When Acid Reflux Treatment Takes You Down a Rabbit Trail

by Dr. Robert Bastian

CS joins Dr. Anthony Jahn in welcoming otolaryngologist Dr. Robert Bastian as a guest contributor to this issue and presenter at the Classical Singer Convention in May.

“It is my pleasure to welcome Dr. Robert Bastian, a nationally known laryngologist and professional voice physician, who contributed this month’s column. I have learned a great deal from Dr. Bastian over the years, and share his skepticism about the overuse of ‘acid reflux’ as a diagnosis. I invite all readers to attend his presentations at this year’s CS Convention in Chicago—you will learn a lot!”

—Dr. Anthony Jahn

The fundamental idea of a voice problem caused by acid reflux is that during sleep, stomach acid may burble upward to the level of the throat and create a mild burn. Inflammation and increased mucus production follow. The individual may not connect the voice disturbance to acid reflux because symptoms may be mild and nonspecific and reflux can happen like a gentle nighttime rain that does not disturb sleep. Persons with acid reflux typically notice at least some initial benefit within days of starting treatment.

There seems to be a growing problem, however: even when the diagnosis is actually something else, acid reflux may be invoked as the cause of a voice problem. I remember one patient with perimenopausal voice change, another with small vocal nodules, and a third with a glottic sulcus. In each case misdiagnoses elsewhere had erroneously blamed acid reflux as the sole or primary explanation for their problem. For these individuals, despite prolonged and aggressive treatment for acid reflux, vocal limitations had remained unchanged.

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The most remarkable case I have seen illustrating the potential to “bark up the wrong tree” was that of a young opera singer with a rough, white patch on the upper surface of one vocal fold. This small lesion was attributed to acid reflux yet had persisted despite double-dose, twice-a-day medication and vigorous application of all of the other lifestyle modifications. Eventually, he even underwent a surgical procedure to tighten the sphincter muscle between his stomach and esophagus. Again, the lesion was unchanged.

After all of this treatment, what was the actual explanation for his vocal fold lesion? Biopsy-proven human papilloma virus, HPV type 16. Frustration, career damage, and unnecessary expense can attend an incorrect diagnosis.

To be fair, while overdiagnosis of acid reflux appears to be a real problem, once in a while we see the opposite problem: underdiagnosis. A singer may really have acid reflux yet not be diagnosed initially, only to find out later that this condition was central to his difficulty. Or, because the singer does not directly experience the “rain in the night” reflux events, he or she may decide not to follow the recommended treatments.

I remember a prominent baritone who brushed aside a physician recommendation to do a reflux trial only to discover more than a year later that this was indeed a primary issue for him. Frustration, career damage, and unnecessary expense can follow underdiagnosis, too.

What can singers do to help get this diagnosis right? With the caveat to consider what follows only with input from your personal physician, why not master the core information about reflux and its treatment, mix in a little common sense, and do an alternating DIY reflux trial? Then you can report the results to
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your physician to add additional data and nuance to his or her diagnostic process. An effective DIY trial begins with a fund of knowledge and moves to a strategy for applying that knowledge. Here’s the basic information you need.

The first step is to know the symptom complex associated with acid reflux. This may include a tendency to awaken in the morning with a dry or somewhat sore throat that abates towards the end of the day; increased mucus and throat-clearing, especially early in the day; and difficulty as a “morning singer” due to a lowered average pitch or a “heavy” morning voice. These symptoms may occur with or without the more easily recognized esophageal symptoms of heartburn and acid belching.

Second, know the tools used in treatment, which encompass both behavior change and medication, as listed below.

Food choices
Avoid caffeine, alcohol, spicy foods, mint, citrus, carbonated beverages, garlic, and chocolate, particularly after 2 p.m. These substances may make acid reflux worse.

Timing of meals
Eat the last meal or snack of the day no fewer than three hours before bed, so that your stomach will be relatively empty when you fall asleep. This avoids “back-pressure” that might push stomach contents upward while you sleep.

Sleeping angle
Use four- to six-inch “blocks” of books, bricks, or boards between the floor and head posts of your bed. During sleep, the slant in the bed frame allows gravity to assist in keeping stomach acid where it belongs. Alternatively, use a foam wedge, available at “bed and bath” stores, under your upper body.

Weight
Maintain your weight at an optimal level. Extra pounds increase pressure on the abdomen and add to back-pressure.

Medication
A variety of medications, both prescription and over-the-counter, may prove helpful.
- **Proton-pump inhibitor (PPI)** acid reducers, such as OTC Prilosec or generic omeprazole. Prescription PPI’s also include Protonix, Prevacid, Aciphex, and Nexium. Take one of these 30-60 minutes before the last meal of the day to decrease acidity of any nocturnal refluxate that reaches the level of your throat and voice box.
- **H2 Blocker** acid reducers, such as OTC Zantac, Pepcid, Axid, or Tagamet. You may double the dose if you use the over-the-counter preparation. Take this medication an hour after dinner and preferably a couple of hours before bed as a second means of reducing stomach acidity.
- **Liquid antacids**, such as Gaviscon, Mylanta, or Maalox. To neutralize acid, take an antacid just before bed.

With this information as background, we move to the strategy: Apply all of the tools described above (four behavior changes and three different medications) simultaneously. Omit nothing for one week. During that week, as soon as you awaken, “commune” with your throat. Ask yourself if it feels dry or scratchy, clear it, and assess your lowest to highest pitches. If you are not sure whether the regimen has had any effect after a week’s trial, discontinue all seven “tools” for a week while following the same morning self-assessment. In week three, resume the seven tools once again. Follow this weekly alternation, until you can make a conclusion about the difference, if any, between the two conditions.

It is true that a week may not be long enough to resolve all of the symptoms of acid reflux, but common sense dictates that you should notice at least some small change within that time. After all, many who actually have acid reflux notice a considerable difference within days.

Whatever your experience, you now have something significant to report to your physician. Failure to notice any difference between “on” and “off” weeks may not necessarily deter a physician who has additional reasons to believe this is your diagnosis, but it is possible you may contribute more robustly to your doctor’s answer to this question and reduce the chance that you will tread the rabbit trail of over- or under-diagnosis.

Robert W. Bastian, M.D. founded Bastian Voice Institute in west suburban Chicago after a successful career in academic otolaryngology. BVI is dedicated exclusively to voice, swallowing, and airway disorders. Dr. Bastian is particularly noted for including vocal phenomenology in his diagnostic process, and when lesions are irreversible otherwise, for vocal fold microsurgery in singers and other performers. For more information visit www.bbastianvoice.com.