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Explore the

of your patients

Comprehensive otolaryngologic care includes inquiring about the voice and your patient's daily communication needs

2016 code changes 🔀

Regent<sup>SM</sup>
progress report 28



## Vocal tips to 'explore'

by Amanda Hu, MD, for the AAO-HNS Voice Committee

oice problems are usually associated with hoarseness, which is characterized by altered vocal quality, pitch, loudness, or vocal effort that impairs communication or reduces voice-related quality of life.

Vocal conditions arise from a variety of sources including vocal overuse or misuse, cancer, infection, or injury. Here are some tips to keep your voice healthy as you "explore your voice" through life.

- As you jog along the journey of life, try to maintain a healthy lifestyle.

  This includes exercise, eating healthy, and getting adequate sleep.
- When you pass by a clean water source, stop to take a drink. It is important to keep yourself well hydrated. Your body needs about six to eight glasses of water daily to maintain a healthy voice. This water consumption optimizes the throat's mucous production and aids vocal fold lubrication.
- If you pass by a bistro or concession stand, don't drink an excessive amount of coffee, tea, soda, or alcohol. These drinks all dehydrate the body and dry out your vocal folds. These drinks will also worsen acid reflux.
- When you approach a fork in the road (or at any time), decide not to smoke! If you are already a smoker, then decide to quit. Smoking can lead to lung or throat cancer. Primary and second hand smoke can cause significant irritation and swelling of the vocal cords. This will permanently change your voice quality.
- Before you start on your journey, remember to warm up your voice. You should warm up your singing voice and speaking voice before heavy voice use. Warm-ups can be simple, such as gently gliding from low to high tones on different vowel sounds, doing lip trills (like the motorboat sound that kids make), or tongue trills.
- If your path gets rocky or you encounter significant background noise, don't try to talk over it. Do not abuse or misuse your voice. Avoid habitual yelling, screaming, or cheering. Try not to talk in loud locations. If you routinely need to speak in a loud environment or give a long speech, consider a vocal amplification system such as a microphone.
- Take a deep breath of fresh clean air and use good breath support when speaking. The lungs are the power behind the voice. Don't wait until you are almost out of air before taking another breath to power your voice.
- Obey the signs on the road and listen to the signs from your body. If your voice is complaining to you, listen to it. Modify and decrease your voice use if you become hoarse in order to allow your voice to recover. Pushing your voice when it is already hoarse can lead to significant problems.

If your voice is hoarse frequently, or for an extended period of time, you should be evaluated by an otolaryngologist (ear, nose, and throat physician). There are many medical conditions that can cause hoarseness, such as infections, reflux, overuse, and cancer.





Comprehensive otolaryngologic care includes inquiring about the voice and your patient's daily communication needs

by Jeanne L. Hatcher, MD, Atlanta, GA, for the AAO-HNS Voice Committee

s physicians, we are called to care for our patients. As otolaryngologists, that care encompasses many complaints: sinus disease, hearing loss, and head and neck cancer, amongst others. On this April 16, World Voice Day, I encourage you to embrace the WVD theme and "explore" the voice of your patients.

I have had the good fortune of building a practice treating the full spectrum of laryngological patients: those with voice, airway, and swallowing complaints. Some of my patients—for example, those with chronic cough or paradoxical vocal fold motion disorder—would enter the Voice Center and occasionally wonder if they were in the right place. "My voice is fine," we would hear. It became clear to us that not everyone understands all that a larynx can do.

Often, a laryngeal disorder does not manifest as a voice problem; on some occasions, voice is a minor piece of the puzzle. Over the course of these visits, through education with our multidisciplinary team, these patients understand that they are in the right place.



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They have a sort of "aha moment." These patients emphasize to us that exploring the voice often means exploring other functions of the larynx as well.

In those with isolated dysphonia complaints, I initially had the naiveté to consider those who were professional voice users to consist of singers only and aspiring performing artists. Over time, I began seeing more professional voice users with a different set of problems: teachers with nodules, ministers with vocal fold atrophy, and call center agents with spasmodic dysphonia and severe muscle tension. I realized how many professional voice users are among us, and how few can actually sing. I had an "aha moment" of my own. So, now I realize many of our patients are professional voice users. Despite the glamor of a professional voice user being a well-known performing artist, it is difficult to ignore all the professions requiring daily voice use.

A recent patient of mine was a litigation lawyer; there was no convincing him that he can continue to do what he loves with vocal fold paralysis and significant glottal insufficiency as a result.

### Hearing your patient's complaint and observing your patient's voice

As a consequence of our training and the need to practice medicine efficiently, we learn to focus our discussions with patients on the chief complaint. Appropriately, we devote time and attention to the main issue that brings a patient to us: sinus disease, cholesteatoma and its infectious complications, or concerns for malignancy.

On occasion, though, the complaint is less worrisome, and after counseling the patient regarding his or her concerns, we may have the time to take notice of the patient's voice. Our trained ears can pick up on roughness, or maybe subtle pitch breaks. In those moments, we have the opportunity to say "Tell me again what kind of work you do." Following up by inquiring about the voice and your patient's daily communication needs will bring comprehensive otolaryngologic care to your patient.

Many of our professional voice users are plagued by signs of vocal overuse and misuse. Acutely they may suffer from hemorrhage or inflammation; over time though, they can develop vocal fold nodules, polyps, cysts, and sulcus. If we are fortunate enough to identify the dysphonia and follow up by asking how it affects our patients, we may be able to prevent at least some of the consequences of chronic phonotrauma.

In-office laryngoscopy will provide a global picture, with the ability to identify overt pathology. However, when findings on flexible laryngoscopy do not adequately account for vocal quality, stroboscopy is necessary to fully evaluate vocal fold closure and vibratory characteristics. If equipment is unavailable to you, contact the speech-language pathologists with whom you collaborate. Even a short course of voice therapy with a voice-trained speech-language pathologist will help your patients explore their voices immeasurably.

#### Making use of speech-language pathologists, patient education, and voice therapy

The speech-language pathologist's role in care of patients with voice issues is crucial. A voice evaluation with acoustic and aerodynamic analysis helps to uncover underlying tremor or spasm, glottal insufficiency, and muscle tension among other issues.

That done, and arguably more important, is the time spent with our patients to determine their own vocal awareness. Helping our patients to understand just how much they use their voices—speaking, teaching, preaching, or singing—is the professional voice user's "aha moment."

Many of us take for granted the sometimes constant demands we place on our voice and then stress it further by using hands-free devices for phone conversations in the car, speaking louder when in a noisy restaurant, and cheering enthusiastically at our favorite sporting events. For those whose lives and livelihood depend on reliable vocal quality, it is our responsibility to help them understand and care for their voice.

Once we have explored the amount of voice use our patient's profession requires, we can then focus on how to use the voice safely and efficiently. Voice therapy helps our patients develop awareness of the force and tension inherent in chronic phonotrauma. When properly applied, therapy can reverse some of the traumatic changes inflicted upon the vocal folds. It helps our patients prepare for surgical intervention when indicated. And then, therapy helps our patients recover from surgical intervention by making them more aware of breath support, resonance, volume, force, and the specific vocal needs for their profession. Finally, voice therapy enables some patients to use their voice confidently and efficiently despite persistent pathology.

#### Promoting voice health and knowledge in the community

We also have an opportunity to explore the voice of our patients on the level of our local

communities. Our colleagues providing primary care often hear our patients' voices before we do. And family members hear our patients' voices on a daily basis. With so many professions relying on the voice, it is an interest of community public health to promote vocal wellness. At your next local medical society meeting, discuss this importance and remind physicians to listen not just what their patients are saying, but how it sounds. Encourage them to reach out to you for further evaluation and care of dysphonia. Remind them of the importance of identifying not only malignancy and precancerous lesions but also benign pathology that still interferes with daily communication needs, quality of life, and in some instances professional livelihood.

As we all strive to provide comprehensive and quality otolaryngologic care, remember to explore the voice of your patients.

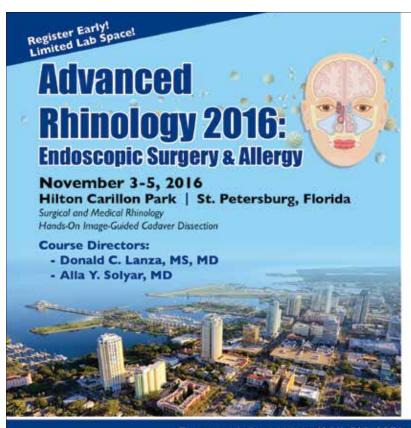
I would like to thank Jeffrey P. Marino, MD, of the Ochsner Voice Center in New Orleans, LA, for his participation in preparing this article.

#### **ENTs** should consider

- What is my patient's profession?
- Is the patient's voice integral to his or her performance?
- What are the vocal complaints?
- Is he or she a good candidate for voice
- Has he or she made progress with voice therapy?
- What are the medical and surgical treatment options?

#### **Primary care providers should consider**

- How long has the patient been dysphonic?
- What risk factors for head and neck cancer are there?
- What other symptoms are related? For example pain, dysphagia, dyspnea, otalgia, neck mass, etc.
- Is the patient's dysphonia affecting daily communication?



#### Honored Guests

Stephen R. Durham, MA, MD David W. Kennedy, MD Dennis K. Ledford, MD

#### Internationally Recognized Faculty

Pete S. Batra, MD James A. Hadley, MD Roy R. Casiano, MD John H. Krouse, MD, PhD Rai Sindwani, MD Rakesh K, Chandra, MD Ramesh C. Deka, MD Noam A. Cohen, MD, PhD

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For more information: (844) 818-2358 or SinusCME.org

## Download the World Voice Day 2016 poster

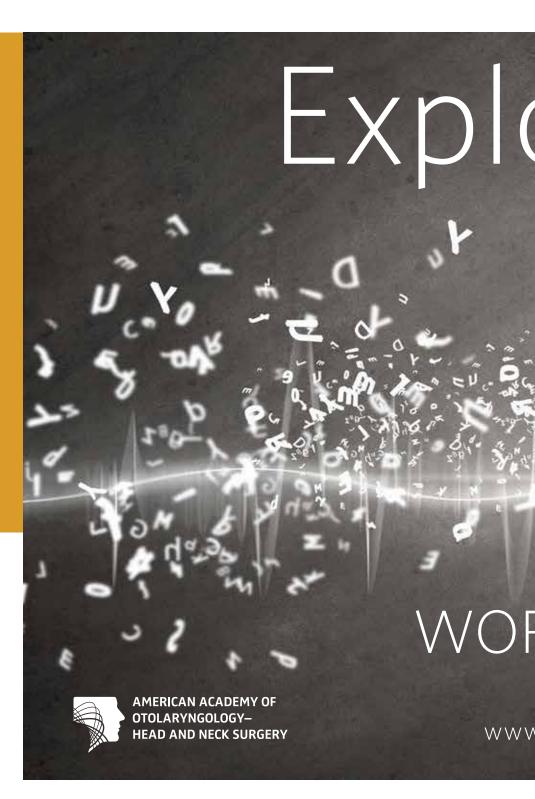
hare this poster with your patients and spread the word about the importance of a healthy voice.

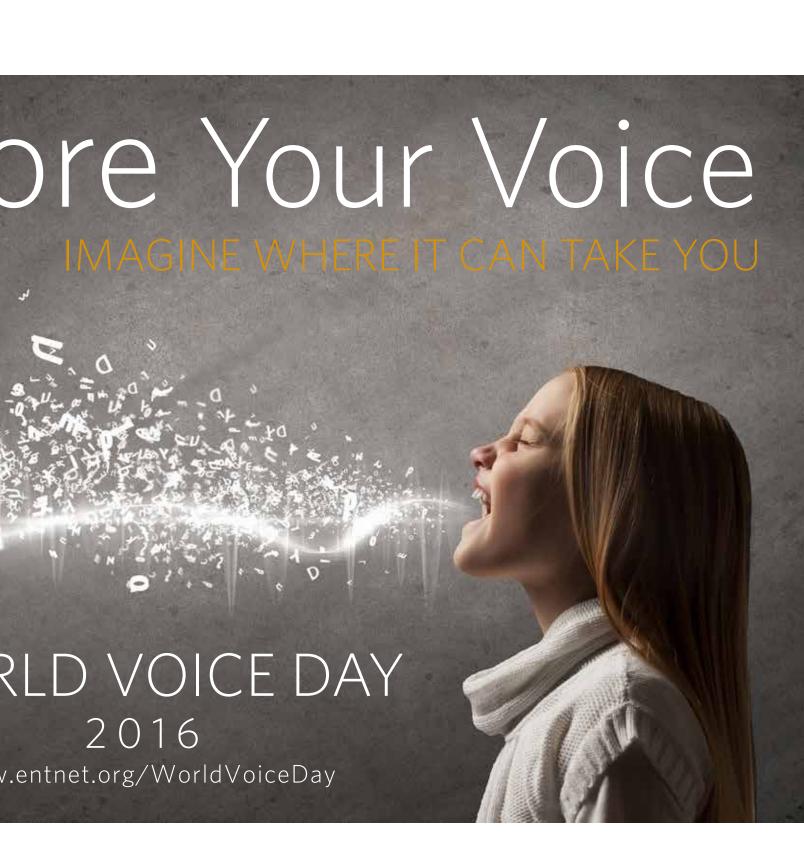
Visit www.entnet.org/worldvoiceday to print your 2016 poster and access other World Voice Day resources.

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- 2. Choose a size:
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Here are a few vendors you may choose from:

- **■** print.staples.com/posters.aspx
- customprinting.officedepot.com
- or try your drug store as well.







Want to offer your patients some timely advice on taking care of their voices for World Voice Day? Three AAO-HNS Voice Committee Members offer answers to questions you may hear in clinic

# If I have reflux and take my proton pump inhibitor, why am I still hoarse?

Salvatore J. Taliercio, MD, Sleepy Hollow, NY: The interplay between reflux and voice is complicated. Laryngopharyngeal reflux (LPR), or "silent" reflux, presents clinically with a persisting globus sensation and throat clearing. The local effects of acid in the larynx are inflammatory, and can directly affect voice quality. Throat clearing results in trauma to the edges of the vocal cords, which can result in inflammatory lesions called granulomas, which then perpetuate the cycle of globus and urge to throat clear. Despite appropriate dietary changes, and adherence to proton pump inhibitors (PPI), patients with LPR can also present with subtle irregularities of the vibratory margins of the vocal cords. The changes are demonstrated dynamically through stroboscopy, which reveals glottic insufficiency that would explain poor voice quality.

Thomas L. Carroll, MD, Boston, MA: The symptoms of glottic insufficiency can closely mimic those of LPR. Throat clearing and mucus sensation in the absence of globus sensation has been demonstrated in patients with vocal fold atrophy when LPR is not present based on impedance reflux testing. Considering a temporary diagnostic trial augmentation in this population before a long-term, high dose PPI trial may be worthwhile if the patient's overall clinical history and exam does not solely suggest reflux changes but rather an elliptical or short phase closure pattern on stroboscopy. Other clues to consider glottic insufficiency rather than reflux as the etiology are supraglottic hyperfunction where one or both false vocal folds are covering the true vocal folds during sustained phonation. The hyperfunction is unlikely the primary problem but rather evidence of secondary compensation for underlying loss of air from the glottis.

# Will voice therapy fix my vocal cord nodules?

Dr. Taliercio: Vocal cord nodules, or more broadly defined as vocal cord mid-membranous phonotraumatic lesions, are a common pathology for those with significant voice demands. Often those with nodules do not seek

treatment, as the patient has no limitations, despite a change in voice quality. For those with limitations, voice therapy serves as an instrument to improve vocal efficiency, to maximize the quality and production of voice given the patient's current laryngeal architecture. Therapy focuses on technique and awareness of voice use, and can even improve breath support. Ultimately, therapy may help to improve the appearance of nodules, but the primary goal is to reduce the patient's voice limitations and vocal fatigue, in a supportive fashion, that does not assume the risks of surgical intervention.

## What's new in the treatment of vocal fold paralysis?

Julina Ongkasuwan, MD, Houston, TX: Vocal fold medialization is one of the most rewarding procedures in otolaryngology. Injection laryngoplasty can now be done, transcervically or transorally in the office or at the bedside with a flexible nasolaryngoscope and video tower. The workhorse for long-term medialization remains type 1 thyroplasty; however, laryngeal reinnervation is experiencing resurgence in popularity.

## What can patients do to explore their vocal health?

Dr. Ongkasuwan: Like many things in life, people do not think about their vocal health until there is problem; however, an ounce of prevention can go a long way. Resources exist through the Academy to learn about how the voice works. Especially for individuals for whom their voice is their livelihood, integrating vocal warm ups, using amplification, and incorporating opportunities to rest the voice can help protect the voice. In addition, vocal coaches are not just for singers, they can help people learn to project their voice in an efficient and atraumatic manner.

What is new in the treatment of chronic epithelial lesions of the true vocal folds?

A Dr. Carroll: Office and operative treatment of recurrent respiratory papilloma

(RRP) and recurrent leukoplakia, including hyperkeratosis and dysplasia, has historically meant multiple trips to the operating room, voice change due to scarring of the lamina propria and progression of disease as patients are observed until "it is time to go back for another procedure". Office based KTP laser treatments can offer patients with RRP and other recurrent epithelial lesions maintenance procedures that do not require general anesthesia and loss of time from work. It is often necessary to start with an operative microsuspension laryngoscopy for diagnostic biopsies and complete lesion excision. After this, office-based surveillance and intermittent KTP laser ablation can maintain voice while keeping disease at bay. Patients prefer the lack of significant down time and the avoidance of a general anesthetic.

## What remains a difficult pathology to treat in the disordered voice?

Dr. Carroll: Scarring of the lamina propria of the true vocal fold remains one of the most difficult laryngeal pathologies to treat. Vocal fold scar is variable in presentation and severity. Scar formation in the glottis

may be an active inflammatory process or more of a chronic result of an initial insult that leads to stiffness of the mucosal wave. Despite normal vocal fold motion, most patients with severe scar present with a harsh, strained, and effortful voice due to glottic insufficiency from inappropriate air loss and lack of normal vibratory characteristics. Some patients achieve a better functional outcome through voice therapy, however adjunct treatments are often necessary to achieve the patient's goals. Serial steroid injections into the scarred area of the vocal fold can soften the scar and modulate what may be an ongoing active inflammatory process. Surgery to excise the scar can be attempted but results are not always predictable. Placement of fascia or fat into the subepithelial plane of the true vocal fold has been demonstrated effective although also not completely predictable or longstanding. One consideration for otolaryngologists who face these difficult cases is to first consider a diagnostic trial vocal fold augmentation into the deep aspect of the vocal fold. Global injection augmentation does not intend to address the scar itself; rather it improves the glottic insufficiency and overall patient function. Research in the area of lamina propria replacement and modulation is ongoing. ■

