

NORTH COUNTY EAR, NOSE AND THROAT –
HEAD AND NECK SURGERY
Pediatric and Adult
2023 West Vista Way, Suite J
Vista, California 92083
(760) 726-2440 Fax (760) 726-0644

Tonsillectomy and Uvulopalatopharyngoplasty (UPPP)

It is recommended that you undergo a tonsillectomy and uvulopalatopharyngoplasty (UPPP).

Where are tonsils?

There are two tonsils, one on each side of the back of the mouth. They can be seen through the mouth.

What are tonsils?

Tonsils are "lymphoid" or "immune" tissue, which means they are involved with recognizing and processing germs and allergens as they pass into the upper airway. They can become enlarged because of genetic tendencies, heavy allergen exposure, or for a variety of less understood reasons. Extensive scientific studies have confirmed that removal of tonsils does not produce "immunologic" problems because there are so many other areas throughout the airway and gastrointestinal tract that process germs and allergens.

What is a uvulopalatopharyngoplasty (UPPP)?

In a UPPP, soft tissue on the back of the throat (pharynx) and soft palate (the uvula and a small portion of the area just above) is removed. The tonsils are removed at the same time. If the tonsils have been removed already, the surface lining of the tonsil "bed" is removed. This is because a "raw surface" is needed through which to access the deeper muscles of the throat opening for stitches. The procedure increases the width of the airway at the throat opening, improves the opening ability by interrupting muscular action, and "squares off" the palate to enhance its movement and closure. It also tightens out the tissue farther back in the throat. In essence, the floppy/redundant/reverberating tissue is removed or tightened. UPPP does not address apnea or snoring caused by blockage at the base of tongue

Why undergo a tonsillectomy and UPPP?

This can be for a number of reasons.

1) Obstructive Sleep Apnea (OSA) - Tonsils can be so large as to *significantly* block the throat and airway during sleep. Sometimes the tonsils per se are not enlarged but the other tissue lining the throat may be so redundant and thick as to cause similar blockage. During the daytime the throat muscles are tense and hold the throat and airway open. At night, the muscles relax and collapse in, collapsing the tonsils as well. You then breathe against blockage and have pauses in your breathing. In severe cases this can lead to heart and lung problems. It also causes restless sleep, daytime fatigue, and sometimes morning headaches. Obstructive sleep apnea is usually

mild to moderate. Tonsillectomy/UPPP is "essentially curative" in only 50% of overall patients with OSA. However, patients with certain anatomy in the back of the throat may be cited a higher percentage. I will let you know this at your clinic visit.

It should be emphasized that the "gold standard" of treatment for OSA is a nasal/face mask called CPAP. It pushes "continuous positive airway pressure" into the nose/throat to hold the areas open at night. Many patients do extraordinarily well and surgery can be avoided. However, for patients who "fail" CPAP (cannot tolerate it) and for those patients who have tried it and do not feel it fits their lifestyle, many surgical options remain. Tonsillectomy/UPPP is just one of the surgeries and is the first level surgery. More extensive surgeries to address sites of blockage such as the back of the tongue may require tongue or jaw advancements.

2) Snoring - Snoring can arise from reverberating tissue or narrow passages anywhere from the nose to the back of the tongue. In my examination I looked for all potential sites. Please read the above statement on obstructive sleep apnea because the reasons behind OSA are similar as for snoring - but without the actual pauses in breathing. UPPP/tonsillectomy may be combined with a nasal procedure if necessary.

3) Difficulty swallowing - Tonsils and/or thickened throat tissue can cause difficulty swallowing, gagging, or decreased exercise capacity.

4) Mouth breathing, daytime "snoring" sounds - These are considered "lesser" indications for surgery but can become important when combined with other issues such as dental cavities or an inability to exercise well.

Do my adenoids need to be removed?

Adenoids are similar to tonsil tissue. There is actually only one adenoid. It is located deep behind the nose just above the tonsils. In children the same enlargement that affects the tonsils also affects the adenoids. However, adenoids almost always shrink by young adulthood. If the doctor had a concern for adenoid enlargement the doctor would have performed a telescope exam of the back of the nose. If the doctor felt the adenoids were a significant cause of blockage, the doctor would probably have recommend an adenoidectomy, NOT a uvulopalatopharyngoplasty. These are not often performed simultaneously because the incision on the palate could theoretically scar to the raw surface where the adenoids were removed and cause complete blockage. You may then need a UPPP at a later date once the raw surface from the adenoids has healed over.

Do I need blood work before surgery?

You will need to have a blood clotting and blood count test before surgery. All females will have a pregnancy test. If you have moderate or severe obstructive sleep apnea, you may also require other testing or consultations before surgery.

What happens at the time of surgery?

This is a common surgical procedure done under general anesthesia. On the day of surgery, the anesthesiologist, operating room nurse, and doctor will see you at the pre-operation holding area. An I.V. will be placed. You are then taken to the operating room. Once under anesthesia a breathing tube is placed. The surgery is performed through the mouth and the breathing tube is removed before you are aware of it. The surgery takes about one hour. There are no outside incisions. There are dissolvable stitches in the back of the throat. When the surgery is done the doctor will go talk to your family, whom you will see once you are more fully awake.

In the recovery room you may be awake enough to notice EKG (heart monitor) wires, an oxygen probe on the fingertip, a blood pressure cuff, a mask on your face blowing humidified oxygen, a lot of nurses, technicians, beeping, and buzzing. All of this is normal! It is not uncommon for you to be very nauseous and vomit. We give the best medicines to prevent this but it is still common. There may be old blood in the vomit. The I.V. remains in place until you are discharged.

Do I need to stay the night?

Most patients stay the night in the hospital. If you have moderate or severe obstructive sleep apnea you may even be admitted to the ICU to monitor breathing and vital signs and to watch for pulmonary edema (see below).

What should I expect after surgery?

Energy will be very low and it will be difficult to drink and talk. However, drinking is essential and if fluid intake is not high enough to generate urine output at least several times a day, you may need an I.V. placed in the urgent care, emergency room, or hospital. Vomiting is also common and is due to general anesthesia. There may be old, dark blood in the vomiting in the first few hours. Do not start taking the antibiotic and pain medication until the vomiting stops.

Pain is manageable with the pain medication prescribed. However, it may last for over 2 weeks. You may require the narcotic medication this entire time.

You are limited to rest and quiet activity for 10 days since vigorous activity can cause bleeding. Then gradually increase activities. Your energy will not return to normal for 4 to 5 weeks.

Expect bad breath, headaches, neck aches, fatigue, and altered taste for about 2 weeks.

Do not take aspirin, ibuprofen, Motrin, or Aleve-type medicines for 10 days because they can cause bleeding. They must be avoided. Regular Tylenol is OK, but not within four hours of the prescribed pain medication since it, too, contains Tylenol (acetaminophen).

You should call the doctor for a temperature over 101 (after 36 hours from surgery), persistent vomiting, bleeding as described below, or an inability to drink or eat for a 24 hour period.

A visit to the office will be arranged for 10 to 14 days after the surgery.

When can I return to school/work/sports?

This is at your discretion. Generally, you should plan on taking 2 weeks off. If your job requires a lot of physical activity or continual talking, you may consider taking 3 weeks. You may return earlier if doing well.

You may resume normal physical activity/sports after 10 days. However, some vigorous physical activity in certain sports may not be tolerated until 3 to 5 weeks after surgery.

What should I eat and drink?

For 1 to 2 days - cool/clear liquids, tepid broth, Jell-O, popsicles, ice cream, ice sherberts, puddings, applesauce, milkshakes, flat sodas.

Then until 10 days after surgery - soft food only such as mashed potatoes, soft pasta (macaroni and cheese!), soft scrambled eggs, soft bread, soft fruits.

Absolutely nothing with an edge (even the edge of certain breads can be too rough) for 10 days.

Drinking is more important than eating. *Dehydration is common and can lead to more pain and even bleeding.* You should have at least 1 1/2 quarts of fluid a day. As mentioned above, inadequate drinking may require an I.V. for fluids.

You can expect to lose 5 to 15 pounds.

What are the risks of surgery?

1) Bleeding - This is the number one risk of tonsillectomy. Adults have a 3-4 % chance of a severe enough episode of bleeding in the first 10 days that requires a return trip to the operating room to control the bleeding. (The UPPP portion of the procedure carries only minimal risk of bleeding.)

Streaks of blood or old dark blood with vomiting are common. Streaks of blood when crusts break away are also common. Steady teaspoonfuls of blood require you to go to the nearest emergency room or to call 911 if severe.

The dietary and exercise precautions are in place because of the risk of bleeding. You should also be careful with any other activity that may increase blood pressure such as bending over to tie shoes or straining with a bowel movement.

2) Infection - This is very rare. Antibiotics are given after surgery, although this is more to help with pain control.

It is *normal* for a whitish/grayish, moist, thick layer to develop over the incision/suture line. This is not infection! This is the "scab" which eventually comes off on its own.

3) Pain - Discussed above. Deep ear pain is almost universal and often sets in five to seven days after surgery, even after throat pain has subsided. This is because the throat and the ear nerves travel similar pathways to the brain. You can be fairly certain it is not an ear infection. It may hurt to yawn for a month or longer.

The tongue may be swollen, painful, or numb because of the retractor. It may have indentations or tingling sensations. This is normal.

The act of swallowing itself will be uncomfortable even with the pain medication.

4) Difficulty swallowing and speaking - This to be expected and subsides as pain and swelling subsides. Some patients have stitches which may cause irritation but eventually dissolve on their own. After two weeks I can remove any that remain if they are truly bothersome. It can take 4 to 6 weeks to adjust to the new swallowing process (since the throat muscles have been tightened outward).

5) "Velopharyngeal insufficiency" - It is common for liquids to come out of the nose during swallowing and for the voice to stay nasally for several weeks after surgery. This is due to swelling in the back of the nose. However, if there is excess scarring in the soft tissues preventing the muscles from pulling the "palate" up and backwards, the palate would not be able to block off the nose during swallowing as it normally should. I instruct all patients that they will *always* have some problem if they drink too fast or tip the head very far back or very far forward to drink (i.e. it may be hard to drink the milk from the bottom of the cereal bowl or to take big gulps from a soda can). Very rarely this could require speech/swallow therapy if it remained bothersome for over a year.

6) Aspiration pneumonia - This is very rare and easily treated. Difficulty swallowing after surgery may result in liquids going down the windpipe instead of the esophagus and cause a lung infection. Alternatively, if you had an active throat infection at the time of surgery, the bacteria might get seeded in the lungs as the breathing tube is placed. This requires stronger antibiotics and possible re-admission to the hospital.

7) Pulmonary edema - About 5% of patients with moderate or severe sleep apnea may suddenly develop fluid on the lungs and require extra observation. This is due to the sudden relief of chronic blockage and is also called "postobstructive" pulmonary edema.

8) Failure of surgery to improve the symptoms.

What medications will I go home with?

A narcotic pain medication, an antibiotic, and an anti-inflammatory (which is also a type of pain medication) unless you are allergic to sulfa. Liquids forms are given when available. Pills may be crushed and slurried. Caplets may be opened and slurried.

What are the alternatives to surgery?

The alternatives are not to have surgery and, instead, to use either the CPAP mask or to tolerate the breathing/snoring problems. Some patients find improvement using "Breathe-Rite"-type nasal strips, an oral jaw-advancing mouth piece fashioned by a dental prosthodontist, avoiding sleeping on the back, or having more limited "palate" procedures such as the newer palate stiffening implants.

Many patients with obstructive sleep apnea (and sometimes snoring without sleep apnea) can be cured with *significant weight loss alone*.

Please let us know if you have any questions.

Julie A. Berry, M.D. Marc J. Lebovits, M.D.