

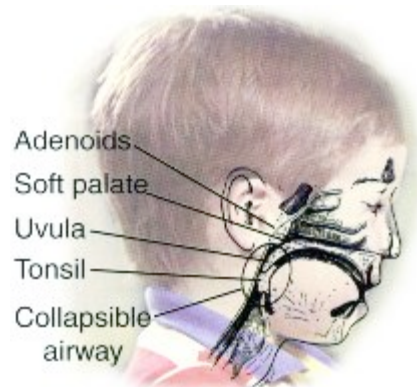


Carolina Ear, Nose & Throat Head and Neck Surgery Center

Insight into Tonsillectomy and Adenoidectomy

Tonsils and adenoids are masses of tissue that are similar to the lymph nodes or "glands" found in the neck, groin, and armpits. Tonsils are the two masses on the back of the throat. Adenoids are high in the throat behind the nose and the roof of the mouth (soft palate) and are not visible through the mouth without special instruments.

Tonsils and adenoids are near the entrance to the breathing passages where they can catch incoming germs, which cause infections. They "sample" bacteria and viruses and can become infected themselves. Scientists believe they work as part of the body's immune system by filtering germs that attempt to invade the body, and that they help to develop antibodies to germs.



This happens primarily during the first few years of life, becoming less important as we get older. Children who must have their tonsils and adenoids removed suffer no loss in their resistance.

What Affects Tonsils and Adenoids?

The most common problems affecting the tonsils and adenoids are recurrent infections (throat or ear) and significant enlargement or obstruction that causes breathing and swallowing problems.

Abscesses around the tonsils, chronic tonsillitis, and infections of small pockets within the tonsils that produce foul-smelling, cheese-like formations can also affect the tonsils and adenoids, making them sore and swollen. Tumors are rare, but can grow on the tonsils.

What Should I Expect At the Exam?

Your physician will ask about problems of the ear, nose, and throat and examine the head and neck. He or she may use a small mirror or a flexible lighted instrument to see these areas.

Cultures/strep tests are important in diagnosing certain infections in the throat, especially "strep" throat.

X-rays are sometimes helpful in determining the size and shape of the adenoids. Blood tests can determine problems such as mononucleosis.

How Are Tonsil and Adenoid Diseases Treated?

Bacterial infections of the tonsils, especially those caused by streptococcus, are first treated with antibiotics. Sometimes, removal of the tonsils and/or adenoids may be recommended. The two primary reasons for tonsil and/or adenoid removal are (1) recurrent infection despite antibiotic therapy and (2) difficulty breathing due to enlarged tonsils and/or adenoids.

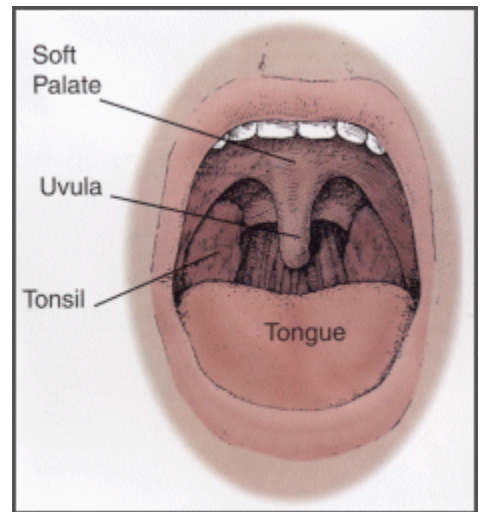
Such obstruction to breathing causes snoring and disturbed sleep that leads to daytime sleepiness in adults and behavioral problems in children. Some orthodontists believe chronic mouth breathing from large tonsils and adenoids causes malformations of the face and improper alignment of the teeth.

Chronic infection can affect other areas such as the eustachian tube – the passage between the back of the nose and the inside of the ear. This can lead to frequent ear infections and potential hearing loss.

Recent studies indicate adenoidectomy may be a beneficial treatment for some children with chronic earaches accompanied by fluid in the middle ear (otitis media with effusion).

In adults, the possibility of cancer or a tumor may be another reason for removing the tonsils and adenoids.

In some patients, especially those with infectious mononucleosis, severe enlargement may obstruct the airway. For those patients, treatment with steroids (e.g., cortisone) is sometimes helpful.



Tonsillitis and Its Symptoms

Tonsillitis is an infection in one or both tonsils. One sign is swelling of the tonsils. Other signs or symptoms are:

- Redder than normal tonsils
- A white or yellow coating on the tonsils
- A slight voice change due to swelling
- Sore throat
- Uncomfortable or painful swallowing
- Swollen lymph nodes (glands) in the neck
- Fever
- Bad breath

Enlarged Adenoids and Their Symptoms

If you or your child's adenoids are enlarged, it may be hard to breathe through the nose.

Other signs of constant enlargement are:

- Breathing through the mouth instead of the nose most of the time
- Nose sounds "blocked" when the person speaks
- Noisy breathing during the day
- Recurrent ear infections
- Snoring at night
- Breathing stops for a few seconds at night during snoring or loud breathing (sleep apnea)

Surgery

Your child: Talk to your child about his/her feelings and provide strong reassurance and support throughout the process. Encourage the idea that the procedure will make him/her healthier. Be with your child as much as possible before and after the surgery. Tell him/her to expect a sore throat after surgery. Reassure your child that the operation does not remove any important parts of the body, and that he/she will not look any different afterward. If your child has a friend who has had this surgery, it may be helpful to talk about it with that friend.

Adults and children: For at least two weeks before any surgery, the patient should refrain from taking aspirin or other medications containing aspirin. (WARNING: Children should never be given aspirin because of the risk of developing Reye's syndrome).

- If the patient or patient's family has had any problems with anesthesia, the surgeon should be informed. If the patient is taking any other medications, has sickle cell anemia, has a bleeding disorder, is pregnant, has concerns about the transfusion of blood, or has used steroids in the past year, the surgeon should be informed.
- Generally, after midnight prior to the operation, nothing (chewing gum, mouthwashes, throat lozenges, toothpaste, water) may be taken by mouth. Anything in the stomach may be vomited when anesthesia is induced, and this is dangerous.

When the patient arrives at the hospital or surgery center, the anesthesiologist or nursing staff may meet with the patient and family to review the patient's history. The patient will then be taken to the operating room and given an anesthetic. Intravenous fluids are usually given during and after surgery.

After the operation, the patient will be taken to the recovery area. Recovery room staff will observe the patient until discharged. Every patient is special, and recovery times vary for each individual. Many patients are released after 1–3 hours. Others are kept overnight.

Your ENT specialist will provide you with the details of pre-operative and postoperative care and answer any questions you may have.

After Surgery

There are several postoperative symptoms that may arise. These include (but are not limited to) swallowing problems, vomiting, fever, throat pain, and ear pain. Occasionally, bleeding may occur after surgery. If the patient has any bleeding, your surgeon should be notified immediately.

Any questions or concerns you have should be discussed openly with your surgeon, who is there to assist you.

Facts on Tonsillectomy

- In the United States, the number of tonsillectomies has actually declined significantly and progressively since the 1970s. The frequency with which tonsillectomy is performed varies from region to region. The variation appears to be related to differences in the medical practice of general practitioners, pediatricians, and otolaryngologists, in the management of recurrent tonsillitis and other conditions affecting the upper airway.
- 30 years ago, approximately 90% of tonsillectomies in children were done for recurrent infection; now it is about 20% for infection and 80% for obstructive sleep problems (OSA).
- The “gold standard” for the diagnosis and quantification of OSA is full-night polysomnography, or sleep study. However, polysomnography is expensive, time-consuming, and often unavailable. Consequently, most otolaryngologists will perform an adenotonsillectomy (T&A) based on a strong clinical history and parental observation in a child with chronically enlarged adenoids and tonsils.
- Extensive data shows the negative effects of OSA in children on behavior, school performance, and bed-wetting. Improvement for such behaviors following tonsillectomy is very well documented.
- Tonsillectomy for recurrent tonsillitis is effective at significantly reducing the number and severity of sore throats in children who are severely affected. There is also anecdotal evidence that some children’s quality of life is transformed by the surgery. This may be caused by a combination of factors that include the tendency of the frequency of recurrent sore throats to resolve over time and the elimination of a source of infection and of obstructive symptoms. These conclusions were published in “TO TREAT: Tonsillitis Outcomes – Toward Reaching Evidence in Adults and Tots,” a January 2008 supplement to the journal *Otolaryngology-Head and Neck Surgery*.
- Tonsillectomy alone is performed infrequently in children younger than 1 year old, whereas adenoidectomy alone is performed infrequently in individuals older than 14. The rate of adenoidectomy is about 1.5 times as high in boys as in girls, while the rate of tonsillectomy is almost twice as high in girls than in boys.
- On financial incentives favoring surgical intervention: Tonsillectomy reimbursement ranges from approximately \$180-\$300 across all payers. For example: Medicaid reimbursement to the surgeon for performing the procedure within the state of Virginia is currently \$200, and this includes all the follow-up care for 90 days following the procedure. Some payers base their fee schedules on a percentage of the Medicare payment. Out of this payment, the physician must pay significant malpractice insurance costs, as well as overhead costs for the practice, including staff salaries and benefits, and utilities.

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