# Mercy Hospital Ear-Nose-Throat Clinic Daniel Pinheiro, M.D., Ph.D Otolaryngology

# What is Laryngitis?

Laryngitis is an inflammation of the vocal folds that may be a result of infection, overuse or irritation. When your vocal folds are inflamed, they do not vibrate smoothly and you develop a horse, strained and sometimes barely audible voice.

Laryngitis can be short lived (acute) or long lived (chronic). Acute laryngitis should last less than two weeks. When symptoms persist longer than two weeks, there may be a more serious problem and you need to consult your doctor.

The symptoms of laryngitis can be caused by numerous factors. The most common is a viral upper respiratory infection. Vocal abuse in the form of smoking, yelling or overuse also commonly leads to laryngitis. Reflux into the throat can also result in laryngitis.

Your symptoms can initially be treated with voice rest. Drinking extra water, performing steam treatments, and Dr. Gould's gargle may also be helpful. Avoid cough drops, especially mentholated products, rather use sugar free hard candy and increase water intake.

#### **Treatment**

Treatment for laryngitis depends on the cause of the problem and the speed at which your voice needs to return to normal. Most often voice rest and vocal hygiene as described above are the best options. Use your voice more conservatively, do not clear your throat, avoid whispering, get plenty of rest, drink lots of water, use a humidifier at home, avoid smoking, and limit alcohol and caffeine intake.

In some situations steroids may be warranted, but will be prescribed by a doctor. For more chronic laryngitis, the underlying cause must be determined and then that cause needs to be treated. The list of causes may range from laryngopharyngeal reflux, which is treated medically, to a vocal fold polyp which is treated surgically.

If you are a smoker, you should stop smoking and see an Orolaryngologist to make sure cancer is not involved. When vocal fold cancer is detected early, it can usually be treated successfully with surgery or radiation.

### **Prevention**

Often prevention is the best course of action. When you are sick or you feel laryngitis developing, the best thing to do is take care of yourself and your voice. Use your voice only when you need to and follow the steps mentioned above. Hopefully this will keep you from losing your voice and keep you out of the doctor's office.

# Steam & Gargle

These will help lubricate your throat and add direct moisture to your vocal folds. These practices are beneficial before and after singing. These practices will also thin mucous. It is recommended using them together in this order. You may use them several times a day.

#### Steam

Use a facial steamer (available at drug stores or Internet) or bowl or pan of hot water. Make a tent with a towel. Breathe in the steam with your mouth and nose gently for 3-5 minuets. Do not add any other ingredients to the water.

# Dr. Gould's Gargle

½ tsp salt

½ tsp baking soda

½ tsp clear corn syrup

6 oz. water

Gargle small amount quietly (no voice), spit and repeat until all is gone. Do not rinse your mouth or eat or drink for 20-30 minutes after.

# Dr. Titze's Favorite Five vocal warm ups for singers

- 1. Lip trill, tongue trill, humming, or phonation into narrow tubes (all partial occlusions of the vocal tract) on glides, scales or arpeggios.
  - Gets respiratory muscles into full action rapidly
  - Minimizes upward force on vocal folds because of positive oral pressure
  - Spreads the vocal folds to vibrate their edges only
  - Lowers phonation threshold pressure by providing an inertive acoustic load
- 2. Two-octave pitch glides, up and down, high vowels /i/ or /u/
  - Low chest to high pure falsetto
  - Mixed voice
  - Gives maximal stretch to vocal folds (first ligament, then muscle)
  - Maximum dichotomy between TA and CT muscles, then unity between them
  - Avoid the difficult passaggi
  - Gets F0 above F1 for varying acoustic loads
- 3. Forward tongue roll and extension, vowel sequence /a/-/i/ scales
  - Creates independence between the phonatory and articulatory structures
  - Loosens the tongue and jaw
  - Helps keep vertical larynx position stable during articulation
- 4. Messa di voce, proceeding from a partially occluded tract, to high vowels, to low vowels
  - Engages the layers of vocal fold tissue gradually in vibration, medial to lateral
  - Help singers match tension in muscle to tension in ligament
  - Tests symmetry of crescendo versus decrescendo control under changing respiratory conditions
  - Makes all intrinsic muscles of the larynx work in coordination with changing lung pressure
- 5. Staccato on arpeggios
  - Elicits clean and rapid voice onset, establishing a dominant mode of vibration
  - Trains adductor/abductor muscles simultaneously with tensor muscles during pitch change

#### **Vocal Misuse and Overuse**

#### What is vocal misuse?

Vocal misuse causes vocal folds to be injured. Destructive behaviors can lead to vocal fold lesions (bumps or calluses on the vocal folds), and in some causes can cause permanent damage to the voice.

#### Examples include:

- Yelling, screaming and hollering (including coaching or cheering at athletic events)
- Throat clearing and coughing
- Loud talking
- Talking in noisy situations (restaurants, bars, parties, social settings, around equipment)
- Whispering
- Singing without warming up and cooling down the voice

#### What is vocal overuse?

Vocal overuse is using the voice too much, so that is gets overly tired. This can lead to an increased risk of vocal fold injury.

If your voice feels tired or gives out easily, you may be overusing your voice. Examples of overuse include talking and/or singing for too long.

#### How can these behaviors hurt my voice?

The vocal folds are made up of layers of delicate tissue. When you use your voice to make a sound, the vocal folds vibrate. If they vibrate in an easy, gentle way the voice works well, but if the vocal folds come together in a hard or forceful way, they can be injured.

It's like clapping your hands. If you clap them softly, you make a sound and your hands don't hurt. If you clap them hard, they will start to tingle and then hurt, and will become red and irritated. If you continue hard clapping, you might get blisters on your hands.

Yelling, screaming, throat clearing, coughing, and even loud talking can all bring the vocal folds together in a hard and forceful way and can cause vocal fold injury.

Talking a lot can also hurt your vocal folds. Your vocal folds come together about 100-200 times per second when you are talking. That can add up to millions of times per day if you are talking for many hours.

All that contact can cause wear and tear on your vocal folds. If they don't get a chance to rest and recover, they can become injured over time. Many styles of singing bring the vocal folds together in a forceful way, too.

Athletes and dancers carefully warm up their muscles to avoid injuring themselves, and they get lots of training to learn to use their bodies without injuring themselves. Singing is the "athleticism" of voice use. Warming up your voice before singing and getting training in how to sing well can help you avoid injuring your voice.

#### How can I avoid misusing or overusing my voice?

- Use a noise maker or gesture to gain someone's attention instead of yelling or screaming.
- Walk over to the person you want to talk to or have them come to you instead of yelling across the room or from another room.
- Use easy throat clearing (no sound).
- Avoid talking in noisy situations. If you are in a noisy situation:
  - o Get close to the person to whom you want to speak.
  - o Put an earplug in one ear so that you can monitor how load your voice is.
- Use a microphone if you have to speak in a large room or in front of an audience or class.
- If your job or social setting requires you to use your voice a lot, give yourself "voice breaks" or times when you don't use your voice for a while to let your voice rest.
- Avoid speaking in stressful situations or when you are overly tense.
- Avoid whispering.

# Maintenance of a Healthy Voice

- Try your best to maintain good general health. Get adequate rest to minimize fatigue. If you do become ill, avoid talking or singing see your physician and rest your voice
- Exercise regularly
- Eat a balanced diet and avoid spicy/acidic foods
- Maintain body hydration; drink two quarts of water daily
- Limit voice use in restaurants, parties, cars and planes, and on cell phones or telephones
- Avoid throat clearing or coughing
- Stop yelling avoid calling from room to room
- When talking, use pitch level in the same range where you say, "Umm-hmm?"
- Speak in phrases rather than in paragraphs, and breath slightly before each phrase
- Reduce demands on your voice listen more and don't do all the talking
- Learn to breathe silently to activate your breath support muscles and reduce neck tension
- Vocal warm ups should <u>always</u> be used prior to singing. Vocal cool downs are also essential to keep the singing voice healthy.

# Optimal Speaking Techniques (Your speaking voice can get your singing voice into trouble)

- Use good abdominal/diaphragmatic breathing and support
- Learn to use your voice with as little unnecessary effort and tension as possible
- Take frequent breaths when speaking long sentences
- Allow the neck, jaw, and face to be relaxed
- "Place" or "Focus" the voice appropriately, sing and speak from the face/head resonances
- Speak at a normal rate of speed
- Use goof vocal inflection

# **Special Tips for all Performers**

It is very important to remember that <u>you are your instrument</u>. You are a vocal athlete, and that means you need to be extra careful I how you use and take care of your voice.

- Use good habits for hydration, managing allergies/reflux, avoiding vocal misuse/overuse.
- Take care of your body by getting plenty of rest, exercising, and eating well.
- Wash your hands before eating and before touching your face, mouth, nose or eyes.
- Don't smoke! Smoke is very irritating and can cause changes in vocal fold tissue.
- Women should be especially careful to limit vocal demands just prior to and during the menstrual cycle. The lowering of estrogen levels can result in vocal fold swelling.
- If you think you have a voice problem, get help quickly from health care professionals with specialized training in caring for voices.

# **Special Tips for Singers**

- Warm up your voice before singing, and cool down your voice after singing.
- Consider taking voice lessons to learn how to sing without hurting your voice.
- Learn to use your speaking voice in a healthy way.
- Know your vocal limits and stay within them (pitch, loudness, and endurance)
- Rest your voice before and after a big singing day.
- Pace yourself during rehearsals.
- Stop singing before you get tired. If you feel tired, you may have already done too much.
- Try not to "spend" your voice on learning the music (listening rather than by singing).
- If you sing with a band, use monitors.
- Plan your singing schedule carefully and avoid overbooking.
- Avoid ice-cold drinks while singing. Room temperature is better.
- Consider getting a "baseline" evaluation of your voice when you are healthy. This will be helpful for comparison if you ever have a voice injury.