Speech and Language Pathology
Boston Children's Health Physicians
Until every child is well™

Speech Language Pathology Clinic

Clinical Evaluation of Feeding and Swallowing Assessment:

Name:	BR
DOB:	XX/XX/XXXX
Age:	3 years;10 months
Parent's Name:	Mother: XXX
Siblings:	Twin Sister
Other Caregivers:	Babysitter - XXX
DOS:	XX/XX/XXXX
Educational Setting:	Redacted

Referring Physician:	Redacted
Reason for Referral:	Concerns about accepted food variety in taste and texture, as well as amount being consumed.
Specialists involved in Patient care:	Redacted
Clinicians completing this assessment:	Lindsay Murray-Keane M.S., CCC-SLP, IBCLC Angela Johnson B.A.

Past Medical History

Birth HX:

- Delivered via caesarian at 33 weeks preterm gestation, weighing 3 lbs. 8 oz.
- Mother had a short cervix and low amniotic fluid levels
- 31-day long NICU stay, receiving CPAP for first 5-7 days

Past Medical Hx:

- Diagnosed with Hermansky Pudlak Syndrome
- Adenoid hypertrophy resulting in hyper nasal speech
- Current autism spectrum disorder and developmental speech delay diagnosis

- Albinism, severe vision impairment, pulmonary fibrosis and platelet dysfunction
- Chronic constipation – bowel movement once every 5 to 7 days, resulting in abdominal pain
- Tactile issues with shorts, tank tops and sandals
- Sensory issues with loud noises, too many people or too much happening at once
- Cautious in new environments due to visual impairment

Surgical Hx:
- Strabismus eye surgery x2

Current Medical Status:
- Allergies: None
- Current Medications: Antibiotics

Feeding HX:
- Bottle-fed – Enfamil Gentle Ease, tolerated larger volumes as she grew
- 7 months - cereal/baby food, but routinely moved head in rejection, cried and wouldn't open mouth fully for feeding
- 11 months - solid foods, resulted in gagging and vomiting
- 12 months - switched from baby formula to whole milk
- 15 months – switched to pediasure
- 3 years (current) – water, vanilla pediasure, vanilla milkshake, diner pancakes with syrup, cream of wheat, Doritos, croissants, vanilla cupcake, glazed donut, frozen French toast sticks, vanilla ice cream, pizza, McDonald's French fries, McDonald's or Perdue Simply chicken nuggets, vanilla yogurt, scrambled eggs, rice (gags)
    - Mother reports that client indicates hunger verbally
    - Meals are consumed at a table with mother or babysitter
    - Continues to use bottles for pediasure
- No previous feeding therapy

Example Daily Routine:
- Attends school 7:30 – 3
- Drinks pediasure 3x a day (before school, after school and before bed)
- Spends time after school with twin sister and babysitter
- Mother works long hours and father works weekends

Developmental History:
- 7 months – sitting, holds bottle or cup
- 8-9 months – crawling, babbling, finger feeding
- 10 months – standing, saying single words
- 12 months – cruising
- 14 months – uses utensils
- 15 months – walking
- 16-17 months – follow direction
- 22 months – saying sentences

Related Services:
- Physical Therapy: 2x a week 30 min

- Occupational Therapy: 2x a week 30 min
- Speech Pathology: 3x a week 30 min
- Vision: 3x a week 30 min

Clinical Observations:

BR entered the clinic with her twin sister, mother and babysitter. She walked independently with occasional caregiver intervention secondary to visual regard in environment. The client climbed on/off and sat independently in an adult sized chair. BR also climbed a 2-step stool with contact guard in order to reach he sink and wash her hands. In play the client was observed to use both of her hands in coordination in a variety of activities and ways. BR's hand preference is the right.

During the evaluation, BR spoke at the word level up to the simple sentence level, using basic questions, requests and greetings. Though her speech and language skills were limited to meal time and simple play, it was noted that she used a natural voice, requested for clarification when confused and benefited from intermittent caregiver scaffolding. BR demonstrates a significantly higher level of impairment compared to her sister and it was noted that she continues to receive speech services in school.

The client was extremely social and easily related to whatever was occurring around her. She had no difficulties acclimating to the clinical setting and appeared to jump right in. BR was engaged and interested and took direction well from unknown adults. After completing her meal, the client began to clean up without needing to be prompted or asked to do so. When playing with her sister, intervention was required due to difficulty sharing and expressing her wants and needs.

Oral Mechanism Examination:

Examination based on informal observations.

	Structure:	**Function:**	**Comments:**
Cheeks	Symmetrical	Impaired coordination	Failed to puff cheeks
Lips	Symmetrical	WNL	
Jaw	WNL	Not assessed	
Tongue	WNL	Impaired coordination	
Velum	Not fully evaluated, but had a hard time puffing cheeks		
Larynx/Voice	Hyper nasal voice		

Nutritive Assessment:

	Initiation of Feeding:	**Mid to End of Feeding:**	**Comments:**
Setting:	Adult sized chair at table	Adult sized chair at table	
Positioning	Sitting upright, with feet dangling or tucked under body	Sitting upright, with feet dangling or tucked under body	
Respiration	WNL	WNL	
Feeder:	Self	Self	

The client's mother produced typical lunch box (Bentigo bento box with insert, child sized utensils and Contigo cup) containing water, croissant, Doritos, Lays potato chips, mac & cheese, French toast sticks, farina, vanilla yogurt with m&ms, and a banana. The following are the foods BR accepted:

Trial One:

- **Food Consistency:** Water (thin liquid) self-fed from a Contigo cup.

- **Oral Stage of Swallow**: BR consistently took sips from the cup and had good lip closure around the mouth piece.
- **Pharyngeal Stage of Swallow**: No coughing or gagging noted after sips.
- **Esophageal Stage of Swallow**: No belching or vomiting occurred.
- **Degree of assistance:** BR was completely independent and required little to no assistance with feeding.
- **Behavioral observations:** The client was excited about how the cup worked by pressing a button to access the water.

Trial Two:
- **Food Consistency:** Farina oatmeal (mechanical soft) – self-fed with spoon.
- **Oral Stage of Swallow**: BR consistently took ½ tsp. sized bites from a small spoon.
- **Pharyngeal Stage of Swallow**: No coughing or gagging noted after bites.
- **Esophageal Stage of Swallow**: No belching or vomiting occurred.
- **Degree of assistance:** BR was completely independent and required little to no assistance with feeding.
- **Behavioral observations:** The client would not finish the bowl of farina because the consistency was too solid, having dried out on the way to the clinic.

Trial Three:
- **Food Consistency:** Croissant (soft solid)
- **Oral Stage of Swallow**: BR consistently took small bites and relied mostly on lingual mashing.
- **Pharyngeal Stage of Swallow**: No coughing or gagging noted after bites.
- **Esophageal Stage of Swallow**: No belching or vomiting occurred.
- **Degree of assistance:** BR was completely independent and required little to no assistance with feeding.
- **Behavioral observations:** The client independently consumed over half of the croissant.

Trial Four:
- **Food Consistency:** Mac & Cheese (soft solid)
- **Oral Stage of Swallow**: BR took a few bites unprompted. She relied on lingual mashing rather than chewing.
- **Pharyngeal Stage of Swallow**: No coughing or gagging noted after bites.
- **Esophageal Stage of Swallow**: No belching or vomiting occurred.
- **Degree of assistance:** BR was completely independent and required little to no assistance with feeding.
- **Behavioral observations:** The client was observed to be abnormally adventurous during the session and independently initiated eating this food for the first time.

Trial Five:
- **Food Consistency:** Doritos (solid)
- **Oral Stage of Swallow**: BR took small bites and chewed using her teeth then resorted to more lingual mashing once the bolus was soft enough.
- **Pharyngeal Stage of Swallow**: No coughing or gagging noted after bites.
- **Esophageal Stage of Swallow**: No belching or vomiting occurred.
- **Degree of assistance:** BR was completely independent and required little to no assistance with feeding.
- **Behavioral observations:** The client requested help opening the bag of chips. She enjoyed the crunch of the Doritos.

Trial Six:
- **Food Consistency:** Banana (soft solid)
- **Oral Stage of Swallow**: The client touched the banana to her lips and teeth, then too a tiny bite, followed by a slightly larger bite.
- **Pharyngeal Stage of Swallow**: BR gagged and spit out the banana after her second, larger bite.

- **Esophageal Stage of Swallow**: No belching or vomiting occurred.
- **Degree of assistance:** BR was completely independent and required little to no assistance with feeding. She did require some assistance when peeling and cutting the banana.
- **Behavioral observations:** BR was observed to enjoy cutting the banana and was willing to try it after smelling it and stating that it smelt good. Her first bite was very tiny and she appeared to enjoy it so she took a second, larger bite.

Nutritive Feeding Skills Assessment: (Morris and Klein Pre-feeding skills checklist)

What is expected at 24 months of age	***What the client demonstrated***	***Interpretation***
Food quantity: Takes 11 or more ounces of food and liquid per feeding, but will fluctuate.	BR was observed to eat only part of her meal and mom reports supplementing her diet with peiasure to meet nutritional needs.	Concerns are noted in regards to the consumption of larger quantities during feedings.
Food types eaten: Is given liquids and coarsely chopped table foods including meats and raw vegetables.	The client ate a majority of soft foods and water. The accepted foods reported also consist of mainly soft foods, few meats and no vegetables.	Concerns are noted in regards to the consumption of a larger variety of food (i.e., textures, shapes, sizes, colors, temperatures, consistencies, & nutritional value).
Sucking liquids from the bottle/breast: Takes liquids primarily from the cup. May continue with bottle/breast at bedtime.	Mother reports use of bottle to feed pediasure 3x daily.	Concerns surrounding the continuation of the use of a bottle.
Sucking liquids from the cup: Sucking pattern present with internal jaw stabilization. Child does not bite side of cup. Some up-down sucking pattern may be present.	BR was observed to drink from a Contigo cup with a closing mechanism. Sucking appeared to be age appropriate and successful.	No concerns at this time.
Swallowing liquids: Easy lip closure on cup. No loss of liquid noted during swallow. Consistent elevation of tongue to assist in swallow	Lip closure was observed and there was no loss of liquid or saliva.	No concerns at this time.
Sucking semi-solids from a spoon: Tongue is used to clean the upper and lower lip in a sweeping motion. Tongue and jaw movement are independent of each other. Potential slight lateral jaw movement. May demonstrate skillful tongue movement	Self-feeding was observed utilizing a child sized spoon. The client successfully ate using the spoon and no abnormalities were noted.	No concerns at this time.
Swallowing semi-solids: No loss of food or saliva during swallow. Tongue-tip elevation used for swallowing. Tongue protrusion not present.	The client did not lose any food or saliva during swallow. Swallow of semi-solids was successful.	No concerns at this time.
Swallowing solids: Can swallow combinations of textures. No loss of food or saliva during swallow. Tongue protrusion not present.	A majority of foods observed were soft solids and there was not a combination of textures present.	No concerns at this time.
Control of drooling Drooling not present during speech or fine motor skills.	No drooling was noted.	No concerns at this time.
Tongue movement in chewing: Able to transfer food from one side of mouth to the other and does not pause in the middle. Extension-retraction movements may be present with difficult transfers.	BR was observed to keep her tongue in her mouth and had no difficulty with transfer of foods.	No concerns at this time.
Jaw movements in biting: Head remains in midline and a controlled bite is present. Grading of the jaw opening	Bites were taken of the croissant that were appropriate in size. No issues were noted with jaw movement.	No concerns at this time

is present when biting different thickness foods.		
Coordination of Sucking, Swallowing, and Breathing: Able to drink at least 1 oz of liquid utilizing a series of coordinated suck-swallow-breathe actions.	The client drank from a cup without any issues with coordination.	No concerns at this time.

Impressions:

BR is a 3 year 10-month-old female who was referred to Boston Children's Health Physicians Speech and Language Clinic for a comprehensive feeding and swallowing evaluation due to concerns about current diet variety and size. She is currently diagnosed with Hermansky Pudlak Syndrome and autism spectrum disorder. The client presents with multifactorial chronic pediatric feeding disorder with mild oral phase dysphagia characterized by immature mastication and oral preparation. BR was observed to utilize lingual mashing; however, there are no signs of differential dysphagia across all consistencies.

Mother was educated on utilization of plates or mats with high-lipped sections, as well as child sized utensils.

Recommendations:

- **Diet:**
  - Solids: Soft food is recommended to be cut into small pieces and presented on her lateral gums.
  - Liquids: All liquids
  - Utensils: Child sized utensils
  - Mealtime setup requires moderate caregiver dependence, food preparation and clean up however; she demonstrated self-feeding skills and the willingness to interact with foods therefore; she should be encouraged to self-feed via finger feeding and utensils.

- **Mealtime routines:**
  - *Timing* = Family to establish a breakfast, lunch and dinner schedule with 2-3 nutritious snacks in between.
  - *Location* = Family should establish mealtime location at home, such as kitchen table, dining room or toddler area for snacking.
  - *Seating system* = Utilize consistent seating area for mealtimes vs. snack times. Example – meals may be at the table, while snack time may be at a toddler sized chair. Child should be in a safe, secure seating system (Hips, knees & feet should be secure and at 90 degrees)
  - *Mealtime setup* = Client's mother is to consult with vision therapist. SLP recommends incorporating color contrast by changing silicone placemat to color. Example – Munchkin Spotless Silicone Placemats. Consistent equipment should be present at mealtimes, such as cups and utensils. Example – Munchkin Toddler Raise Toddler™ Fork & Spoon Set.
  - *Sensory toys/oral stimulation* = Ark grabber (infant), large peeled carrot/stale mini bagel/stale twizzler, for oral exploration that will offer taste. Safe feeder to assist in increasing tolerance to taste and texture without the fear of choking.
  - *Food Presentation* = Food should be presented in a child sized plate on a colored silicone placemat.
  - *Reinforcement* = Social praise and interaction throughout the mealtime should be incorporated, small toys and background music may be appropriate. Utilization of self-held screens should be

avoided, as this may be distracting from the mealtime or limit exploration by occupying the hands.

- **Additional Referrals:**
  - **Supplemental Occupational Therapy evaluation**:
    - **Rationale**: Assessment and treatment focusing on self-feeding skills.
  - **Nutritionist:**
    - **Rationale**: Assessment

- Initiate SLP/Feeding services 2x/week to address mild oral phase dysphagia.
  - Feeding therapy provided by speech pathologist 2x/week

Long Term Goals

1. Client will consume an age-appropriate volume of food, as determined by pediatric nutritional guidelines and meet nutritional and hydration needs.
2. Client will expand her menu in order to increase the number of textures she consumes.
3. The client will decrease negative behaviors associated with mealtimes and food.

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