

Robert T. Sataloff, Associate Editor

Understanding Voice Doctors: Whom to Call and When to Call Them

Kari Ragan



Kari Ragan

INTRODUCTION

SINGING TEACHERS HAVE A TREMENDOUS OBLIGATION in caring for students' voices. Because of their training and attentive ears, singing teachers might suspect a voice issue even before the student becomes aware of it. Alternatively, the student might confide experiencing an issue with their singing, and the teacher will need to determine what level of concern is warranted, and when medical consultation is appropriate. To optimally serve students of voice, singing teachers should be knowledgeable in both voice technique *and* vocal health. The fields of vocal health and voice pedagogy continue to develop because of advancements in technology, research in voice science, and the advent of the dedicated field of laryngology. By attending conferences, workshops, symposia, and reading journals and books on a variety of voice-related topics, singing teachers are able to provide their students with better guidance. This article will further educate voice teachers about the process for seeking specialized care for singers.

UNDERSTANDING THE DIFFERENT MEDICAL SPECIALTIES FOR TREATING THE VOICE

In the past couple of decades a great deal has been written about the importance of the voice care team. In particular, the *Journal of Singing* featured a series of informative articles written in 2008 and 2009, defining the role of each voice team member as well as educating NATS members on what to expect at appointments with the physicians.¹ Since not everyone lives in a metropolitan area with a voice clinic, understanding the differences within the field of Ear, Nose and Throat (ENT) doctors is crucial in order to guide singers to the appropriate specialized care.

Singers are often referred to an otolaryngologist (physicians trained to diagnose and manage disorders and diseases of the ears, nose, sinuses, larynx, mouth, and throat, as well as structures of the head and neck). These are most commonly known as ENT physicians.² According to the American Academy of Otolaryngology, ENTs complete up to fifteen years of college and postgraduate training and pass the American Board of Otolaryngology examination. In addition, some otolaryngologists pursue a one- or two-year fellowship for more extensive training in one of eight subspecialty areas. Some doctors choose a broad range of ear, nose, and throat care, while

others have a focused practice on one or two of the subspecialties.

The eight areas of subspecialty within the field of otolaryngology are: allergy, facial plastic/reconstructive surgery, head and neck oncology, laryngology (throat), otology/neurotology (hearing and balance), pediatric otolaryngology, rhinology (nose), and sleep disorders. Some otolaryngologists limit their practices to one or two of these eight areas.⁵ When choosing an otolaryngologist, singers should consider the doctor's areas of specialty and subspecialty. For example, if a singer has concerns dealing with sinuses, allergies, or tonsils, then an ENT with a broader practice is appropriate. However, if voice is the primary concern, then an ENT with the subspecialty of voice or a laryngologist would be the preferred provider of care.

The subspecialty of laryngology is a relatively new field that became formalized late in the twentieth century. A laryngologist specializes in disorders of the throat, including voice and swallowing problems. Specialized postgraduate training in laryngology exposes doctors to a range of practices, with some programs focusing more on discrete areas. Specifically, for singers, they manage diseases and injuries of the larynx. Some conditions for which a singer might see a laryngologist include nodules, cysts, granulomas, polyps, neurological disorders, LPR or GERD (reflux), vocal fold hemorrhage, sulcus vocalis, and voice overuse, as well as a common cold or allergies, should they be impacting the voice.

Modern laryngology evolved out of an interest in caring for professional voice users. Senior otolaryngologists practicing twenty-five or more years ago would not have had the opportunity for a laryngology fellowship, since most training programs started after 1990.⁵ Therefore, there are some ENTs who are considered voice specialists although they did not receive laryngology fellowship training. There are currently around 300 laryngologists in the United States. Professions that depend on the voice include teachers, clergy, politicians, actors, and (of course) singers.

This specialty in caring for the performing voice falls under a newer field in medicine called Arts Medicine, which was established in 1987. Discussions about performing arts medicine can be chronicled to as early as 1984 when Dr. Robert Sataloff outlined the idea of developing a program for the care of the professional voice.

This led to the *Textbook of Performing Arts Medicine*, published in 1991 to help formalize this new trend.⁵ Since then, many Professional Voice Care Centers have been established in large metropolitan areas. These are prominent voice care clinics that specialize in the care of the performing artist. At these centers, one finds an interdisciplinary team of specialists who diagnoses and treat voice disorders. The primary team members include a laryngologist, a speech-language pathologist, and a singing voice specialist. The team can be expanded to include a gastroenterologist, nutritionist, psychologist, massage therapist, dentist and others as appropriate.⁶

Smaller communities rarely have ENTs with a subspecialty of voice care, and some may not have instrumentation to visualize the vibration of the vocal folds. At the very least, singers need an ENT with access to videolaryngoscopy to properly visualize the vocal folds. Videolaryngoscopy allows the clinician to view the larynx through a fiberoptic or digital laryngoscope, which is inserted through the nose (sometimes called a flexible scope) or through the mouth (sometimes called a rigid scope).⁷ The magnified images can then be viewed and replayed on a monitor allowing for a more detailed examination by the doctor. However, the ideal diagnostic procedure for evaluation of the larynx is videolaryngoscopy with stroboscopy. Stroboscopy allows for examination of vocal fold motion biomechanics and vocal fold vibration.⁸ This is similar to the effect seen at popular dance clubs, when strobe lights cause the dancers gyrations to be seen only at certain intervals of time. Stroboscopy for viewing the larynx works much the same, by using synchronized, flashing lights passed through the flexible or rigid telescope. "The flashes of light from the stroboscope are synchronized to the vocal fold vibration at a slightly slower speed, allowing the examiner to observe vocal fold vibration during sound production in what appears to be slow motion."⁹ This is necessary because the vocal folds vibrate at such a fast rate of speed that the motion is not discernible to the naked eye. For example, for the pitch A₄ (A above middle C) the vocal folds vibrate at a rate of speed 440 times per second. For a soprano singing C₆ (commonly referred to as high C), the vocal folds vibrate over 1046 times per second. Videostroboscopy captures a slow motion picture of the vocal fold vibration during different phases of the cycle. This technology provides

information essential for the voice team to diagnose the problem and implement a recovery plan for the singer.

WAYS TO FIND A VOICE DOCTOR

It is imperative that singers with injuries find a proper voice care team. The ideal would be an arts medicine center specializing in professional voice care. Since that is not always realistic, it is imperative that voice teachers and singers educate themselves about resources within their community and/or the nearest metropolitan area. Most laryngologists are affiliated with major academic medical centers, or practice in larger metropolitan areas, which may require singers to travel several hundred miles to find a qualified laryngologist or ENT voice specialist. The value of acquiring a proper diagnosis and guidance from experienced and expert voice care specialists cannot be overestimated. Far too often, singers are misdiagnosed or ill advised as to how to proceed. To guide students appropriately, voice teachers are obligated to know which physicians are best trained to provide an accurate diagnosis and an appropriate treatment plan.

A referral from someone who has specific knowledge of singers with injuries such as an *informed* voice teacher, or singing voice specialist familiar with this special field is probably the best option. Alternatively, the following links provide listings for medical voice specialists: 1) voicefoundation.org, 2) alahns.org, 3) voicedoctor.net, and 4) gbmc.org/nationalreferralatabase. Always, due diligence is expected since the voice teacher must be prepared to support the recommendation by understanding the qualifications of the voice expert to whom they are referring. Understanding the subspecialties within the field will help streamline the information. If the ENT's subspecialty is plastics or allergies, they may not be the voice specialist a singer requires.

The field of voice has become an interdisciplinary field, and the medical community is generally open to direct communication with the primary voice teacher, who should build a relationship with the medical voice specialists in their area. Every doctor's office has a different protocol, whether it's contacting a specific scheduler, or a nurse practitioner directly, rather than the main office. Often, this allows singers to be evaluated more quickly, especially if there is a more urgent need. With

student permission, voice teachers wanting to further educate themselves on voice care can arrange to attend the appointment and/or have a medical evaluation sent. Never expect the student to relay complete and accurate information from the doctor. This point is imperative. Some doctors are able to share the videostroboscopic exam. Depending on their office protocol this can be done by the student bringing a blank flash drive for the videostroboscopic exam to be uploaded, or by other means of sharing large files. Communication from the voice care team to the primary singing teacher is crucial so that the teacher can further understand and advocate for the singer.

TEACHER AS ADVOCATE: WHEN TO REFER

If a voice teacher has a concern about the vocal health of a student, it is never too early to suggest an evaluation. Sometimes this may require a serious conversation with the student about investing extra time and travel to seek appropriate care. Singing teachers are liable for the voices in their studio and can be placed in a challenging position should students refuse or delay proper evaluation by a laryngologist and ENT voice specialist. The decision then rests with the teacher as to whether to continue voice lessons. If the singer is jeopardizing his or her vocal health, or the teacher's reputation, then the teacher should consider discontinuing lessons.

Teachers often ask when they should refer a student to a physician. Teachers should not delay when they have a significant concern. If a singer is experiencing voice issues for longer than two weeks, an examination by a laryngologist or ENT voice specialist is needed. For example, if the singer recently had an upper respiratory infection, cold, prolonged cough, or other circumstance which left them vocally fatigued or hoarse without improvement, then referral to a laryngologist for evaluation is necessary. The same is true if the singer is in the middle of a rehearsal or performance period and experiences fatigue, strain, or hoarseness. He or she should be referred to a laryngologist or ENT-voice specialist. At the very least, singers would then have a baseline scope for future reference as well as eliminating or identifying any immediate concerns. It is *not* for the voice teacher to guess whether there is a medical implication in what

they hear during the singing lesson. If teachers hear something of concern in the singing *or* speaking voice, or if they are not hearing the anticipated changes as a result of technical adjustments, then they should refer to a voice doctor.

Sometimes a student's baseline stroboscopes will reveal an abnormality that is not impacting the singer. Many singers have baseline physical findings that might be considered pathologic. If the abnormalities do not impact the singing quality, it is not necessary to be treated;¹⁰ however, having the baseline videostroboscopy allows for better understanding should a voice issue arise in the future. Then the doctor doesn't attribute the current voice concern to the previously known abnormality. Following is a list of warning signs for voice teachers to be aware of:

1. a prolonged (longer than two weeks) voice concern;
2. sudden-onset of hoarseness;
3. prolonged hoarseness, roughness, breathiness, or lowered pitch on speaking;
4. persistent cough;
5. continuous feeling of globus (lump in the throat);
6. continuous sinus drainage (not always a sinus issue, it can be reflux);
7. voice fatigue;
8. voice strain;
9. unreliable voice;
10. loss of high notes or endurance;
11. effortful or painful speaking or pain during/after singing;
12. issues in areas of *passaggio* (register changes) not previously experienced;
13. the need to constantly clear the throat.

DEALING WITH STIGMAS

Unfortunately, there is still stigma around voice injuries. Many singers experience voice issues and do not reach out for help, sometimes waiting a year or more. Multiple studies suggest that roughly 30–35% of singers will experience voice injury at some point in their career. It's commonly understood that physical athletes at some point in their career will sustain an injury that requires loss of participation.¹¹ It's reasonable to expect that vocal athletes at some point in their activities may need assessment and guidance. Recently, professional singers Adele, Sam Smith, and John Mayer have come

forward revealing a vocal fold polyp, hemorrhage, and granuloma. Their honesty and willingness to reveal injuries helps alleviate the unwarranted stigmas associated with voice issues.

Singers tend to blame themselves when they are diagnosed with a vocal pathology or injury. Unfortunately, this is often because one of the contributing factors can be labeled as vocal abuse or misuse. Singers are inextricably linked to their voices; identity and self esteem are profoundly tied to a singer's voice. This voice as "self" framework from which singers operate further complicates the psychological component of voice concerns and the willingness to seek medical help. Singers and teachers of singing must learn to advocate for themselves and their students in seeking optimal technical and medical guidance.

Singers must understand that voice injuries are always multifactorial. They make high demands on their instrument, which leaves them vulnerable to potential phonotraumatic events. Certainly, singers should never blame themselves. They will need to examine their singing technique, voice hygiene, and overall voice use as possible contributing factors. The voice team's evaluation will determine which of these factors must be considered and provide guidance for rehabilitation.

Understanding voice hygiene, vocal health, and the possible necessity for medical evaluation is not just for the professional voice user. A singer in high school choir with an upcoming solo/ensemble performance or an avocational singer can also be significantly impacted when experiencing voice issues. Whether the concern is a lingering voice problem following a common cold or a long term voice concern, seeking medical evaluation is always the wisest course of action. The sooner a singer gets proper evaluation and guidance, the better the chances of preventing further injury.

By educating themselves about the warning signs of voice issues, understanding the different medical voice specialties, and knowing the importance of connecting a singer to the appropriate voice team, singing teachers can have a profound influence on their students and become advocates within their community.

NOTES

1. Yolanda D. Heman-Ackah, Robert T. Sataloff, Mary J. Hawkshaw, and Venu Divi, "What to Expect During a Visit

- with a Voice Doctor Part I: The History,” *Journal of Singing* 65, no. 2 (November/December 2008): 181–186; Yolanda D. Heman-Ackah, Robert T. Sataloff, Mary J. Hawkshaw, and Venu Divi, “What to Expect During a Visit with a Voice Doctor Part II: The Examination,” *Journal of Singing* 65, no. 3 (January/February 2009): 321–328; Yolanda D. Heman-Ackah, Robert T. Sataloff, Mary J. Hawkshaw, and Venu Divi, “Finding a Voice Doctor and Voice Care Team,” *Journal of Singing* 64, no. 5 (May/June 2008): 583–592.
2. “What is an Otolaryngologist,” American Academy of Otolaryngology. American Academy of Otolaryngology-Head and Neck Surgery (2015); <http://www.entnet.org/content/what-otolaryngologist> (accessed December 15, 2016).
 3. Ibid.
 4. Robert T. Sataloff, Yolanda D. Heman-Ackah, and Mary J. Hawkshaw, “Voice Care Professionals: A Guide to Voice Care Providers.” In Robert T. Sataloff, ed., *Vocal Health and Pedagogy: Science and Assessment*, Vol. 1, 2nd ed. (San Diego, CA: Plural Publishing, 2006), 121–126.
 5. Robert T. Sataloff, Alice G. Brandfonbrener, Robert J. Lederman eds., *Textbook of Performing Arts Medicine* (New York, NY: Raven Press; 1991).
 6. Further information on the importance of the voice team and resources on the growing field of the singing voice specialist may be found in: Yolanda D. Heman-Ackah, Robert T. Sataloff, Mary J. Hawkshaw, Venu Divi, “Finding a Voice Doctor and Voice Care Team,” *Journal of Singing* 64, no. 5 (May/June 2008): 583–592; Karen Wicklund, *Singing Voice Rehabilitation: A Guide for the Voice Teacher and Speech Language Pathologist* (Clifton Park, NY: Delmar. 2010)67–77; K. A. Emerich, Margaret M. Baroody, Linda M. Carroll, and Robert T. Sataloff, “The Singing Voice Specialist,” in Robert T. Sataloff, ed., *Professional Voice: The Science and Art of Clinical Care*, 2nd ed. (San Diego: Singular Publishing Group, Inc., 1997), 735–753; Leda Scearce *In Manual of Singing Voice Rehabilitation* (San Diego, CA: Plural Publishing. 2016), 13–30; Karen Wicklund, “The Future of Singing Voice Rehabilitation as a Profession: Suggested Curriculum of Study for the Training of Singing Voice Specialists,” *Journal of Singing* 68, no.4 (March/April 2012): 411–414; Julia Gerhard, “A Review of Training Opportunities for Singing Voice Rehabilitation Specialists,” *Journal of Voice* 30, no. 3 (May 2016): 329–333.
 7. L. M. Pott, W. B. Murray, “Review of Video Laryngoscopy and Rigid Fiberoptic Laryngoscopy,” *Current Opinion Anaesthesiology* 21, (no. 6) (December 2008): 750–758.
 8. Clark A. Rosen, “Stroboscopy as a Research Instrument: Development of a Perceptual Evaluation Tool.” *Laryngoscope* 115, no. 3 (March 2005): 423–428.
 9. Seth Kaplen and Paul Bryson, “Office-Based Videoimaging of the Larynx,” *Current Otorhinolaryngology Reports* 3, no. 3 (2015): 132–137.
 10. Robert T. Sataloff and Mary J. Hawkshaw, “Singers: What is Normal?” *Journal of Singing* 69, no. 3 (January/February 2013): 301–303.
 11. “Sports Injury Statistics,” *Stanford Children’s Health*, Stanford Medicine; <http://www.stanfordchildrens.org/en/topic/default?id=sports-injury-statistics-90-P02787> (accessed May 15, 2016).
-
- Dr. Kari Ragan**, soprano, holds a bachelor’s and master’s degree from Indiana University and a DMA from the University of Washington.
- In 2012, she was the recipient of the Van L. Lawrence Fellowship, a prestigious award presented jointly by The Voice Foundation and the National Association of Teachers of Singing (NATS). Her research for this fellowship has been “The Impact of Vocal Cool-Down Exercises: A Subjective Study of Singers’ and Listeners’ Perceptions.”
- Among other awards and honors, Dr. Ragan was the recipient of the NATS Pedagogy Award, The New York Singing Teachers(NYSTA) Association’s Distinguished Voice Professional Certificate, and the Wicklund Singing Voice Specialist Certificate.
- For over a decade, Dr. Ragan has worked as a singing voice specialist (SVS). This important speciality is done in association with a medical team that includes at minimum a laryngologist and speech language pathologist (SLP). As a result of her specialized training as an SVS, Dr. Ragan has presented at the Voice Foundation Symposium, the National Association of Teachers of Singing conference, and the National Center for Voice and Speech.
- Dr. Ragan is pleased to have joined the University of Washington voice faculty, where she teaches applied voice, voice pedagogy, Italian diction, and French art song literature. Additionally, she has maintained a thriving and collaborative independent voice studio for over thirty years.
- Dr. Ragan is an organizing member of the Northwest Chapter of the Voice Foundation, the NATS Chat Coordinator, and a charter member of the newly formed Pan American Vocology Association (PAVA).
-
- Robert T. Sataloff, MD, DMA, FACS**, is Professor and Chairman, Department of Otolaryngology-Head and Neck Surgery and Senior Associate Dean for Clinical Academic Specialties, Drexel University College of Medicine. He is also Adjunct Professor in the departments of Otolaryngology—Head and Neck Surgery at Thomas Jefferson University and the University of Pennsylvania, as well as Temple University and the Philadelphia College of Osteopathic Medicine; and on the faculty of the Academy of Vocal Arts. Dr. Sataloff is also a professional singer and singing teacher, and he served as Conductor of the Thomas Jefferson University Choir over a period of nearly four decades. He holds an undergraduate degree from Haverford College in Music

Theory and Composition, graduated from Jefferson Medical College, Thomas Jefferson University, received a Doctor of Musical Arts in Voice Performance from Combs College of Music; and he completed his Residency in Otolaryngology—Head and Neck Surgery and a Fellowship in Otology, Neurotology and Skull Base Surgery at the University of Michigan. Dr. Sataloff is Chairman of the Boards of Directors of the Voice Foundation and of the American Institute for Voice and Ear Research. He has also served as Chairman of the Board of Governors of Graduate Hospital; President of the American Laryngological

Association, the International Association of Phonosurgery, and the Pennsylvania Academy of Otolaryngology—Head and Neck Surgery; and in numerous other leadership positions. Dr. Sataloff is Editor-in-Chief of the *Journal of Voice*, Editor-in-Chief of *Ear, Nose and Throat Journal*, Editor-in-Chief of the *Journal of Case Reports in Medicine*, Associate Editor of the *Journal of Singing*, and on the editorial boards of numerous otolaryngology journals. He has written approximately 1,000 publications, including 59 books. His medical practice is limited to care of the professional voice and to otology/neurotology/skull base surgery.