## Voice Center Update

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WELCOME

It is with great pleasure that we introduce this first edition of the UT Southwestern Voice Center Newsletter. This endeavor gives our voice team the opportunity to provide updates and insights in the realm of voice, airway, and swallowing.

Since its inception over eight years ago, our Voice Center has grown into the largest center of its kind in Texas, complete with three fellowship-trained laryngologists and five voice therapists. We most recently welcomed Kathleen Tibbetts, M.D., as well as Se-in Kim, M.A., CCC-SLP, to our team.

At the core of our mission is providing the highest-quality patient care. We are passionate about what we do and the quality of care that we provide. We average 1,000 new laryngology patients per year and are now able to increase our capacity to care for even more in North Texas and beyond.

At UT Southwestern we are privileged to collaborate with physicians in other complementary subspecialties, such as movement disorder neurology, gastroenterology with expertise in pH/impedance and motility testing, and interventional pulmonology.

As part of our mission, we pride ourselves on being accessible to you and your patients. Please feel free to reach out to us anytime via email. We thank you for continuing to entrust the care of your patients to us.

For more information, please sign up for our electronic newsletter by sending your contact information to voicecenter@utsouthwestern.edu.

Sincerely

Ted Mau, M.D. Ph.D. ted.mau@utsouthwestern.edu

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### At the Forefront in Voice Care

By Ted Mau, M.D., Ph.D.
 Associate Professor, Otolaryngology
 Director, Clinical Center for Voice Care



n addition to taking care of patients, we are engaged in clinical and translational research in voice disorders to figure out how to take even better care of our patients in the future.

We regularly present our research findings at national and international meetings, and we have an ongoing randomized clinical trial in collaboration with Texas Christian University to study the efficacy of stretch-and-flow, a voice therapy program targeting balanced respiration, phonation, and resonance for patients with muscle tension dysphonia. This has already led to publication of one of the few randomized controlled trials in the field.

Other clinical studies in the past several years investigated the effect of an augmentative communication device during postoperative voice rest, in a collaboration with Vanderbilt University; the relationship between patient-perceived vocal handicap and clinician-rated level of vocal dysfunction; and factors associated with voice therapy referrals.

The theme of our translational research is Quantitative Laryngology, or the application of quantitative methods to improve the diagnosis and treatment of voice disorders. A recently published work described an automated computer algorithm to analyze electroglottographic (EGG) signal in the speech of patients with adductor spasmodic dysphonia. Just a few months ago, we were awarded an NIH grant to develop software for surgical planning and simulation in laryngeal surgery for voice disorders, with collaborators from the National Center for Voice and Speech and the University of Utah.

These efforts as well as other research endeavors at the Voice Center reflect our commitment to advance knowledge and to bring the latest in voice care to patients in North Texas.

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

# "Mind the Gap": A Paradigm Shift in the Management of Vocal Fold Paralysis

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



ocal fold paresis and paralysis represent one of the most common diagnoses in our patient population. At least 15 percent of our patients have vocal fold weakness and accompanying symptoms of a breathy voice, windedness with exertion, and thin liquid dysphagia.

While taking a "wait and see" approach with regard to intervention for up to 12 months used to be the standard of care, the paradigm has shifted toward early intervention. Not only does early intervention in the form of vocal fold augmentation improve our patients' quality of life and decrease maladaptive compensatory muscle strain patterns, it may decrease the likelihood of synkinesis or aberrant nerve regrowth. In-office and bedside injection augmentation procedures to restore glottic competence allow for more timely

intervention, especially for those who want to avoid general anesthesia.

More than 95 percent of our vocal fold injection augmentations are performed in an office or bedside setting. Various synthetic injectables are available that range in durability from six to eight weeks to nine to 12 months. After six to nine months, more permanent intervention in the form of a silastic medialization or thyroplasty procedure with arytenoid adduction can be considered if nerve recovery has not occurred.

Re-innervation procedures are another

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- Lesley Childs, M.D.

option for certain patients; these procedures help to restore vocal fold tone. The many treatment options now available and the emphasis on early intervention have made all the difference to our patients with glottic incompetence. Help us to "mind the gap" sooner rather than later!

## Laryngeal Unloading Defined

By Amy Hamilton, M.A., CCC-SLP
 Faculty Associate, Otolaryngology
 Director of Vocology, Clinical Center for Voice Care



any patients with voice problems present with inefficient voice production due to a technique involving too much muscular tension. This excessive tension can exist in many forms and is most likely a strongly ingrained pattern. This is commonly seen in our patients and is referred to as muscle tension dysphonia.

The hyperfunctional pattern can be the primary voice disorder or a secondary maladaptive compensatory pattern that has developed as a result of an underlying voice disorder. Voice therapy with a speech-language pathologist specialized in assessing and treating voice disorders is key to identifying and changing the suboptimal voice technique in these patients.

Less than 5 percent of all ASHA-certified speech-language pathologists have expertise in treating voice disorders. Initial voice therapy sessions frequently focus on increasing the patient's awareness of tension in speaking technique, as well as addressing vocal hygiene parameters. Follow-up therapy serves to teach patients to

voluntarily decrease any excessive muscle involvement before turning the focus to increasing vocal strength, flexibility, and endurance.

Voice therapists have extensive knowledge and experience with various facilitative techniques and voice therapy programs, such as Stretch and Flow (Stone and Casteel), Resonant Voice Therapy (Lessac, Verdolini, Stemple), Vocal Function Exercises (Stemple), and Semi-Occluded Vocal

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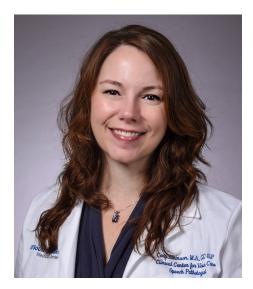
Tract Exercises (Titze). These techniques are all designed to optimize the coordination of the vocal subsystems in order to release the unnecessary muscle tension and sometimes involve seemingly silly tasks, such as blowing air through a straw, breathing in the supine position, bending over from the waist while vocalizing, or whatever it takes to break the typically stubborn maladaptive pattern.

Myofascial release is often recommended in conjunction with voice therapy. This involves a myofascial certified massage or physical therapist to release tension in the fascia of muscles inhibiting free voice production. Voice therapy sessions are usually held once every one to two weeks and can vary from four to 16 total sessions, depending on the patient and their response to therapy.

Our voice therapists will maintain contact with the referring otolaryngologist on the patient's progress, as a team approach always serves our patients best.

#### Clinical Swallow Evaluation vs. Modified Barium Swallow Study: Which Makes the Most Sense?

 By Cory Atkinson, M.A., CCC-SLP Faculty Associate, Otolaryngology Clinical Center for Voice Care



hen referring a patient to a speech-language pathologist (SLP) to evaluate swallowing problems, it is helpful to consider whether a clinical swallow evaluation versus an instrumental radiographic assessment (Modified Barium Swallow Study) is of greater efficacy.

A clinical swallow evaluation is a useful screening tool that is used to determine whether signs or symptoms of dysphagia are present and whether they warrant further assessment. The speech-language pathologist accomplishes this by observing and palpating oral-motor function as well as the anterior neck during swallows (with or without oral trials of liquid or food), and observing or assessing for outward clinical signs of aspiration. As the clinical swallow evaluation does not allow visualization of the pharynx in order to define swallow

physiology, it also does not provide enough information to determine therapy needs and would not identify silent aspiration.

A Modified Barium Swallow Study or Videofluoroscopic Swallow Study is the gold standard instrumental assessment of oropharyngeal and upper esophageal swallow function. It is the critical assessment in defining the presence and characteristics of dysphagia in the context of patient complaints of swallow difficulty. The MBS differs from a traditional barium swallow or esophagram in that it evaluates a patient's swallow during a variety of bolus volumes, food textures, and liquid viscosities, with detailed attention to oral, pharyngeal, and cervical esophageal stages of swallowing.

Performed by an SLP in cooperation with radiology, the MBS allows for three important things: First, it allows us to define abnormalities in anatomy or physiology contributing to a patient's symptoms of dysphagia. Second, it evaluates the efficacy of treatment strategies that may immediately enable the patient to eat more efficiently

"There currently is not a standardized protocol for SLPs performing an MBS, and skill in interpreting the study can be variable."

- Cory Atkinson, M.A., CCC-SLP

or safely. Some of these strategies may include diet modification, swallow postures, swallow maneuvers, or other swallow behavior modification. And third, it allows the care team to determine what further intervention is appropriate. This may include additional referrals or consults and/or SLP dysphagia therapy. If dysphagia therapy is indicated, the MBS is critical to the development of a treatment plan tailored to that patient's specific swallow disorders.

There currently is not a standardized protocol for SLPs performing an MBS, and skill in interpreting the study can be variable, though referral to an experienced SLP may enhance patient outcome.

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#### The Clinical Center for Voice Care'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.

#### **Upcoming Events**

#### Singers Symposium

"Voice Through the Ages" Friday, July 14, 2017 **UT Southwestern Medical Center** T. Boone Pickens Auditorium Dallas, Texas utswmedicine.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 located on the 7th floor of the James W. Aston Ambulatory Care Center and has valet parking as well as a self-park garage with shuttle service.

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 also can 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).