

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



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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

3



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



Look at your uncomfortable data

5

6

100 year old "modern" idea

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

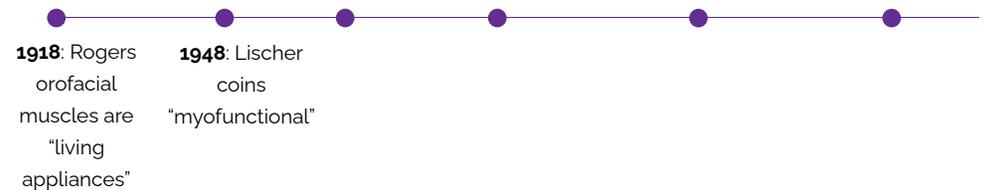
- The tongue is an "obstacle"
- Nose breathing impacts tongue posture and malocclusion

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!

7

Myofunctional Timeline for SLPs



8

The "Myo" Confusion



Orofacial = Oral + Face



Myo = Muscle



Function!

9

Myofunctional Timeline for SLPs



10



“

Patient does not have a cleft palate!

1

SLP: "Something isn't right"

2

Refer to ENT

3

ENT: "They're fine! They need therapy!"

11

12

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

Each of these six (6) factors is an independent "red flag" for sleep-disordered breathing.

- 1. MOUTH BREATHING**
 NO YES
 Difficultly with exclusive nasal-breathing for 3+ minutes?
- 2. MENTALIS STRAIN**
 NO YES
 No Mentalis-Strain vs. Mentalis-Strain
- 3. TONSIL HYPERTROPHY**
 <50% >50%
 Tonsil Coverage: 0-25%, 25-50%, 51-75%, 76-100%
- 4. ANKYGLOSSIA**
 NOT RESTRICTED RESTRICTED (GRADE 3-4)
 TRM Tip: Tongue Range of Motion Index with Tongue to Intraoral Palate
- 5. DENTAL WEAR**
 NO YES
 Are there visible signs of dental wear?
- 6. NARROW PALATE**
 NO YES
 Signs of dental crowding, high arch, and/or narrow palate?

GRADING SCALE

The score on the FAIREST 6 is equal to the sum of the number of red flags present. Scores range from 0 (none of the items are present) to 6 (all six of the screening items are present). A score of four corresponds to mildly increased risk of sleep-disordered breathing. Four indicators (recurrently increased risk, six indicators severely increased risk).

Number of Red Flags	Score	Risk Level
0	0	Normal
1	1	Mild
2	2	Mild
3	3	Mild
4	4	Moderate
5	5	Severe
6	6	Severe

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

1
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S is for Sleep*

*A biological need, not a luxury



1
4



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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5

#1 Nose vs Mouth Breathing



1. MOUTH BREATHING

NO YES

1
6

Your Breathing Options

MOUTH BREATHING

- Smaller airway
- Sleep disordered breathing
 - snoring, UARS, apnea, daytime sleepiness
- Suboptimal facial structure growth + esthetics
- Reduce mental and physical health
- Behavior problems
 - inattention, hyperactivity
- Reduced cognitive functioning

NOSE BREATHING

- Healthy orofacial muscle development
- Optimal head + face development
- Filtering, warming, & humidifying air before it enters our body
- Increase circulation throughout our body
- Reduce anxiety

#2: Lip Closure, Mentalis Strain



Breathing & Oral Rest Posture Referrals

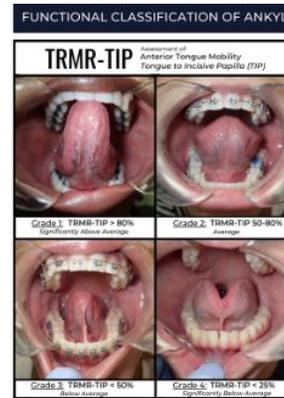
- Lips naturally close at rest / are able to close without facial strain, chin wrinkling
 - If not, refer to a clinician specializing in orofacial myology
- Resting position of tongue is up, behind front teeth
 - If not, support in therapy
- Nasal breathing can be sustained for at least 3 consecutive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

#3 Hard & Soft Palates, Pharynx



2
1

#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"

2
2

#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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2
4



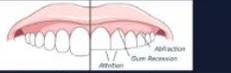
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Lingual Functioning Referrals

- 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**

NO YES

Are there visible signs of dental wear?

6.  **NARROW PALATE**

NO YES

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



8.  **TONGUE OVERFLOW**

NO YES

NORMAL MILD MODERATE SEVERE

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

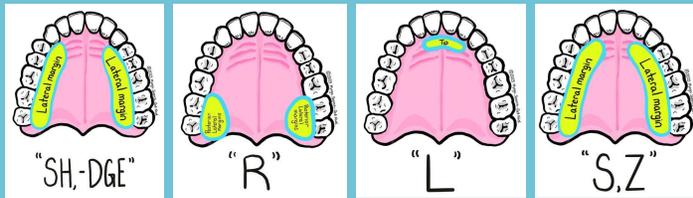
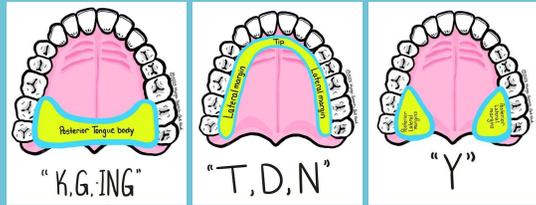
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Intraoral Structure Referrals

- 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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Articulation Stabilization



From Pamella Marshall

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3
0



3
1

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?

3
2

My
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- 1 Why did some produce /s, z/ with lower incisors?
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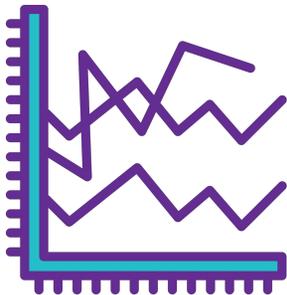
Solved!



Root cause?

COMPENSATIONS?

Common Plateaus



Fluency:
Breath support
Muscle
Tension

Articulation:
Must use slow speech
Unable to move into conversation
Poor molar stabilization
Unstable jaws
Poor lip and/or tongue dissociation
Poor range of motion

Language:
Just the minimum (verbal or written)
Late talkers
Delayed development

Feeding/Swallowing:
Picky eating
Slow eating
Messy eating
Poor oral health
Digestive issues
Muscle Tension

Voice:
Breath support
Muscle tension
Head position/posture

2023-2025 Research Peek

Dyslexia: Tongue dysfunction may be an early marker for learning disorders (Burlea et al 2025)

Autism: 81% of autistic individuals show oromotor abnormalities (Maffei et al 2023)

Voice: 91.6% of MTD patients improved after myofunctional therapy + release (Summersgill et al 2023)

Obstructive Sleep Apnea: Poor **voice** assessment vs control group without snoring (Martins et al 2025)

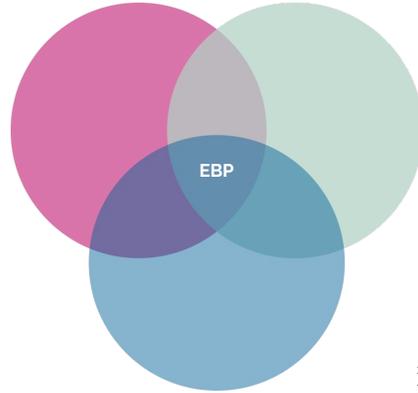
Cerebral Palsy: Releasing tethered oral tissues "unlocks" mobility for sleep and swallowing (Baxter & Merkel-Walsh, 2025)

EBP

ASHA's Model



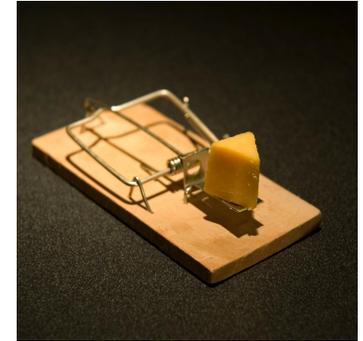
Medical Model



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Watch the Ableist Trap!

"That's just how they are"



3
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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



3
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