**Initial Speech Evaluation Summary**

**Name**: Liam Franco **Evaluation Date**: May 23, 2023

**Date of Birth:** September 11, 2017

**Age:** 5 years, 8 months

**Relevant Background Information**

Liam, a 5-year, 8-month-old male was seen for an initial evaluation of articulation at Riviera Day School on May 23, 2023. The evaluation was recommended by the teacher at the most recent parent teacher conference. Teacher reported concerns regarding Liam’s overall intelligibility. No concerns regarding language were reported.

As per information collected from case history, Liam was born following a full-term pregnancy via natural delivery. Birth history was reported unremarkable.

Medical history was significant for frequent ear infections beginning at 1 year old. This was resolved with the placement of tubes at 2 and a half years old. Additionally, seasonal ear infections were reported.

Developmental milestones were reported to be achieved within normal limits. Concerns regarding articulation arose in the Spring of 2023 as Liam was difficult to understand by his teacher and classmates. Liam currently attends Riviera Day School and is in Pre-K 4. The primary language spoken is English.

**Instrumentation**

Formal and informal measures performed during the evaluation included the following:

* Oral-Peripheral Examination
* Speech Sound Assessment

All measures were performed in English. Results of all formal and informal assessments appear to be reliable.

**Outcome of Evaluation**

Prior to beginning the assessment, information was collected informally via spontaneous conversation. Liam demonstrated adequate communicative intent and awareness of others. In addition, appropriate eye contact and social reciprocity was present. Liam performed all tasks willingly and interacted well with clinician. He was able to initiate conversation, ask and answer questions, and demonstrated an age-appropriate vocabulary. He attempted all tasks enthusiastically. Throughout the course of the evaluation, verbal praise and squishy prize was proven to be effective in keeping Liam motivated and on task.

**Oral Peripheral Observation:** Informal assessment of the oral speech mechanism was performed through observation to assess the adequacy of the structures and functions of the oral-motor mechanism. Cursory observation revealed:

Structure – The face was observed to be symmetrical in shape. The mandible and maxilla were in proper alignment, height, shape and size. Dental occlusion, the palatal arch and oral/dental structures were observed to be unremarkable based on chronological age. At this time, Liam’s oral structure was observed to be adequate for speech production.

Function – The body, trunk, and facial tone were observed to be normal. All reflexes were inhibited (no observable reflexes when eating or performing verbal tasks). Phonation and breath support were adequate (1-3 seconds of sustained phonation), for single voiced, nasal and un-voiced phonemes could be produced. Jaw movements were significant for an occasional open mouth posture. Jaw stability is important for speech as it allows the tongue and lips to move independently to produce speech in a quick and efficient manner. In the area of Labial-Facial Control, Flaccid cheeks were noted due to underuse of the musculature. Furthermore, lip movements show decreased access/control to contact (medial one third of labial surface) as evident by difficulty with individual lip movement. Labial facial muscle movements were significant for decreased retraction and protrusion. In the area of Lingual Control (tongue) in connected speech, decreased tongue tip and body access/control was noted as evident by reduced precision of the tongue when articulating lingual sounds. Overall, facial muscles were observed to have decreased combined alternate movements and coordinated functioning. As a result, accumulation of saliva in the corners of mouth was noted.

**Speech Sound Assessment:** The ability to produce speech sounds was assessed throughout the course of the evaluation in order to measure articulation of sounds and determine types of misarticulation. The Clinical Assessment of Articulation and Phonology - 2nd Edition (CAAP-2)was administered informally. Additionally, spontaneous speech was elicited both in words and connected speech. Data was collected and analyzed using the Age of Customary Consonant Production chart as recommended by The American Speech-Language-Hearing Association (ASHA). The acquisition of speech sounds is a developmental process and children often demonstrate "typical" errors and phonological patterns during this acquisition period. Developmentally appropriate error patterns were taken into consideration during assessment of speech sounds in order to differentiate typical errors from those that are not.

Based on Liam’s chronological age at the time of the assessment, the following relevant substitutions, distortions, and omissions were noted:

|  |  |
| --- | --- |
| Error | Example |
| Substitution of /Ɵ/ for /s/ | /mouth/ for /mouse/, /houth/ for /house/, /theal/ for /seal/ |
| Substitution of /Ɵ/ for /z/ | /thoo/ for /zoo/ |
| Substitution of /w/ for /l/ | /weaf/ for /leaf/ |
| Substitution of /p/ for /f/ | /knip/ for /knife/  /leap/ for /leaf/ |
| Substitution of /p/ & /b/ for /v/ | /hipe/ for /hive/  /ban/ for /van/ |
| Substitution of / Ɵ / for /sh/ | /fith/ for /fish/  /theep/ for /sheep/ |
| Substitution of /w/ for prevocalic /r/ | /wing/ for /ring/, /wake/ for /rake/ |
| Omission of vocalic /r/ | /ja/ for /jar/ |
| Various inconsistent errors of sounds were noted in sequenced movements as a result of difficulty moving oral motor musculature appropriately, difficulty with combined alternative movements of the facial muscles, and poor integration of jaw, lips, and cheek movements to support development of lingual control. | Difficulty with proper contact of lips when producing /p/ for /pig/ and /m/ for /mouse/, /bet/ for /bed/, /ga/ for /gate/, /sea/ for /seal/, /wep/ for /web/, Distortion of /cheese/ |

In addition, the following errors were found to be developmentally appropriate at this time, but should be monitored based on chronological age and sound development:

|  |  |
| --- | --- |
| Error | Example |
| Substitution of /p/ & /g/ for /Ɵ/ (voiceless th) | /teep/ for /teeth/  /gumb/ for /thumb/ |
| Substitution of /d/ and /b/ for /ð/ (voiced th) | /babe/ for /bathe/  /dem/ for /them/ |

These sound substitutions, distortions, and deletions affected Liam’s overall intelligibility at the single word level and conversational level. Intelligibility in connected speech was judged to be fair to poor. Liam appeared to be aware of communication difficulties. When he was asked to repeat what said, he would attempt to rephrase his utterance. It was difficult to understand most of the time without relying on context clues and/or gestures.

**Impressions**

Based on the results of formal and informal assessment as well as parent interview and clinical observation, Liam, a 5-year, 8-month-old male presents with a moderate to severe articulation delay.

Cursory observation of the oral speech mechanism revealed that the face was observed to be symmetrical in shape. No gross structural asymmetries or abnormalities were noted at this time. Liam’s oral structure was observed to be adequate for speech production. Assessment of the function of the oral motor mechanism revealed Jaw movements were significant for an occasional open mouth posture. Jaw stability is important for speech as it allows the tongue and lips to move independently to produce speech in a quick and efficient manner. In the area of Labial-Facial Control, Flaccid cheeks were noted due to underuse of the musculature. Furthermore, lip movements show decreased access/control to contact (medial one third of labial surface) as evident by difficulty with individual lip movement. Labial facial muscle movements were significant for decreased retraction and protrusion. In the area of Lingual Control (tongue) in connected speech, decreased tongue tip and body access/control was noted as evident by reduced precision of the tongue when articulating lingual sounds. Overall, facial muscles were observed to have decreased combined alternate movements and coordinated functioning. As a result, accumulation of saliva in the corners of mouth was noted.

Speech sound assessment revealed various inconsistent distortions, omissions, substitutions, and unintelligible utterances noted in speech at both the word level and conversational level. These multiple sound substitutions, distortions, and omissions made it difficult for an unfamiliar listener to understand Liam’s utterances approximately 50% of the time.

Parent and teacher reported no concerns regarding Liam’s receptive, expressive, and pragmatic language skills. Furthermore, information collected during unstructured conversation was consistent with parent and teacher report. Therefore, no further testing was conducted in those areas at this time. Furthermore, receptive language, expressive language, and pragmatic language skills should be considered a relative strength at this time.

Based on the results from this evaluation, Liam’s age, family support and adherence to recommendations that follow, prognosis for improved communication skills is favorable.

**Recommendations**

Based on the information obtained through the assessment tools and parent, the

following recommendations are made:

1. Individual speech therapy 2-3 times a week for 30 minutes to improve articulation skills.
2. Goals should be reviewed and updated monthly and a re-evaluation is recommended in 6 months to evaluate progress.
3. Implement at home activities focusing on goals targeted in therapy.

It has been a pleasure meeting and working with Liam and his family. If you have any questions and/or concerns feel free to contact me directly via telephone at (786) 622-2353 or via email at [info@iplcmiami.com](mailto:info@iplcmiami.com).

Sincerely,

Text

Description automatically generated with medium confidence

Speech-Language Pathologist/Director