

Educational Brochures for Speech-Language Pathologists Serving Individuals with Cleft Palate

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Problem



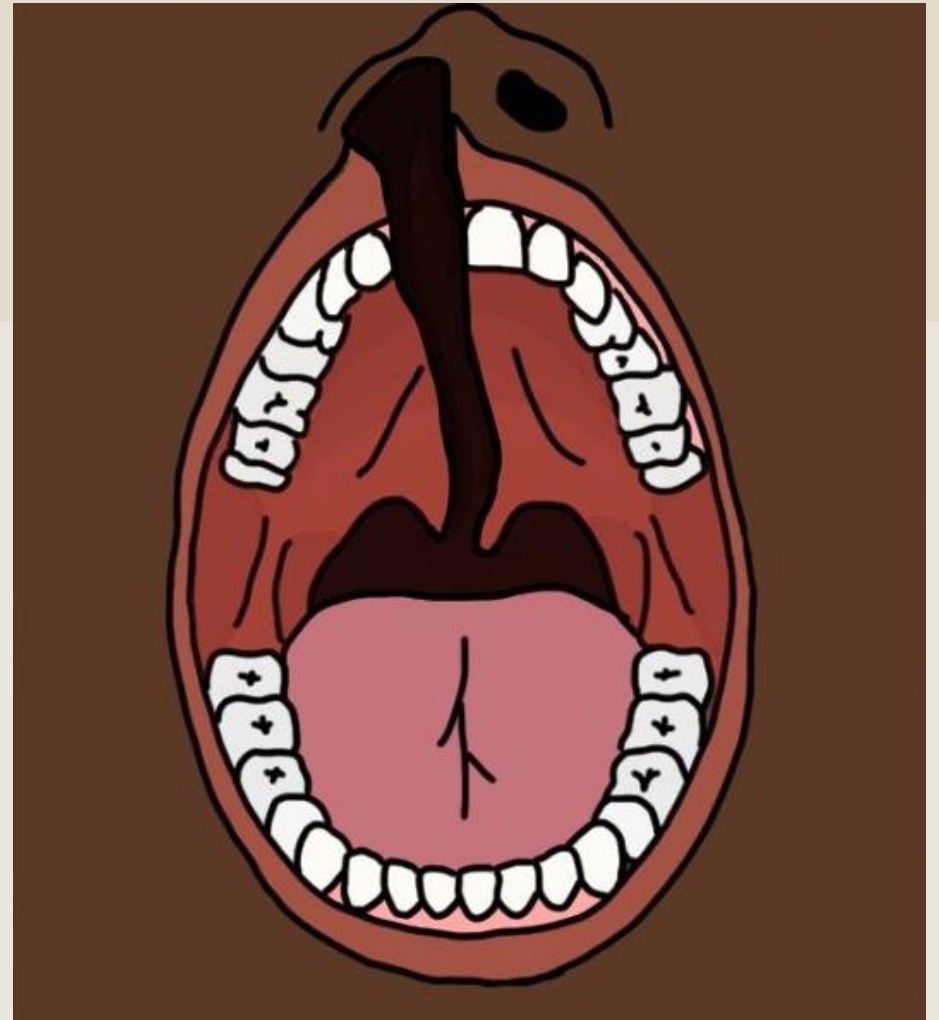
Speech-Language Pathologists in rural areas may not often encounter a client with a cleft palate.



They learn the necessary skills to serve these individuals while in graduate school, but without working with them regularly, these skills are not often fresh in their mind.

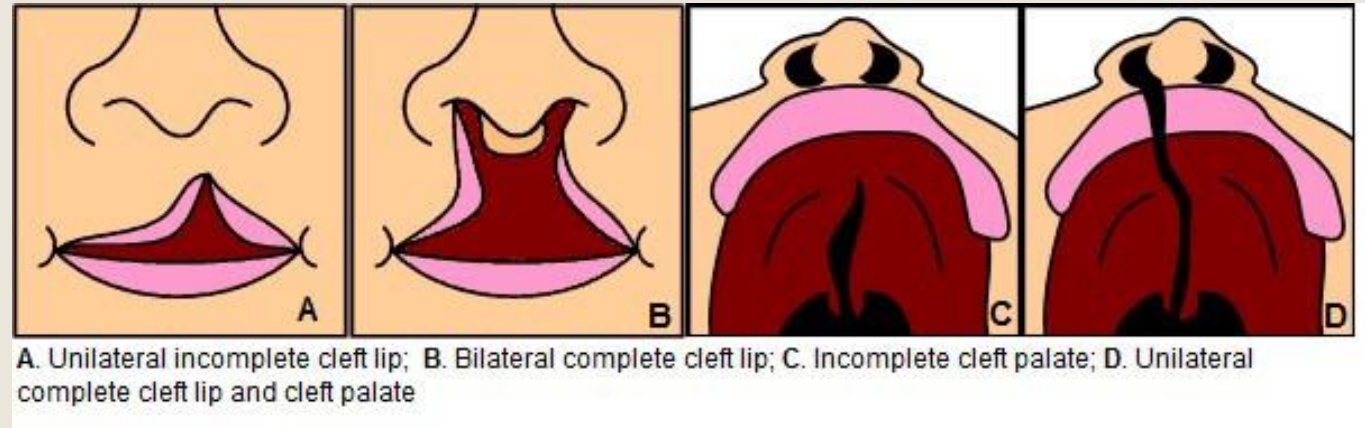
Background: What is cleft palate?

- **Cleft palate is a craniofacial disorder that is characterized by the lack of fusion between the bones within the roof of the mouth.**
- **Individuals can possess a complete cleft or an incomplete cleft.**
- **The presence of a cleft palate can impact speech sounds and cause hypernasality and audible nasal air emissions.**
- **There are 7000 children born with cleft lip and/or palate every year.**



Why do SLPs need to know about it?

- **Individuals with a cleft palate will have speech and feeding difficulties.**
- **SLPs need to possess the skills necessary in order to assist in the treatment and evaluation of all speech and feeding disorders related to cleft palate.**



Role of my Project

- **These brochures serve as a tool to be utilized in the clinic/classroom setting to assist in the treatment, evaluation, and implementation of feeding strategies for individuals with cleft palate.**
- **The brochures cover a substantial range of topics that will allow SLPs to feel prepared to meet the varying needs of their clients.**
- **SLPs will be able to have these resources readily available for in-session use.**

Therapy Techniques for Cleft Palate

Specific Speech Therapy Techniques for Eliminating
Compensatory Articulation Errors

BILABIAL STOPS

- Produce /m/ with nasal occlusion to achieve /b/
- "Puff" cheeks to maximize oral pressure
- Whisper target phoneme for glottal stop substitution
- Use visual feedback (e.g., tissue) to show air "popping" from mouth
- Produce /h/ and open and close lips slightly



ALVEOLAR STOPS

- Produce /n/ with nasal occlusion to achieve /d/
- Whisper /n/ with nasal occlusion to achieve /t/
- Produce /s/ and "stop" airstream
- Produce /θ/, retract tongue, and "stop" airstream
- Shape from /p/ to produce /t/
- Teach interdental /t/ and retract to alveolar
- Include minimal pairs activities



FRICATIVES & AFFRICATES

- Use Long-T technique (t-t-tss) to produce /s/
- Bite the lip and blow for the /f/ providing tactile feedback using child's hand
- Protrude tongue for /θ/ and retract for /s/
- Occlude nostrils during practice when nasal fricative is substituted
- **Be careful** of reinforcing mid-dorsum palatal fricative!



VELAR STOPS

- Produce /ŋ/ with nasal occlusion to achieve /g/
- Produce /t/ or /d/ while depressing tongue tip
- Have child pretend to "gargle" with head back
- Attempt VC with high vowel (e.g., /i/ with velar)
- Whisper technique if substituting glottal stops
- Teach velar fricative approximation in isolation
- Minimal pairs activities

CAUTION!
No Oral Motor
Exercises!



References

ASHA Special Interest Group 5. Therapy techniques for speech sound disorders associated with repaired cleft palate. Handout to accompany Poster. Developed in 2014. Peterson-Fitzone, S.J., Trost-Cardonone, J.E., Karnell, M.P., & Hardin, M.A. (2017). The Clinician's Guide to Treating Cleft Palate Speech, 2nd Ed. St. Louis, MO: Mosby Elsevier.

Gabbing-Kuehler, K. (2001). Therapy Techniques For Cleft Palate Speech And Related Disorders. San Diego: Singdon-Thompson Learning.

Methods for Creating the Brochures



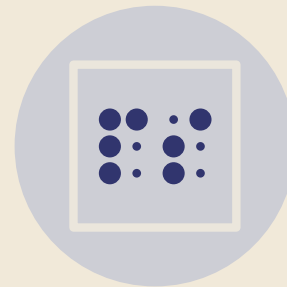
Used info from books, ASHA SIG 5 poster, ACPA website, Leader's Project videos



Compiled all of the important information and consolidated it into a set of five educational brochures.



These guides used comprehensive language for the respective audience (ie caregivers and SLPs)



Easy to navigate format, visually appealing design, small/compact size that is suitable for on-site use and for travelling SLPs

Examples from Treatment Brochure

RED FLAGS DURING COURSE OF TREATMENT



- Progress is not being made
- New errors in the child's speech
- Non-oral motor speech exercises
 - Some errors may indicate that a speech sound error is obligatory.
 - Providing treatment that is proven to not work is unethical.

- **When it comes to therapy for cleft palate speech, it is important to remember that the SLP should not intervene until surgical repairs have been made (if needed).**
- **SLPs need to be able to tailor therapy sessions to the specific needs of their clients, and in order to do this it is necessary to understand the differences between different kinds of clefts.**

Examples from Evaluation Brochure

- **Evaluation of cleft palate includes a variety of things including: assessing the quality of speech, determining what kind of cleft is present, and what intervention strategies will work best for that client.**

ASSESSMENT

- Perform an articulation and resonance evaluation and transcribe speech
- Rate speech features such as hypernasality, audible nasal air emission, and intelligibility.
- Diagnostic considerations
 - Be aware of sounds that should be present at the patient's age.
 - Are any "errors" due to different cultural perspectives?
 - Was the cleft repair successful?
- Use low-tech tools such as See-Scape or a straw to identify inaudible nasal air escape.
- Positive findings:
 - Age appropriate place of articulation
 - Any oral pressure sounds
 - Oral pressure with nasal occlusion
- Negative findings:
 - Compensatory articulation
 - No improvement in oral pressure with nasal occlusion

Examples from Feeding Brochure

- **When it comes to feeding, it is important to make sure that caregivers understand that babies with clefts have additional feeding needs.**
- **Parents may feel overwhelmed when it comes to understanding how to feel their baby, so this guide is meant to help ease some of the uncertainty associated with this time.**

TIPS FOR FEEDING

- Place the baby in an upright, sitting position to prevent the formula from flowing back into the nose area.
- Watch for a pattern of sucking and swallowing.
- Keep the bottle tilted so that the nipple is always filled with milk and pointed down away from the cleft.
- As baby feeds, formula may escape through the nose. This is common and does not mean they are choking. Hold baby in a more upright position and this will lessen the amount of milk coming through the nose.
- Babies with a cleft require burping more often because they take in more air. Watch for signs of discomfort. Baby will give you signs when it's time to stop and burp.

Future Steps

- **In the future, I hope to provide these sources to SLPs across Wyoming and potentially other states.**
- **I am hoping to provide printed copies of these brochures to SLPs across the state of Wyoming.**
- **Additionally, it is a goal to make these available online as well so that SLPs across the country can have access to them as well and the Wyoming SLPs can get more copies as needed.**

Conclusion

- **SLPs in rural areas do not often have a client with a cleft on their caseload, they are not always up to date with the best interventions regarding treatment, evaluation, and implementation of feeding strategies for children with cleft palate.**
- **The brochures will serve as a tool to be utilized as needed by SLPs during sessions with their clients.**

Resources

- **American Cleft-Palate Association. (n.d.). Feeding Your Baby. American Cleft-Palate Association. <https://acpa-cpf.org/acpa-family-services/family-resources/feeding-your-baby>**
- **American Speech-Language-Hearing Association. (2022). Speech-language pathology assistant scope of practice [Scope of Practice]. Available from www.asha.org/policy/**
- **ASHA Special Interest Group 5. Evaluation of Speech Disorders Associated with Cleft Palate and Velopharyngeal Dysfunction. Handout to accompany poster. Developed in 2017.**
- **ASHA Special Interest Group 5. Therapy techniques for speech sound disorders associated with repaired cleft palate. Handout to accompany Poster. Developed in 2014.**
- **Golding-Kushner, K. J. Therapy Techniques for Cleft Palate Speech and Related Disorders. Singular (2001).**
- **Kotlarek, K., Krueger, B. (2022) Treatment of Speech Sound Errors in Cleft Palate: A Tutorial for Speech-Language Pathology Assistants. Language, Speech, and Hearing I Services in Schools. In press.**
- **Kummer, A. W.,. Cleft Palate and Craniofacial Conditions: A Comprehensive Guide to Clinical Management. Jones and Bartlett Learning (2020).**
- **Peterson-Falzone,, et al. The Clinician's Guide to Treating Cleft Palate Speech. Elsevier (2017).**