

Beyond the Plateau:
 Unlocking Progress via Oral Mechanism Exams and
 Myofunctional Strategies Across the Lifespan



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 Michelle Richards, CCC-SLP, TSLI, CLC

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Disclosures

Financial: I am the owner and Clinical Director of Oakland Myo and Wellness Institute and receive a salary for therapy services and programs.

Non-Financial: I have been a school-based Speech-Language Pathologist for 23 years and continue to serve part-time in a public school setting. The views expressed in this presentation are my own and do not necessarily reflect the policies or positions of my employer.

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Learning Objectives

1. Analyze the physiological impact of oral-motor restrictions across clinical settings
2. Correlate tongue tension and myofunctional deficits with specific speech and fluency disorders
3. Formulate effective interdisciplinary referral pathways

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We are healthcare providers

Regardless of the setting, we support "patients".

We all entered this field with a desire to help others and an interest in education and health.

4

The plateau that's felt by the clinician, patient, and caregiver

Shame: "I am bad"

Blame: a defense

5



Look at your uncomfortable data

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100 year old "modern" idea

1907: Dr. Edward Angle, an orthodontist, identified:

- The tongue is an "obstacle"
- Nose breathing impacts tongue posture and malocclusion

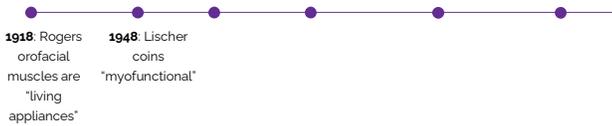
2019: Linda D'Onofrio, an SLP, publishes "Oral Dysfunction as a Cause of Malocclusion"

- Echoes Angle's statements
- Includes a *plethora* of additional research since his claim!

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Myofunctional Timeline for SLPs



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The "Myo" Confusion



Orofacial = Oral + Face



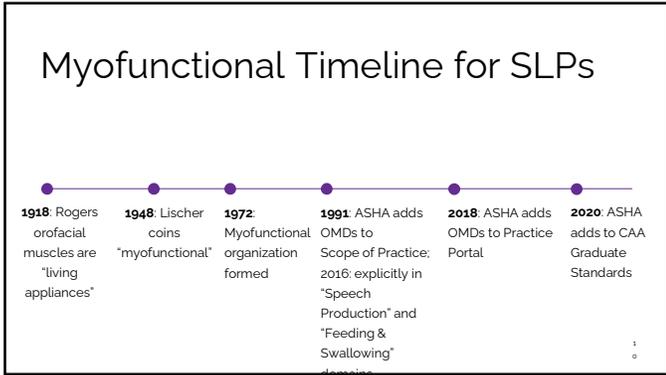
Myo = Muscle



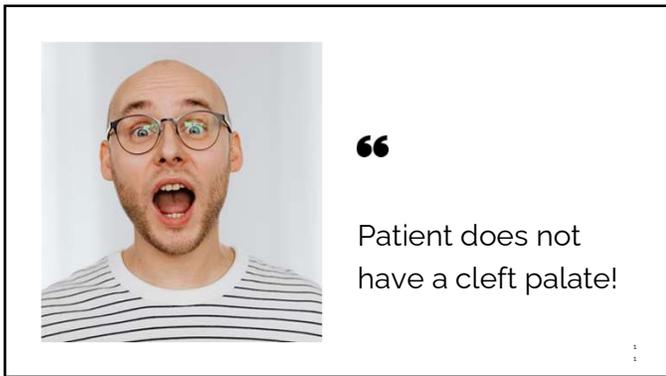
Function!

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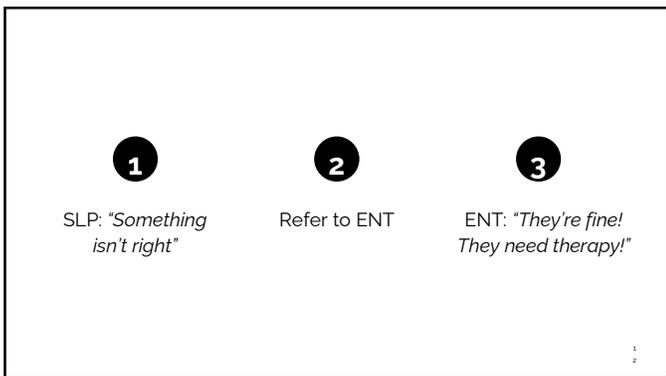
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FAIREST 6 Six Red Flags for Pediatric Sleep Disordered Breathing (SDB)

1 MOUTH BREATHING
 NO YES

2 MENTALIS STRAIN
 NO YES

3 TONSIL HYPERTROPHY
 <50% >50%

4 ANKYLOGLOSSIA
 FREE RESTRICTED RESTRICTED

5 DENTAL WEAR
 NO YES

6 NARROW PALATE
 NO YES

GRADING SCALE

The FAirEST 6

- Created by a multidisciplinary team
- Outlines "red flags" for Sleep Disordered Breathing (SDB)
- Provides objective score
- Guides referral to medical or dental provider
- Looks at the root cause

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S is for Sleep*

*A biological need, not a luxury

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The ADHD Red Herring

AAP and AASM guidelines state clinicians **MUST** refer for a sleep study if snoring or daytime sleepiness is present before concluding an ADHD diagnosis

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#1
Nose vs Mouth
Breathing



1.  VS. 

MOUTH BREATHING
 NO YES

1
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Your Breathing Options

<p>MOUTH BREATHING</p> <p>Smaller airway</p> <p>Sleep disordered breathing</p> <ul style="list-style-type: none"> • snoring, UARS, apnea, daytime sleepiness <p>Suboptimal facial structure growth + esthetics</p> <p>Reduce mental and physical health</p> <p>Behavior problems</p> <ul style="list-style-type: none"> • inattention, hyperactivity <p>Reduced cognitive functioning</p>	<p>NOSE BREATHING</p> <p>Healthy orofacial muscle development</p> <p>Optimal head + face development</p> <p>Filtering, warming, & humidifying air before it enters our body</p> <p>Increase circulation throughout our body</p> <p>Reduce anxiety</p>
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1
0

17

#2: Lip Closure, Mentalis Strain

2.  VS. 

No Mentalis-Strain *Mentalis-Strain*

MENTALIS STRAIN
 NO YES

1
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Breathing & Oral Rest Posture Referrals

- Lips naturally close at rest / are able to close without facial strain, chin wrinkling
 - If not, refer to a clinician specializing in orofacial myology
- Resting position of tongue is up, behind front teeth
 - If not, support in therapy
- Nasal breathing can be sustained for at least 3 consecutive minutes
 - If not, refer to physician / ENT for upper airway assessment
- Breathing is quiet
 - If not, refer to physician / ENT for upper airway assessment
 - Can support slow, diaphragmatic breathing in therapy

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#3 Hard & Soft Palates,
Pharynx

3. Tonsil Coverage

0-25% 25-50% 51-75% 76-100%

TONSIL HYPERTROPHY

<50% >50%

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#4 Tongue Range of Motion: TIP



Maximum Opening (comfortably):.....
 Tongue to the Incisive Papilla (TIP) :

TIP / Maximum Opening:

by measurement

(we still need to look at FUNCTION)

Grade 1, 2: normal functioning
 Grade 3 = 25-49%, "moderate restriction"
 Grade 4 = <25%, "severe restriction"

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#4 Tongue Range of Motion: LPS



Maximum Opening (comfortably):.....
 Lingual Palatal Suction (LPS) :

LPS / Maximum Opening:

by measurement

(we still need to look at FUNCTION)

Grade 1, 2: 30 - >60% normal functioning
 Grade 3 = <30%, "moderate restriction"
 Grade 4 = <5%, "severe restriction"

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Lingual Functioning Referrals

- Tongue Range of Motion Ratio Grade 1-2, tip is >50% elevated towards incisive papilla when mouth is fully opened
 - If not, refer to clinician specializing in orofacial myology
- Lingual Palatal Suction (LPS) shows adequate space for the tongue to fit within it; tongue does not overflow over the middle of the teeth bilaterally
 - If not, refer to dentist for growth check (2-4 years old) or evaluate for orthodontic expansion to allow lingual palatal suction
- Tongue can sweep molars
 - Can support oral motor skills in therapy
 - If not, refer to clinician specializing in orofacial myology

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#5, 6, 8: Dentition

5. DENTAL WEAR

Are there visible signs of dental wear?

NO YES

6. NARROW PALATE

Signs of dental crowding, high arch, and/or narrow palate?

NO YES

MEASURING MAXILLARY INTERMOLAR DISTANCE

Adult Measurements: < 32mm, 32-34mm, 34-36mm, 36-38mm, 38-42mm

Pediatric Measurements: Age = 2+ yrs

8. TONGUE OVERFLOW

Assess for tongue space limitations. Look for tongue overflow while the tongue is held in Lingual palatal suction (LPS).

NO YES

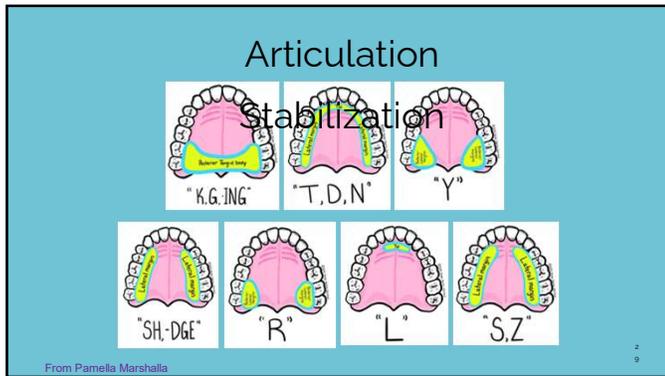
NORMAL MILD MODERATE SEVERE

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Intraoral Structure Referrals

- Palate is U-shaped, is <7mm high, no signs of crowding
 - If not, refer to dentist for growth check (2-4 years old) or evaluate for orthodontic expansion to allow lingual palatal suction
- Tonsils: Brodsky Grade 1-2, >50% oropharynx
 - If not, refer to Physician/ENT: airway obstruction impacts tongue placement at rest / in speech, swallow
- Teeth do not show dental wear / no observed or reported clenching, grinding
 - If not, refer to Physician/Dentist: sign of airway compensation
- Friedman: Class I-II
 - If not, monitor as therapy progresses; can note to Physician/Dentist

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My
Speech
Room
Wonders

- 1 Why did some produce /s, z/ with lower incisors?
- 2 Why were my students the most disruptive in their classrooms and often known throughout the school?
- 3 Why were so many of my students referred for evaluations for Learning Disabilities?
- 4 Why were 5/6 of the slowest running students in Gym class my students?
- 5 Why did I hear so many a/ae substitutions in my most impaired articulation kids?

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My
Speech
Room
Wonders

Solved!

- 1 Why did some produce /s, z/ with lower incisors?
- 2 Why were my students the most disruptive in their classrooms and often known throughout the school?
- 3 Why were so many of my students referred for evaluations for Learning Disabilities?
- 4 Why were 5/6 of the slowest running students in Gym class my students?
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Root cause?
COMPENSATIONS?

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Common Plateaus



<p>Fluency:</p> <p>Breath support</p> <p>Muscle</p>	<p>Articulation:</p> <p>Must use slow speech</p> <p>Unable to move into conversation</p> <p>Poor molar stabilization</p> <p>Unstable jaws</p> <p>Poor lip and/or tongue dissociation</p> <p>Poor range of motion</p> <p>Language:</p> <p>Just the minimum (verbal or written)</p> <p>Late talkers</p> <p>Delayed development</p>	<p>Feeding/Swallowing:</p> <p>Picky eating</p> <p>Slow eating</p> <p>Messy eating</p> <p>Poor oral health</p> <p>Digestive issues</p> <p>Muscle Tension</p> <p>Voice:</p> <p>Breath support</p> <p>Muscle tension</p> <p>Head</p>
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2023-2025 Research Peek

<p>Dyslexia: Tongue dysfunction may be an early marker for learning disorders (Burlea et al 2025)</p>	<p>Autism: 81% of autistic individuals show oromotor abnormalities (Maffei et al 2023)</p>	<p>Voice: 91.6% of MTD patients improved after myofunctional therapy + release (Summersgill et al 2023)</p>
<p>Obstructive Sleep Apnea: Poor voice assessment vs control group without snoring (Martins et al 2025)</p>	<p>Cerebral Palsy: Releasing tethered oral tissues "unlocks" mobility for sleep and swallowing (Baxter & Merkel-Walsh, 2025)</p>	

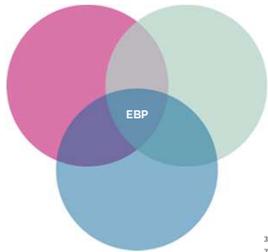
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EBP

ASHA's Model



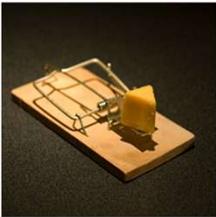
Medical Model



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Watch the Ableist Trap!

"That's just how they are"



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“Plateaus are an opportunity to re-evaluate what we may be missing”

enhanced oral function assessments
create stronger evaluations, faster progress, higher outcomes



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Reference

American Speech-Language-Hearing Association. (n.d.). Orofacial myofunctional disorders (Practice Portal). <https://www.asha.org/practice-portal/clinical-topics/orofacial-myofunctional-disorders/>

American Speech-Language-Hearing Association. (1978). Report. Ad hoc committee on labial-lingual posturing function. *ASHA*, 31(11), 52-54.

American Speech-Language-Hearing Association. (1993). The role of the speech-language pathologist in the management of oral myofunctional disorders (Position Statement). <https://www.asha.org/policy/p1993-030207/>

American Speech-Language-Hearing Association. (1993). Orofacial myofunctional disorders: Knowledge and skills. *ASHA*, 35(Suppl. 1), 21-23.

American Speech-Language-Hearing Association. (2018). Scope of practice in speech-language pathology (Scope of Practice). <https://www.asha.org/policy/p2018-01041/>

Baxter, R., & Merzel-Walsh, R. (2005). Cerebral palsy and arylglossia: Improved sleep, speech, swallowing, and breathing after lingual frenectomy tongue-tie release: A case series. *Special Care in Dentistry*, 49(3). Article #70045. <https://doi.org/10.1111/j.1744-1049.2005.01049.x>

Baxter, R., Merzel-Walsh, R., Baxter, B. S., Lashley, A., & Binkoff, N. R. (2008). Functional improvements of speech, feeding, and sleep after lingual frenectomy tongue-tie release: A prospective cohort study. *Clinical Pediatrics*, 49(4), 489-494. <https://doi.org/10.1177/0009922808318185>

Baselodovsky, L., Lange, T., & Born, J. (2012). Sleep and immune function. *Physiology Archive - European Journal of Physiology*, 49(3), 123-137. <https://doi.org/10.1007/s00424-011-1044-0>

Brown, B. (2006). Shame Resilience Theory: A Grounded Theory Study on Women and Shame, Families in Society: The Journal of Contemporary Social Services.

Burke, S. L., Chohanji, L. E., Staravali, O., Vicario, M., Singh, A. E., Rubini, I., Ilnicki, D. A., Baki, V., Badman, M. A., Toma, Y., Amirov, L., & Culurci, A. (2023). Exploring Dyslexia Risk Through Psycholinguistic and Orofacial Correlates: Neurodevelopmental Insights Toward a Personalized Medicine Approach. *Journal of personalized medicine*, 13(8), 359. <https://doi.org/10.3390/jpm13080359>

Cappuccio, F. P., Cooper, D., D'Elia, L., Strazzullo, P., & Miller, M. A. (2011). Sleep duration predicts cardiovascular outcomes: a systematic review and meta-analysis of prospective studies. *European Heart Journal*, 32(12), 1484-1492. <https://doi.org/10.1093/eurheartj/ehr007>

Council for Clinical Certification in Audiology and Speech-Language Pathology. (2020, 2020). Standards for the certificate of clinical competence in speech-language pathology. <https://www.asha.org/certification/2020-4hp-certification-standards/>

4
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Council on Academic Accreditation in Audiology and Speech-Language Pathology. (2023). Standards for accreditation of graduate education programs in audiology and speech-language pathology. <https://caaa.org/resources/files/2023-accreditation-standards-gr-graduate-slp.pdf>

D'Onofrio, S. (2020). Oral dysfunction as a cause of malocclusion. *Orthodontics & craniofacial research*, 23. Suppl 1(Suppl 1), 43-48. <https://doi.org/10.1111/orc.12377>

Ferrante, A., & Ferrante, A. (2015). Il problema del succhiamento del dito. Nuove Interpretazioni e implicazioni terapeutiche [Finger or thumb sucking: New interpretations and therapeutic implications]. *Minerva pediatrica*, 67(4), 289-297.

Han, S.-H., Kim, M.-C., Choi, Y.-S., Lim, J.-S., & Han, K.-T. (2021). A study on the genetic inheritance of orofacial dysplasia based on pedigree analysis. *Archives of Plastic Surgery*, 24(4), 299-302. <https://doi.org/10.5999/aps.2021.24.4.299>

Klockars, T. (2007). Familial orofacial dysplasia (Bangue-Sell). *International Journal of Pediatric Otorhinolaryngology*, 71(8), 1307-1314. <https://doi.org/10.1016/j.ijporl.2007.05.018>

Moffitt, M. F., Chennavathy, K. V., Ghil, S. V., Toppo-Flasberg, H., & Green, J. R. (2023). Osomodor (Hb) in autism spectrum disorder: A scoping review. *Autism research: official journal of the International Society for Autism Research*, 16(5), 879-917. <https://doi.org/10.1002/aur.2943>

Marshalla, P. (2021). The Marshalla guide: A topical orthology of speech movement techniques for motor speech disorders and articulation deficits. *Marshalla Speech and Language*.

Martin, M. F. L., Echeñe, A. L., Saldar, F. G., Valera, F. C. P., & Falha, G. A. (2023). Vocal and Orofacial Myofunctional Characteristics of Individuals with Obstructive Sleep Apnea. *Sleep science (Sao Paulo, Brazil)*, 18(4), e327-44(3). <https://doi.org/10.5935/s1516-9445-2023-0107279>

Merkei-Walsh, R., & Covey, D. (n.d.). An open letter to The Informed SLP. https://www.robynmerkeiwalsh.com/_files/ugd/108114_c81e1932166547618a9936079f81e2a9.pdf

Merkei-Walsh, R., Covey, D., Burnelle, A., Girme, D., Turlich, D., Tang, R. J., & Smart, S. (2023). Effectiveness of Orofacial Myofunctional Therapy for Speech Sound Disorders in Children: A Systematic Review. *International Journal of Orofacial Myology and Myofunctional Therapy*, 4(1), 4. <https://doi.org/10.33064/ijom4.1.4>

Mills, C. S. (2022). International Association of Orofacial Myology History Origin - background - contributors. *International Journal of Orofacial Myology*, 37(1), 5-25.

Sockell, D. L., Rosenberg, W. M., Gray, J. A., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: what it is and what it isn't. *BMJ (Clinical research ed.)*, 312(7023), 71-72. <https://doi.org/10.1136/bmj.312.7023.71>

Summingill, I., Nguyen, G., Gray, C., Narasimhan, L., Merkei-Walsh, R., Kozumovic, C., Red, B., & Zoghbi, S. (2023). Muscle Tension Dysphonia in Singers and Professional Speakers with Orofacial Dysplasia: Impact of Treatment with Lingual frenuloplasty and Orofacial Myofunctional Therapy. *International Journal of Orofacial Myology and Myofunctional Therapy*, 4(1), 1-8. <https://doi.org/10.33064/ijom4.1.1>

Walker, M. P., & Stickgold, R. (2006). Sleep, memory, and plasticity. *Annual Review of Psychology*, 57, 139-166. <https://doi.org/10.1146/annurev.psych.56.0913.070308>

Wei, L., Kemp, H., Xu, G., Chen, M. J., Luo, Y., Tiyagangnan, M., O'Donnell, J., Christensen, D. J., Nicholson, C., Rife, J. J., Takano, T., Deane, R., & Nedergaard, M. (2023). Sleep drives metabolic clearance from the adult brain. *Science*, 340(6591), 379-377. <https://doi.org/10.1126/science.1242242>

