

Untying the Knot: Resolving Muscle Tension Dysphonia in Singers in the Clinic and Studio

Leda Searce, MM, MS, CCC-SLP

Matt Edwards, DMA

What I listen for:

- What is happening at the vocal fold level?
- How is the respiratory system interacting with the vocal folds?
- What is happening in the back room?
- What is happening in the front room?

Swallowing and Singing have a lot in common

Swallowing	Singing
- Tongue raises to block food from exiting the mouth	- Tongue raises to form a vowel
- Soft palate raises so food can pass into the pharyngeal cavity	- The soft palate rises to prevent nasality
- The vocal folds close firmly together	- The vocal folds are closed to phonate the desired pitch
- The air pressure beneath the vocal folds helps the larynx rise	- The air pressure beneath the vocal folds will encourage the larynx to rise
- The tongue retracts to guide food into the pharyngeal cavity	- The tongue retracts instinctually
- The constrictor muscles contract to guide food down the esophagus	- The constrictor muscles attempt to engage

First step:

- What: Train the body that tongue retraction is not necessary for phonation
- How: Extended tongue phonation

Second step:

- What: Improve tongue mobility
- How: Articulation exercises
- Place of Articulation
 - o bilabials /m,w,b,p/
 - o labiodentals /f,v/
 - o alveolars /l,t,d,n,s,z/
 - o palatoalveolars /ʃ,ʒ,tʃ,dʒ/
 - o palatal /j/
 - o velars /ŋ,k,g/
- la; da; ta; na
- /ja/
- ka; ga
- ga-la
- The work other vowels and make sure the tongue is in the correct position for the desired outcome

Third step:

- What: Improve tongue agility
- How: Tongue Twisters (McClosky)

Fourth step:

- What: Apply this work to songs
- How: Alternate practice (tongue out then words, consonant drills then words)

Using negative practice

- To develop kinesthetic awareness

Stylistic Considerations

- Not always a bad thing

Jaw

- Often related to the tongue
- Masseter release
- Altoids

Using the microphone

- How it affects posture
- Using it to assist in pacing
- Live vs. Recording studio

The best way to learn microphone technique is to practice with a microphone. Using a dynamic microphone, try the following:

- Position the microphone directly in front of your mouth, no further than 1 cm away. Sustain a comfortable pitch and slowly move the microphone away from your lips. Listen to how the sound quality changes. When the microphone is close to your lips, you should notice that the sound is louder and has more bass response. As you move away from the mic, there will be a noticeable loss in volume and the tone will become brighter.
- Next, try sustaining a pitch while rotating the handle down. You should notice that the sound quality changes in a similar fashion as when you moved the microphone away from your lips.
- Now try singing breathy with the microphone close to your lips. How little effort can you get away with and still sound good?
- Try singing bright, at a medium volume level, with a closed mouth and spread lips with the microphone placed approximately 1 to 3 cm from your mouth. In this position, you should be able to create aggressive sounds without over-singing.
- Next, cup both of your hands around the microphone and then sing into your hands. Try using a vocal fry in this position and experiment with death metal-style sounds. You should notice that the cupping of your hands increases the bass response and helps boost your vocal power without excess effort.
- Also, experiment with variations in your diction. Because the microphone amplifies everything, you may need to under-pronounce some consonants when singing on a microphone.

“When in Doubt Refer Out”

When to refer out

- Voice changes that last for more than 1-2 weeks
- Gradual reduction in range
- Chronic hoarseness
- Complaints of discomfort
- When your arsenal of tools does not work