

Treatment for Vocal Cord Nodules

Vocal nodules are treatable and intervention leads to improvement in most cases. The most common treatment is voice therapy.

The purpose of voice therapy is to identify vocal abuse, eliminate vocal abuse, and teach the child effective use of the voice. The elimination of the vocal abuse, which first caused the vocal cord nodules, must be the basis of any program to eliminate the vocal cord nodules. It must be remembered that most nodules form over a long period of chronic vocal abuse. Just as the nodules did not appear overnight, they will also not disappear overnight. The elimination of the abuse needs to be over a long period of time. Elimination of the abuse for only a week or two will not be effective.

The successful treatment and management of the child with vocal nodules is highly dependent upon the involvement of the parents and the people in the child's environment. The first step is to identify the vocal abuses and chart the frequency of abuse. Then, the child needs to be made aware of these abuses in order to eliminate them. It is often necessary to establish a new set of rules in which the child uses his/her voice. These rules might include:

- **No screaming, yelling or shouting allowed.**
It is best to offer the child a substitute for these. For example, the child must walk to you before he/she begins to talk, rather than to yell for you in the house. Remember, if he/she yells for you, do not yell back. This only reinforces the habit of abuse.
- **Provide the child with another outlet for anger.**
Suggest that your child look in a mirror and make angry or funny faces. Give your child a stopwatch or hand-held oven timer to set for 5 minutes, during which time he/she must either literally run around the house or tear up scrap paper, an old phone book, or newspaper into tiny pieces until the timer goes off. During a time of non-anger, discuss with your child that it is okay to get angry, but it is not okay to express this with yelling or a loud, grinding voice.

- **No motor, animal or super hero sounds.**
Offer him/her other sounds that do not abuse the vocal cords.
- **No loud talking.**
Loud talking can often be a family problem. Does the child need to talk over other members in the family to be heard? Reinforce the rule that only one person in the family can talk at a time.
- **No talking when the television or radio is on.**
Turn the TV or radio off when talking with the child.
- **Throat clearing is not allowed.**
This can be the result of a habit from when the child had a cold. Teach the child to use a long, hard swallow, which will give the same effect, but is not vocally abusive.
- **Singing should be discouraged.**
Give the child a whistle or musical instrument to play.
- **Drink plenty of water and eliminate drinks with caffeine (ie. dark soft drinks).**
Vocal cords which become dry are often more susceptible to injury. Also, the feeling of dryness often results in throat clearing.

It is very important that these rules be reinforced consistently. Remember, the vocal nodules did not develop overnight, and likewise, it will take time to eliminate the cause. Patience and consistency with treatment are essential. Give your child a lot of positive reinforcement for following the rules. A sticker chart is often helpful. Likewise, gentle reminders (rather than nagging) are appropriate when rules are broken.

Surgical intervention may be needed when the nodules are very large or have existed for a long time. If your ENT physician recommends surgery, you should hear from our surgery scheduler within 48 hours. For questions about surgery scheduling, call 402-397-0670, option 2. If you have a contracted deductible from your insurance carrier, it is your responsibility to pay ENT Specialists, PC the dollar amount unfulfilled seven days prior to your scheduled surgery date.



Vocal Nodules



Board Certified Otolaryngologists Head & Neck Surgeons

Trent W. Quinlan, M.D., F.A.C.S.

Patrick C. Farrell, M.D.

David A. Denman, M.D., M.P.T.

Debora W. Goebel, M.D.

Ryan K. Sewell, M.D., J.D.

Louis D. Sully, PA-C

720 North 129th Street
Omaha, Nebraska 68154

(402) 397-0670

(402) 397-0670, option 2 *surgery scheduler*

(402) 354-2754 *after hours*

(402) 397-0713 *fax*

www.omahaent.com

Basic Information for Parents

Vocal cord nodules are benign (noncancerous) growths on both vocal cords. Vocal nodules are similar to “calluses” of the vocal cords. They occur on both vocal cords opposite each other at the point of maximal wear and tear and are usually treated with voice therapy to eliminate the vocal trauma that is causing them.

If your child has been diagnosed with vocal cord nodules, the first step is to understand their cause and treatment. Parents, siblings, teachers, and even the child’s friends play an important part in the elimination of the causes of the nodules. It is hoped that this information will clarify the nature and treatment of vocal cord nodules and the role that you play in the treatment process.

How the voice is produced

The voice is produced in the larynx, or voice box, which is located in the neck behind the Adam’s apple. The voice itself is produced by the vibration of the vocal cords, which are located in the larynx. During phonation (or production of the voice), the vocal cords close and are vibrated by air coming from the lungs. This should be an easy, effortless process.

How Vocal Cord Nodules Develop

Vocal cord nodules develop as a result of abuse to the vocal cords. They are callous-like bumps on the vocal cords. They usually form on both cords, but are occasionally seen on just one side. If vocal cord nodules are present, then the vocal cords cannot close completely. This results in air escape, making the sound breathy and hoarse.

Symptoms of Vocal Cord Nodules

Symptoms of vocal cord nodules include:

- Vocal fatigue
- Unreliable voice
- Delayed voice initiation
- Low, gravelly voice
- Low pitch
- Voice breaks in first passages of sentences
- Airy or breathy voice
- Inability to sing in high, soft voice
- Increased effort to speak or sing
- Hoarse and rough voice quality
- Frequent throat clearing
- Extra force needed for voice
- Shooting pain from ear to ear
- Neck pain

If you have experienced a hoarse voice for more than 2 to 3 weeks, you should see a physician. A thorough voice evaluation should be completed.

The Causes of Vocal Cord Nodules

Vocal cord nodules are caused by misuse or abuse of the voice and therefore, the vocal cords. Vocal misuse can include:

- Use of an incorrect pitch or volume
- Poor breath support for speaking or singing
- Controlling the voice at the level of the larynx (voicebox)

The most common cause of vocal cord nodules in children is vocal abuse. Vocal abuses include:

- Excessive shouting, screaming, whining, cheering, crying, etc
- Strained vocalization, such as imitation of motor sounds
- Animal noises, super hero sounds, etc
- Excessive talking
- Excessive coughing or throat clearing

Other factors that may be associated with the development of nodules include:

- Chronic upper respiratory infection or allergies
- Smoking and second-hand smoke exposure
- Reflux of stomach acids
- Air pollution

One or a combination of the above factors may cause the formation of vocal nodules.

Vocal abuse can cause the vocal cords to close with excessive force (ie. bang together). As this happens, a slight reddening is noted on the edge of the vocal cord. This is followed by swelling or thickening along the edge of the cord. Finally, a definite bump or nodule develops on the front one-third of the vocal cord, where the point of maximum vibration occurs. Nodules can range in size from as small as a pin head to as large as a split pea. The primary symptom of vocal cord nodules is a breathy and hoarse voice.

