

## What Are Vocal Cord Nodules?

Vocal cord nodules are growths that form on the vocal cords.

These nodules are benign, or not cancerous. Nodules can affect people at all ages, and are more common in women than men. The vocal cords are also called vocal folds. The vocal folds sit in the larynx (voice box) to produce sound. When a person speaks, air causes the vocal cords to vibrate—the sound comes from this process. Talking too much or too loudly can cause growths to form on the folds that affect vocal use.

People with vocal cord nodules may complain of hoarseness, breathiness, and vocal tiredness when trying to speak. The voice can sound husky or raspy. Some people may have challenges talking or singing in a higher pitch. Other common symptoms are the feeling that something is stuck in the throat and pain around the ears or neck that is related to forcing the voice to come out despite the presence of nodules. Groups that use their voice more frequently are at greater risk for nodules. This group includes singers, teachers, cheerleaders, and children. Vocal nodules can also occur among people with a history of smoking, allergies, and acid reflux. These 3 health conditions are known to irritate the larynx and vocal folds, and can make symptoms worse.

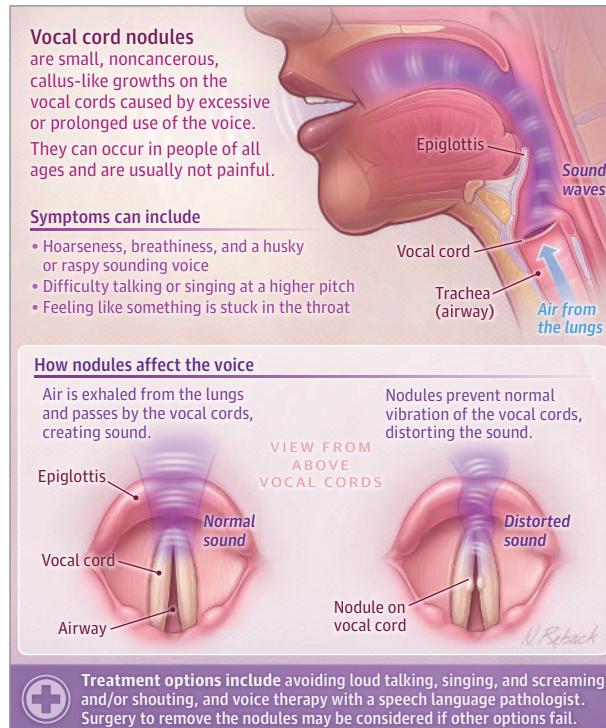
Vocal nodules are usually diagnosed based on medical examination. An otolaryngologist, also called an ear, nose, and throat doctor, may also use a camera to look in the throat for nodules. This camera examination is called a laryngostroboscopy and can be offered during the doctor's visit while you are awake.

Vocal nodules prevent the normal everyday use of the voice. After being diagnosed with vocal nodules, patients should avoid screaming, intense singing, and shouting. Drinking water and use of a humidifier are also ways to keep the vocal folds healthy. Nodules are not usually painful.

Doctors may suggest voice therapy to rehabilitate the voice. Voice therapy is led by speech language pathologists. In voice therapy sessions, patients are taught how to use their voice in a healthier way through vocal and breathing exercises. Outside of therapy, some patients can increase the amount of water they drink, change their diet, or manage their allergies and acid reflux to improve chances of recovery.

In serious cases where symptoms do not improve, surgery to remove the nodules may be recommended. The surgery is typically performed by a laryngeal (voice box) surgeon in an outpatient setting, where patients go home the same day. Patients who undergo surgery may be asked not to speak after surgery for a short time. Some patients will require voice therapy after surgery to learn better habits and avoid the return of nodules in the future.

There are many ways to prevent vocal cord nodules. When people feel discomfort, tiredness, or hoarseness in their voice, they



should take brief vocal rests by not speaking, singing, or whispering. At loud events, they should practice not shouting or move to a quieter environment to hold a conversation. Requesting a microphone if speaking at an event or in a large event space can be helpful. If vocal problems do occur and last longer than 1 to 2 weeks, seek out the care of an ear, nose, and throat doctor. Many people may benefit from vocal therapy to learn how to appropriately use their voice and avoid injury in the future.

### FOR MORE INFORMATION

American Special-Language-Hearing Association (ASHA)  
<https://www.asha.org/public/speech/disorders/vocal-cord-nodules-and-polyps/>

National Institute on Deafness and Other Communication Disorders  
<https://www.nidcd.nih.gov/health/taking-care-your-voice>

**Authors:** Danielle Gaskins, MSPH; Brandon J. Baird, MD

**Published Online:** December 14, 2023. doi:10.1001/jamaoto.2023.3698

**Author Affiliations:** Pritzker School of Medicine, The University of Chicago, Chicago, Illinois (Gaskins); Section of Otolaryngology-Head and Neck Surgery, Department of Surgery, Pritzker School of Medicine, The University of Chicago Medicine, Chicago, Illinois (Baird).

**Conflict of Interest Disclosures:** None reported.

**Section Editor:** Samantha Anne, MD, MS.

The JAMA Otolaryngology-Head & Neck Surgery Patient Page is a public service of *JAMA Otolaryngology-Head & Neck Surgery*. The information and recommendations appearing on this page are appropriate in most instances, but they are not a substitute for medical diagnosis. For specific information concerning your personal medical condition, *JAMA Otolaryngology-Head & Neck Surgery* suggests that you consult your physician. This page may be downloaded or photocopied noncommercially by physicians and other health care professionals to share with patients. To purchase bulk reprints, email [reprints@jamanetwork.com](mailto:reprints@jamanetwork.com).