WHEN ARTIC IS NOT ARTIC

• Are you hearing an articulation disorder, or are you hearing the symptoms of a structural, muscle function, or placement disorder?

• How long is too long to work on an articulation target?

• What do you do when you don’t know what to do?

OBJECTIVES

• Introduce concepts of Oromyofunctional Disorders & Oral Placement Disorders

• Know the Red Flags associated with OMD

• Know the basics of differential diagnosis for articulation v. structural v. motor-based v. placement disorder

• Have practical treatment techniques for clients with OMD & OPD.
THE DILEMMA & THE CONTROVERSY

• ASHA’s stance on oral motor techniques, NSOMEs

• Oral motor research
  • Subjects are boringly normal; no atypical kids
  • Small samples
  • Focus on non-functional, non-speech related activities

• Teaching placement, range of motion & smooth grading is NOT the same as an oral-motor exercise.

LIMITATIONS OF SCHOOL SLP THERAPY

• If it’s not academically relevant, it cannot be addressed on an IEP.

• Feeding & swallowing often fall to OTs in the school environment.

• Referrals for outside support have to be deemed medical or the school may have to fund it.

OROMYOFUNCTIONAL DISORDERS

OROMYOFUNCTIONAL DISORDERS
ASHA’S DEFINITION

• What are orofacial myofunctional disorders (OMD)?
  • With OMD, the tongue moves forward in an exaggerated way during speech and/or swallowing. The tongue may lie too far forward during rest or may protrude between the upper and lower teeth during speech and swallowing, and at rest.

• What are some signs or symptoms of OMD?
  • Although a “tongue thrust” swallow is normal in infancy, it usually decreases and disappears as a child grows. If the tongue thrust continues, a child may look, speak, and swallow differently than other children of the same age. Older children may become self-conscious about their appearance.

• What effect does OMD have on speech?
  • Some children produce sounds incorrectly as a result of OMD. OMD most often causes sounds like /v/, /l/, /zh/, /sh/ and /j/ to sound different. For example, the child may say “thumb” instead of “some” if they produce an /v/ like a /th/. Also, the sounds /t/, /d/, /n/, and /l/ may be produced incorrectly because of weak tongue tip muscles. Sometimes speech may not be affected at all.
DIAGNOSING OMD

OMD is often diagnosed by a team of professionals. In addition to the child and his or her family or caregivers, the team may include:

- An SLP
- An orthodontist
- A dentist
- A physician

Both dentists and orthodontists may be involved when constant, continued tongue pressure against the teeth interferes with normal tooth eruption and alignment of the teeth and jaws. Physicians rule out the presence of a blocked airway (e.g., from enlarged tonsils or adenoids or from allergies) that may cause forward tongue posture. SLPs assess and treat the effects of OMD on speech, rest postures, and swallowing.

ASSESSMENT CONSIDERATIONS

RED FLAGS

- History of frequent middle ear infections, upper respiratory infections, sinus infections, allergies
- Messy eating & drooling
- Tongue thrust swallow
- Low forward lingual rest posture
- Obvious malocclusions
- Finger or thumb sucking
- Bottle or pacifier use past two years old
DYNAMIC ASSESSMENT/DIAGNOSTIC INTERVENTION

• Evaluation & Treatment are not separate events
• Evaluation & Clinical Observation are part of every session
• Probing skills for later objectives or future assessment

FOCUSING ON BEHAVIOR

• Typical children respond to typical therapy in a typical way. Change the behavior, change the speech.
• But when typical therapy doesn’t yield typical results, what then?

MY APPROACH TO EVERYTHING

• Boney Structure
• Muscle Function
• Behavior
### MY APPROACH TO EVERYTHING

<table>
<thead>
<tr>
<th>Structure</th>
<th>Function</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaw</td>
<td>Breathing</td>
<td>Attention</td>
</tr>
<tr>
<td>Teeth</td>
<td>Muscle tone</td>
<td>Motivation</td>
</tr>
<tr>
<td>Lips</td>
<td>Stability</td>
<td>Self-awareness</td>
</tr>
<tr>
<td>Tongue</td>
<td>Range of motion</td>
<td>Problem-solving</td>
</tr>
<tr>
<td>Hard palate</td>
<td>Speed &amp; accuracy</td>
<td>Parental Support</td>
</tr>
<tr>
<td>Soft palate &amp; oral pharynx</td>
<td>Smooth graded movement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structured &amp; conversational speech</td>
<td></td>
</tr>
</tbody>
</table>

### TYPICAL MALOCCLUSIONS

**STRUCTURE - MALOCCLUSIONS**
LINGUAL FUNCTION
LINGUAL FUNCTION

BREATHING
ADENOID FACES

WHY MOUTH BREATHING MATTERS

- Chronic mouth breathing contributes to:
  - Flaccid jaw posture, which can change the direction of jaw growth
  - Hard palate collapse
  - Over-eruption of the molars
  - Low forward lingual rest posture with flaccid lateral margins
  - Increasingly flaccid tongue blade
  - Imprecise and mushy speech with forward placement

IF YOU SUSPECT AN OMD, STRUCTURAL OR MOTOR-BASED SPEECH DISORDER

- Make observations about breathing, oral rest postures, feeding as foundations of speech production
- Make observations about tongue shape, tone, range of motion, differentiated movement
- Make observations about articulatory placement & acoustic clarity
- Referrals to an ENT, orthodontist, or clinic-based SLP are medical referrals, not academic referrals

OMD TREATMENT

ASHA’S DEFINITION
OMD TREATMENT

- A speech-language pathologist (SLP) with experience and training in the treatment of OMD will evaluate and treat the following:
  - open-mouth posture
  - speech sound errors
  - swallowing disorders
- SLPs develop a treatment plan to help a child change his or her oral posture and articulation, when indicated. If tongue movement during swallowing is a problem, the SLP will address this as well. [Address this First!]

OMD TREATMENT

- Treatment techniques to help both speech and swallowing problems caused by OMD may include the following:
  - Increasing awareness of mouth and facial muscles
  - Increasing awareness of mouth and tongue posture
  - Improving muscle strength and coordination
  - Improving speech sound productions
  - Improving swallowing patterns
- If airways are blocked due to enlarged tonsils and adenoids or allergies, speech treatment may be postponed until medical treatment for these conditions is completed. If a child has unwanted oral habits (e.g., thumb/finger sucking, lip biting), speech treatment may first focus on eliminating these behaviors.

PRACTICAL TREATMENT TECHNIQUES

- Placement matters
  - S & Z may be symptoms of a larger placement & positioning issue – check all alveolars
- Teaching alveolars
  - Beginning with N
  - The dreaded Tadalacha
  - S is a cognate of T & N, not TH
PRACTICAL TREATMENT TECHNIQUES

• The Feedback System
  • Speech is typically learned & evaluated acoustically.
  • To retrain alveolars, you must incorporate visual and tactile feedback.
  • Auditory feedback alone will deceive you.
  • Z is deceptive because the voicing often masks incorrect placement.

TEACHING S & Z

• S is achieved by blowing air through a small hole.
• That hole can be a space between the teeth.
• That hole can be a space between the tongue & upper teeth.
• Unilateral airflow can be central or off to the side.
• If S is made using a gap in the teeth, a frontal lisp will develop when braces are installed.
• When braces are removed, the gap for S will reappear.

TEACHING R

• Developmental v. Weak v. Distorted
• Developmental R
  • Normal developmental error
  • R is typically emerging in some environments
  • Use reading & structured conversation to generalize
• Weak R
  • Achievable when teeth are closed or when posterior lateral margins are raised for another sound (K, G, NG)
  • The rubber-band/swinging back, vowel-R-vowel
**TEACHING R**

- Distorted R
- Creating lingual pressure somewhere, anywhere
- The downside of the Retroflex R – the tip drag along the hard palate
- The 3 things you must do to make a perfect R
  - The tongue must be back
  - The tongue must be tight
  - The sides of the tongue must touch the molar ridge (ideally behind the molars)
- Forcing the R – the hands on approach

**MY PERSONAL BIAS**

- Oral rest posture and lingual rest posture are the most important components for generalizing clear articulation throughout the lifetime.
- Ignoring rest posture and only working on articulation increases the time children are in speech therapy. This in turn increases case loads, reduces client motivation, and prolongs and ingrains habits that must be retrained later.
- You only need good rest posture every day for the rest of your life.

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REFERENCES & MORE INFORMATION

• http://www.asha.org/public/speech/disorders/OMD.htm