Voice Center Update

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WELCOME

Welcome to the third edition of *Voice Center Update*. This newsletter gives our voice team the opportunity to provide information and insights in the realm of voice, airway, and swallowing. If you are interested in viewing our first and second editions from 2017 and 2018, please visit utswmed.org/voice.

We are now in our 11th year as a Voice Center and have some exciting updates to share with you. We've been in our new location in the Southwestern Medical District's West Campus Building 3 for just over a year. The state-of-the-art facility has expanded our space and equipment and provided easier access for patients. The new site features a laser suite within the clinic, so we're now able to perform

office-based laryngeal pulsed KTP laser treatments during patients' visits. We continue to make progress in recruiting a Ph.D.-level speech-language pathologist to further expand our clinical and translational research efforts. Recently, we played a major role in organizing the 2019 Fall meeting of voice care specialists held annually, this year in Plano. Many of our voice team members gave talks and served on expert panels. Finally, we continue to provide voice care at our Moncrief satellite clinic in Fort Worth and are pleased to extend our service to Collin and Denton counties through our presence at the new UT Southwestern Medical Center at Frisco, which opened in early December.

Thank you for continuing to entrust us with the care of your patients. For more information, please sign up for our electronic newsletter by sending your contact information to voicecenter@utsouthwestern.edu.

Sincerely

Lesley F. Childs, M.D.

Associate Professor, Otolaryngology Medical Director, Clinical Center for Voice Care lesley.childs@utsouthwestern.edu

Ted Mau, M.D., Ph.D.

Professor, Otolaryngology
Director, Clinical Center for Voice Care
ted mau@utsouthwestern edu



UT Southwestern Medical Center at Frisco

Professional Voice Care

By Lesley Childs, M.D. Associate Professor, Otolaryngology Medical Director, Clinical Center for Voice Care



aring for the vocal performance community is a great privilege. The

UT Southwestern

Voice Center is proud to provide care for singers from the Dallas Opera, Dallas Summer Musicals, Children's Chorus of Greater Dallas, and many other choirs and performance venues throughout the Metroplex. A multidisciplinary approach that is both accessible and sensitive to the unique needs of the performing artist is crucial to providing the highest level of care. There is, unfortunately, a stigma associated with "voice problems" in the vocal performance community, so it is paramount to remember that the human voice is personal, closely linked with self-identity, and often accompanied by a powerful emotional overlay. Additionally, when our patients' livelihood is on the line, the stakes couldn't be higher.

"A rehabilitative approach is required in collaboration with a voice therapist, much like the important work completed with a physical therapist in the case of an injured athlete."

Tenets of vocal therapy intervention

Three common principles underscore behavioral management recommendations for the performance voice community: vocal "dose" awareness, vocal hygiene optimization, and muscle memory pattern adjustments.

Vocal "dose" awareness has to do with the concept of the total amount of voice use over a period of time, which includes both the speaking voice and singing voice.

Vocal hygiene refers to education surrounding the care of the larynx and includes the importance of adequate hydration.

In the setting of injury, frequently the muscle memory patterns associated with voice use need to be adjusted, most likely due to laryngeal hyperfunction. A rehabilitative approach is required in collaboration with a voice therapist, much like the important work completed with a physical therapist in the case of an injured athlete.

Typically, voice therapy with a singer will focus on improving the speaking voice technique before addressing the singing voice technique. Improving vocal efficiency by rebalancing the vocal subsystems underscores the objective of voice therapy intervention. Because fewer than 5% of speech therapists specialize in disorders of the voice, it is important to identify qualified practitioners with this specific skill set.

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Voice Care Team

Back row (left to right): Amy Harris, M.A., CCC-SLP; Barbara Schultz, M.D.; Ted Mau, M.D., Ph.D.; Kathleen M. Tibbetts, M.D.; Se-In Kim, M.A., CCC-SLP

Front row (left to right): Jacob Lofland, M.S., CCC-SLP; Lesley Childs, M.D.; Janis Deane, M.Ed., CCC-SLP; Cory Atkinson, M.A., CCC-SLP

If surgical intervention is required . . .

Interventions appropriate for the vocal performer with new voice complaints will rarely begin with a recommendation for surgery. Behavioral intervention in the form of voice therapy almost always precedes surgical considerations in this population. However, if surgical intervention is required given minimal reversibility of a vocal fold lesion, a microflap excision is most commonly performed with both voice rest and voice therapy incorporated into the postsurgical timeline. The concept behind microflap surgery is to remove the lesion while minimizing disruption of the uninvolved lamina propria and mucosal cover. The ultimate surgical goal is the preservation of the vibratory mechanism that is fundamental to phonation.

Amplifying care

In summary, caring for vocal performers represents an opportunity in the medical field to positively impact a group of individuals whose livelihood, artistry, and often self-identity are derived from their voice. We owe it to this talented community to provide only the highest level of quality care and consider it a privilege to have earned the trust of performance voice professionals.

Unexplained **Throat Pain:** Diagnosis and Treatment of Some of the Less-Common Causes

By Kathleen Tibbetts, M.D. Assistant Professor, Otolaryngology



hen a patient presents with persistent throat pain, the obvious first

serious cause of the symptoms, such as infection or malignancy. A head and neck examination, laryngoscopy, and imaging studies are typically part of this initial work-up. If no source of pain is identified, empiric treatment for common causes of chronic throat irritation, such as acid reflux or allergies, might be pursued. Thankfully, many patients' symptoms will improve with this medical management. For those

patients whose pain persists, further

investigation is necessary.

Dysphonia

If dysphonia is present and the pain is triggered by or worsened with speaking, a diagnosis of muscle tension dysphonia might be considered. These patients will typically localize their discomfort bilaterally to the perilaryngeal musculature. They might have tenderness to palpitation of

these muscles, and their videostroboscopy might reveal hyperfunction or excessive squeezing of the supraglottis with phonation. In this case, voice therapy with an experienced speech-language pathologist is the mainstay of treatment. In patients with severe neck and upper body tension, physical therapy focusing on myofascial release might be recommended as an adjunct to voice therapy.

"If dysphonia is present and the pain is triggered by or worsened with speaking, a diagnosis of muscle tension dysphonia might be considered."

Eagle syndrome

While patients with muscle tension dysphonia typically report bilateral or diffuse throat discomfort, unilateral symptoms might point toward a rarer diagnosis. Sharp pain localizing to the throat and tongue base should raise suspicion for Eagle syndrome or glossopharyngeal neuralgia. In Eagle syndrome, pain results from an elongated styloid process or calcified stylohyoid ligament. The diagnosis can be confirmed with a noncontrast CT scan of the neck, and treatment involves surgery to reduce the length of the styloid process and/or divide the thyrohyoid ligament. Glossopharyngeal neuralgia is thought to result from irritation of the ninth cranial nerve, and it is typically managed with medication or surgery by a neurologist or neurosurgeon.

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Thyrohyoid ligament syndrome

Pain localized to the lateral thyrohyoid space has been given multiple names in the literature: hyoidynia, thyrohyoid ligament syndrome, and superior laryngeal neuralgia. It is possible that these represent one disorder, or a spectrum of disorders, where there is irritation of the lateral thyrohyoid complex, over which the internal branch of the superior laryngeal nerve passes. These patients are typically able to point to one site of pain over the lateral thyrohyoid space, and they generally have unremarkable laryngoscopy and stroboscopy results. (A vocal process granuloma can cause similar symptoms and can be ruled out with laryngoscopy.)

Treatment for patients with thyrohyoid space pain is geared toward controlling their symptoms. Neuromodulating medications such as gabapentin or anticonvulsants such as carbamazepine might offer some relief. A localized injection of a corticosteroid and local anesthetic to the lateral thyrohyoid space is effective for relieving pain, often permanently, in many of these patients.

Pain relief

Throat pain without an obvious cause can be a diagnostic dilemma. A careful history and physical examination, appropriate imaging studies, and an awareness of some of the rarer diagnoses can often lead to an answer – and long-awaited pain relief.



Voice Modification in the Transgender and Nonbinary Community

By Jacob Lofland, M.S., CCC-SLP Faculty Associate, Otolaryngology



oice is one of the most important aspects of an individual's personal identity. It is also at

the core of gender expression. Many individuals who identify as transgender or nonbinary want to change the way their voice sounds in order to better reflect their gender identity.

Voice therapy can help a person alter their voice quality in a safe, efficient manner. In the age of the internet, there is no shortage of online tutorials that claim to teach voice alteration. However, while some of these include helpful information, many individuals report vocal strain and vocal fatigue when attempting to change their voice on their own. A person can

develop maladaptive patterns and poor speaking voice techniques without proper guidance – thus the importance of access to skilled voice therapy for this population.

Individualized care

The process of voice modification considers all aspects of speech and communication. These include pitch, resonance, rate, inflection and intonation patterns, volume, word choices, and even nonverbal gestures and non-speech vocalizations (throat clearing and coughing, for example). Just as gender identity is on a spectrum, the different parameters of speech and voice are also on a spectrum from "feminine" to "masculine," with nonbinary or gender-neutral in the middle. With voice modification, the voice therapist works with individuals to help them identify their current patterns and assess which parameters of their voice and speech they would like to alter to most accurately reflect their gender identity.

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A new motor pattern

Altering voice production patterns can be trickier than one might assume due to the complexity of learning and implementing a new motor pattern. Maintaining vocal health and avoiding vocal strain is of primary importance during this process. Because of this, individuals are often taught diaphragmatic-abdominal breathing, upper body stretches, laryngeal massage, and general relaxation techniques.

"Altering voice production patterns can be trickier than one might assume due to the complexity of learning and implementing a new motor pattern."

Therapy often focuses on alteration of pitch in a gradual and realistically attainable manner because pitch alteration is often a primary goal for many people. However, pitch is only one part of a person's individual voice profile and is a highly perceptual phenomenon. Furthermore, an individual can use a particular fundamental frequency that is not especially high or low, but this might still be interpreted as masculine or feminine depending on the other characteristics that accompany that pitch. For example, transgender females are often taught strategies that encourage a shorter or smaller vocal tract to emphasize the higher harmonics in their sound, which will often be perceived as sounding more "feminine." For transgender males, the opposite is often the goal: a lower laryngeal position and more open or back-focused vowel

shapes. Altering the shape of the vocal tract in theses ways will often change the way a particular pitch is perceived, making a more "masculine" or "feminine" voice easier to obtain without straining to speak at an uncomfortably low or high pitch.



Voice Therapy TeamLeft to right: Se-In Kim, M.A., CCC-SLP; Jacob Lofland, M.S., CCC-SLP; Janis Deane, M.Ed., CCC-SLP;
Amy Harris, M.A., CCC-SLP; Cory Atkinson, M.A., CCC-SLP

Discovery and experimentation

The goal of voice modification services is to provide patients with individualized tools and strategies to let them explore their own voice. Discovery and experimentation are a large part of the process, and while it might not always be easy, voice modification can assist individuals during the process of finding one of the most important things in life – their voice.

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UT Southwestern is an Affirmative Action/Equal Opportunity Employer. Women, minorities, veterans, and individuals with disabilities are encouraged to apply.

The Voice Center's Mission:

To advance and promote knowledge in the care of the voice and to provide the best treatment for our patients.

For more information about the Clinical Center for Voice Care, sign up for our electronic newsletter by sending your contact information to **voicecenter@utsouthwestern.edu**. Please also visit our website at **utswmed.org/voice**.



All UT Southwestern patients have access to MyChart, a secure web-based system for sending direct electronic messages to any physician and his or her staff. This allows our voice patients to avoid having to use their voice on the phone.

Our Voice Center is now located on the 7th floor of the new West Campus Building 3, located at 2001 Inwood Road, which has valet parking as well as a self-park garage.

Our goal is to see patients in a timely manner. If we need to accommodate your patient sooner than the appointment time offered, please contact us directly.

Referrals

p. 214-645-8300 f. 214-645-7999 UT Southwestern welcomes referrals from providers seeking optimal care for patients with voice, swallowing, and airway disorders.

You can also contact the Clinical Center for Voice Care directly to refer a patient to one of our five voice therapists at 214-645-8898 or 214-645-8894 (fax).