottal stop. Be careful not to reinforce co-productions; these can contribute to decreased speech intelligibility and slow progress.

General treatment principles:

Strategies and techniques used in therapy include

- Introducing gentle whispering or using sustained /h/ to break the glottal pattern and to teach easy oral airflow with open glottis.
- Inserting /h/ after oral stop consonants to discourage use of glottal stops prior to vowel onset [e.g., p(h)op for "pop"].
- Teaching auditory discrimination between the correct target and the compensatory error to facilitate self-monitoring.
- Providing visual cues, including
 - using a lateral diagram or a model of the mouth for visual placement cues.



- pointing to lips/tongue to cue placement;
- using visual airflow cues (e.g., using a feather); and
- using mirrors for observing articulatory positioning—sit side-by-side, so that the child can view the reflection of themselves and the therapist.
- Providing verbal cues such as instructions for correct placement and manner or airstream. Be sure to discriminate productions—learn difference between mouth sound versus throat sound versus nose sound. Use of drawings and diagrams can be helpful.
- Providing tactile cues, such as
 - feeling one's neck musculature to help identify incorrect placement for glottal stops and for pharyngeal stops and fricatives;
 - feeling a released puff of air on one's hand during the production of plosives;
 - using nose plugging/pinching (nasal occlusion) to provide the individual with the sensation of oral pressure and to discourage nasal airflow errors.
- Using established speech therapy procedures and techniques (e.g., minimal pairs, traditional shaping hierarchy).

To achieve alveolar stop consonants:

- Produce /n/ with nasal occlusion to achieve /d/
- Whisper /n/ with nasal occlusion to achieve /t/
- Produce /s/ and "stop" airstream
- Produce "th", retract the tongue and "stop" the airstream
- Use sound shaping from /p/ to /t/-model /p/ and then move from making a "funny /p/ with the tongue. Protrude the tongue between the lips and make a "p" sound again.

Cleft Palate Speech Strategies (English)

Next, move the tongue to the upper lip only, then the upper teeth, then finally behind the upper teeth.

To achieve velar stop consonants

- Produce ng with nasal occlusion to achieve /g/
- Produce /t/ or d/ while depressing the tongue tip
- Have child pretend to gargle with head tilted back-be careful not to reinforce pharyngeal stop
- Whisper technique to eliminate glottal stop