



Children's Hospital Boston

Tonsillectomy and Adenoidectomy

Department of Otolaryngology & Communication Enhancement
Pre-operative Informational Series



childrenshospital.org/oto | 617-355-6462

Introduction

The goal of this booklet is to help you work together with us to give your child the best possible care before, during and after surgery.

You are a key member of your child's health care team.

Good communication between you, your child and the health care team is essential. Be sure you are fully informed about your child's care. If you are concerned about your child's treatment and recovery, please discuss this with any of your child's doctors and nurses while in the hospital, or call us at any time if you are at home. A doctor is available to talk to you 24 hours a day. The last page of the booklet gives instructions on how to contact us.

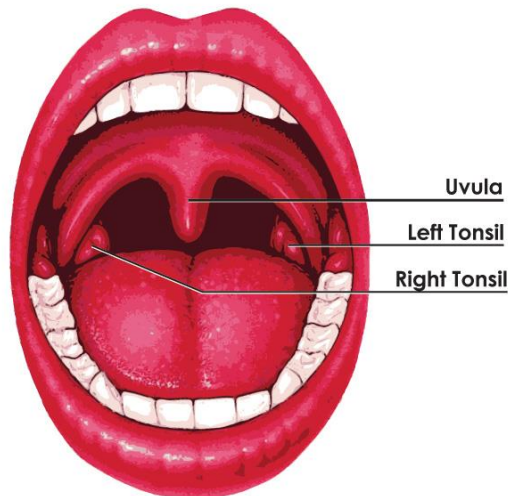
What are tonsils and adenoids?

Tonsils and adenoids are lymph glands located on the sides and the roof of the throat. They are part of the body's immune system. When bacteria or viruses enter the

nose and throat, the tonsils and adenoids help the body respond to prevent infection.

If tonsils and adenoids are normal tissue, why would we want to remove them?

Like all normal tissue in the body, the tonsils and adenoids can sometimes become diseased and cause more problems than they solve.



What are common reasons for removing tonsils and adenoids?

There are two major reasons for removing tonsils and adenoids:

1. Sometimes the tonsils and adenoids become so large that they interfere with breathing, especially during sleep. This may be due to repeated infections, allergies or other factors that we don't fully understand.
2. Sometimes the tonsils and adenoids become diseased and actually become a source of infection, particularly sinusitis, repeated sore throats or strep throats.

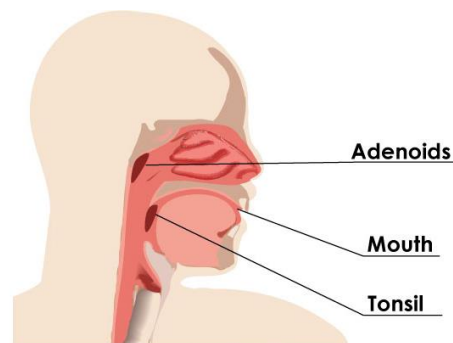
Are there other reasons for removing tonsils and adenoids?

Yes. They may interfere with swallowing, cause abscesses or worsen asthma. There are other less common reasons for surgery. Your surgeon will explain to you why he/she feels your child's tonsils, adenoids or both need to be removed.

What is obstructive sleep apnea?

Obstructive sleep apnea is a condition where the child has to struggle to breathe during sleep. In extreme cases, the breathing passage may completely block off and there may be periods where the child stops breathing altogether.

Chronic disrupted sleep is a serious health problem which can cause behavior problems, easy distractibility, poor weight gain, poor learning and, in extreme situations, delayed brain development and heart and lung problems. In children, by far the most common cause of obstructive sleep apnea is enlarged tonsils and adenoids.



Do the tonsils and adenoids cause ear infections?

The adenoids can interfere with the natural drainage of the ear (through the Eustachian tube). Studies show that removal of the adenoids will (on average) reduce ear infections. Therefore, adenoidectomy may be recommended for chronic ear problems.

In most cases, tonsils probably do not contribute substantially to ear disease. However, some children with severe ear problems may benefit from tonsillectomy.

My child's tonsils are huge. Shouldn't they be removed?

Tonsils and adenoids need not be removed simply because they are enlarged. They only need to be removed if they are causing your child problems. You and your child's surgeon will decide together if removing the tonsils, adenoids or both is best for your child.

Don't tonsils & adenoids shrink with growth? Why not wait?

They do shrink with growth in most children. However, they may not completely shrink until the teen years or adulthood. If they are

causing significant problems now, waiting many years may not be best for your child.

Is it safe to remove a part of the immune system?

In this case, yes. There are many other lymph nodes in the throat that can perform the defense function of tonsils and adenoids. Studies show that children who have had their tonsils removed actually get fewer throat infections.

What should I do to prepare my child for surgery?

Your child will likely have questions about his/her upcoming surgery. Naturally many children are nervous about their surgery. You should answer questions about the hospital stay as honestly as possible. You can best calm your child by demonstrating calm yourself. A simple, factual conversation with your child about what to expect is usually the best approach.

If needed, Child Life specialists are available by telephone, at the time of your preop visit and on the day of surgery to help ease your child's worries. They are specially trained in giving age-appropriate explanations of the procedures and experiences. They may also be able to suggest one of the many books available for you to read with your child in

order to prepare your child for his/her hospital visit.

If you are unsure of the answer to your child's questions, call our nurses' line or the hospital's pre-operative clinic for more information.

Tip: honesty is best

The most reassuring thing for your child is to know that their questions are always answered honestly.

Don't mislead your child by saying "it won't hurt"—this will lead him/her to mistrust you as well as doctors and nurses in the future.

If your child asks, it is better to tell them, calmly, that some parts will be painful but that you will always be with them to help them cope.



Help us make surgery safe

If your child has other medical problems...

- Tell us about all of your child's medical problems, the names of his/her doctor(s) and medication(s) he/she takes.
- Be particularly sure to review your child's full history in the anesthesia preop clinic, and with the anesthesiologist on the day of surgery.
- If your child sees doctors at other institutions, please bring copies of their most recent records.
- If you believe your child's other medical conditions are worsening, tell us immediately. You know your child best.



Medication safety

If your child is taking any medication, continue to take it up to the night before surgery (unless otherwise directed).

Have your child take his/her medication on the morning of surgery only if instructed to

do so by your

surgeon,

anesthesiologist or

pre-op nurse.

Bring your child's

medications to the

preop visit and on the

day of surgery.

Tell us if your child is

allergic to any

medications. **YOUR CHILD SHOULD NOT TAKE ASPIRIN OR ASPIRIN-CONTAINING PRODUCTS (Advil™, Motrin™, Ibuprofen, Bufferin™, Alka-Seltzer™, etc.) FOR TWO WEEKS PRIOR TO THE SURGERY.**

Does my child need to spend the night in the hospital?

It depends on your child's age, the surgery being done and other factors. Your surgeon will tell you what is best for your child.

What is a pre-operative evaluation?

Your child may need to come to the hospital within 30 days prior to the surgery for a pre-operative evaluation. At this time an anesthesiologist will assess your child's medical/surgical history. He/she will also explain the risks of general anesthesia. A nurse will also review what you can expect during hospitalization. You may also meet with a representative from the hospital Business Office if there are any concerns regarding your insurance.

This pre-operative evaluation takes place in the Admitting Office and may last as long as two hours. In an effort to avoid confusion, we ask that only a parent and the child who is having surgery come to this meeting.

Since your child will be having general anesthesia, certain laboratory tests may be performed during this evaluation. These include a red and white blood count to determine if your child is anemic or has evidence of a recent infection. The blood's chemical composition and ability to clot may also be tested. Children with more complicated medical histories may also have a chest x-ray and an electrocardiogram. These tests check for the presence of disease in the heart or lungs prior to surgery.



If you feel that your child should have additional laboratory tests or that one of the above mentioned tests should be omitted, please communicate this to us or to other members of our staff.

If your child meets all the medical requirements and is scheduled for surgery at a satellite location (Lexington or Waltham), he/she will not require a pre-op appointment.

My child has other medical problems. Is surgery safe?

The presence of other medical problems can increase the risk of surgery. At Children's Hospital Boston, we frequently have to perform surgery in children with other medical problems, sometimes

very major ones. Our team of surgeons, medical doctors, anesthesiologists and nurses are among the best in the world at caring for children with complex problems. If you have questions about your child's specific situation, ask your surgeon or anesthesiologist.

How can I help during my child's hospitalization?

You can be with your child through their entire stay. Particularly with younger

children, your presence is the most important thing that will help your child cope. It is particularly important for you to be with your child in the pre-operative area and in the recovery room. One parent can sleep at the child's bedside. There is not room in the hospital for both parents to stay at the bedside overnight.

You are the best advocate for your child's well being and care. You are most familiar with the child's unique personality, general state of health and particular preferences. Your participation is of immense value in helping us best care for your child.

Before the operation

Please arrive promptly; leave yourself sufficient time to travel, park and find the office. There will be playthings available in the admitting area to help entertain your child during the pre-operative period.

It is often helpful to bring distracting activities for your child to the pre-operative area, such as favorite toys or video games.

In the pre-operative area, you will meet other members of the surgical team, including nurses and anesthesiologists.

Why can't they eat?

- It is unsafe to give anesthesia when a child has food or liquid in their stomach. Rarely, they could vomit and food could enter their lungs.
- If your child eats or drinks, surgery will be cancelled.
- Your child should have nothing to eat after midnight prior to the scheduled surgery, including milk.
- Your child may drink apple juice or water up to two hours before the scheduled surgery time.
- Do not allow your child to have milk, gum, lollipops or hard candy on the morning of surgery.
- If instructed to do so, give your child their regular medications with a sip of water on the morning of surgery.

In the operating room

Depending on your child's needs, the anesthesia team may ask one parent to accompany the child into the operating room. For older children, an intravenous (IV) catheter may be placed in the hand or arm in the pre-operative area. For younger children,

anesthesia will usually be induced in the operating room by breathing gas through a mask.

If you accompany your child into the operating room, you should know that while going to sleep children will often make unusual movements such as stretching their arms and legs, arching their back or grunting. This is a normal phase of anesthesia, but if you are not prepared, you might be disturbed by these motions. Your child is actually asleep during this phase and will not remember it.

Once your child is asleep, you will leave the room. The anesthesiologist will then place a breathing tube, and your surgeon will perform the procedure. Your child will be continuously monitored throughout the entire procedure.

Surgery usually takes between thirty and sixty minutes. The tonsils and adenoids are both removed through the mouth. There are no external incisions on the face or neck.

The procedure

There are a number of methods currently available to remove tonsils and adenoids. Your surgeon can tell you what method he/she recommends for your child.

Where do I wait?

You will be taken to the family waiting area where you will check in with the nurse(s) supervising the family waiting area.

After surgery, your surgeon will come to see you personally and let you know how the operation went and how your child is doing.

After the operation

After the procedure is completed, your child will be awakened from general anesthesia. Then the breathing tube will be removed and your child will be brought to the Post Anesthesia Care Unit (PACU) recovery room for observation. Your child will stay in the PACU for 1-6 hours, until they are sufficiently awake to move to a regular hospital room or are ready to be discharged home.

During recovery, your child will have an intravenous line in place. This is necessary to administer medications, antibiotics and fluids until your child can eat and drink.



Usually, your child will not remember the early awakening and the first thing they will remember is you being at their side.

Where do we go after the recovery area?

If your surgeon and anesthesiologist have determined it is safe, you may be discharged from the recovery area to home.

Some children need to be monitored in the hospital for one night. Your child will be taken from recovery to a hospital room.

Some children, particularly those with severe apnea or other

medical problems, may be monitored in the Intensive Care Unit overnight.

Can I be with my child while he/she wakes up?

Your child must come out of general anesthesia, be transported to the recovery room and be stabilized in the recovery room before you can be with them. The recovery room nurses will call the family waiting area nurse to bring you back as soon as it is safe. Usually this will be just a few minutes.

Is recovery the same for tonsillectomy and adenoidectomy?

No. Adenoidectomy rarely causes severe pain or swallowing difficulties. Usually children who have had an adenoidectomy can return to school in 1- 3 days.

Tonsillectomy is a bigger operation which causes more pain and more stress to the child's system. The recovery period take two weeks to fully recover and for the child to "be themselves".

What is the first day of recovery like?

For many children, the first day of recovery will take place in the hospital. In the first day after general anesthesia your child may be a bit groggy, and may have nausea or vomiting because of anesthesia. If nausea/vomiting occurs, we will treat it with anti-nausea medications. Of course, your child cannot be discharged home until any nausea/vomiting has stopped.

As soon as practical, the first goal is to get your child to begin taking liquids by mouth. If your child has had an adenoidectomy, swallowing is not usually painful. If your child has had his/her tonsils removed, it is usually very painful to swallow. It is important to urge them to continue to take small frequent sips of liquids, even if this is painful.



Your child's throat will hurt after a tonsillectomy! It will feel like a severe sore throat and swallowing will hurt. There may be drooling as well. Children will often complain of ear and mouth pain. These complaints are common and are unfortunately normal after tonsillectomy.

What's my most important job?

Your biggest job is to get your child to drink adequate liquids. It is not critical if, due to throat pain, your child does not eat solids well for a few days. However, taking adequate liquids is essential to keep the body hydrated. Also, drinking sips of liquids bathes the raw areas in the throat and reduces pain.

Fluids include popsicles, ice cream and soda. A little creativity on your part to find what your child will tolerate can help a great deal.

The adenoids are behind the nose and not in the swallowing pathway. Therefore, after

adenoidectomy alone (without tonsillectomy) most children can return to a normal diet when they go home from the hospital.

When do we go home?

You will be discharged when your child is taking adequate liquids and your surgeon has determined they are safe for discharge. This may be the day of surgery or the morning after surgery.

What do I need to do at home?

- Give your child the prescribed pain medication
- Keep your child drinking liquids

How do I know if my child is drinking enough liquids?

If your child is urinating several times daily, and the urine is a light color, they are taking enough liquids.

If your child is not urinating frequently, or the urine is very dark, they are not taking enough liquids.

If your child does not urinate for 12 hours or more, call us immediately. This may be a sign of serious dehydration.

Pain management

There are four basic ways to control pain after tonsillectomy.

- Tylenol
- Ibuprofen
- Bathing the surgical site in liquids by drinking lots of fluid
- Distracting the child's attention from the pain by games or other activities

Narcotic pain medication

Most older children can safely take a mild narcotic pain medication. If this is appropriate for your child, your surgeon will give you a prescription for this when you are discharged.

How does distraction help?

Distraction is an often-overlooked but very effective strategy for coping with pain. If your child is drawing pictures, or glued to a video game, the pain will be less noticeable because his/her attention will be diverted.

Eating and drinking

Drinking is vital from the very beginning.

After your child's oral intake has reached the point where adequate amounts of liquids (4-6 glasses of liquid per day) are being taken, semi-solid foods should be started. Any type of soft food is fine as long as it is neither crusty nor dry. Foods such as potato chips, crackers, dry toast, pizza and pretzels may scratch the healing operative sites. They should be avoided for two weeks following surgery.

Over the first week to ten days, the bare zones of the throat created by the tonsil and adenoid surgery will heal. This process is a gradual one and may occasionally be slowed by the presence of infection. Be aware that the tonsil removal sites will look very peculiar over the first week to ten days after surgery. The raw surfaces will first appear very dark. After several days, the sites will become yellow or brown. The material coating these sites is a scab. The scabs fall off on their own, usually within 14 days. By two weeks after the surgery, healing will progress to the point where a regular diet may be resumed.

What are the risks of tonsillectomy and adenoidectomy?

Tonsillectomy and adenoidectomy are generally safe procedures that most children recover from uneventfully. Of course with all surgery there is always a risk of complications. You need to know about the complications that may occur.



Expected problems

Some problems are to be expected after tonsillectomy and/or adenoidectomy.

1. Bad breath during the healing of injured tissue
2. Low grade fever (less than 101.5)
3. Cough
4. Pain, particularly after tonsillectomy/adenoidectomy
5. Ear pain after tonsillectomy
6. Mild changes in the tone of your child's voice, due to changes in the size and shape of the oral cavity

What's the most important thing I need to watch for?

Bleeding after tonsillectomy.

Bleeding occurs in about 3% of children after tonsillectomy. Bleeding can occur at any time in the first 14 days after tonsillectomy. Most bleeds are not serious, but in rare cases bleeding can be severe or life-threatening.

Therefore, any blood in your child's mouth or nose (even a small amount) after tonsillectomy is abnormal and needs immediate evaluation.

If your child has any bleeding after tonsillectomy, you should call 911 or take him/her at once to be examined in the nearest emergency room. Do not transport your child a long distance by car if he/she is actively bleeding. Page the Otolaryngology surgeon on call at Children's Hospital Boston by calling 617-355-6369 to notify us.

Many cases of bleeding need only a careful exam to confirm that the bleeding has stopped. In some cases, the child needs to be kept overnight for observation, or taken back to the OR to stop the bleeding.

How about bleeding after adenoidectomy?

Bleeding is rare after adenoidectomy, and almost never serious. If your child has had only an adenoidectomy (not a tonsillectomy), and you see blood in his/her mouth or nose, call us by phone promptly.

Are there other warning signs of serious complications?

Signs of potentially serious complications include:

1. Temperature over 101.5
2. Complete inability to eat or drink
3. Neck stiffness, or holding the head in a fixed position
4. Changes in your child's mental status or alertness

Call us immediately for advice if you notice any of these signs.

What are the rarer complications of this surgery?

1. Some children have a change in the voice in which too much air escapes from the nose after adenoidectomy. Also, some children may have liquid or food escape from their nose when they eat and drink after adenoidectomy.

These changes are almost always temporary, but in very rare cases they can be long-term. Notify us if these changes persist more than 4-6 weeks.

2. Although tonsils almost never grow back, adenoids can regrow, particularly in younger children.
3. In extraordinarily rare cases, the back of the nose or mouth may scar shut or partially shut after this surgery. Surgery is required to repair this.
4. Rarely, the device used to hold the mouth open during surgery may dislodge teeth, particularly baby teeth. It may also very rarely cause injury to the lips or tongue.
5. Tonsils are usually removed using electric current. Because of this, there is a rare risk of an electric burn to the lips or tongue.
6. Any anesthesia carries a risk, but the risk of major complications from anesthesia in a healthy child is extraordinarily small. If you have concerns about anesthesia, you should discuss them with the anesthesiologist, either at the preop visit or on the day of surgery.

Post-operative evaluation

Ten to 14 days after your child's surgery, our staff will contact you by phone to assess how your child is doing. If your child is doing well and both you and the nurse are satisfied with his/her progress, then a post-operative visit will not be scheduled. We have done extensive studies that have shown that an in-person post-operative visit is not necessary for most patients who have undergone tonsillectomy and/or adenoidectomy. There are some exceptions to this. Depending on your doctor, those patients who have sleep study-confirmed sleep apnea, and those with other medical problems, may need to be seen for a post-operative visit. If at any time you would like your child to be seen in our office post-operatively, please call the nursing line at 617-355-7147.

Key care tips

- Drink, drink, drink. Dehydration is common after surgery, is dangerous, and worsens the pain.
- Use the pain medication as instructed. It is difficult for your child to drink if he/she is in pain.

- Bleeding after tonsillectomy is an emergency. Take your child to the closest emergency room promptly.
- Call us for
 - Temperature over 101.5°
 - Stiff neck
 - Child not drinking or making urine
 - Child not behaving normally, changes in mental status
 - Any other concerns you may have
- for the ORL doctor on-call and give the operator your name and phone number.
- Set your phone to received blocked caller IDs. Most of our physicians have blocked caller IDs and will not be able to reach you if your phone blocks these calls.
- To schedule an appointment at any of our locations, please call 617-355-6462 from 8:30 a.m. to 5:00 p.m. Monday through Friday.

How to reach us

During the day

- Call the ORL Nursing line: 617-355-7147.
- If your issue is not urgent, and you reach voicemail, leave a message and we will usually be able to return your call in 1-2 hours.
- If your issue is urgent, and you reach voicemail, listen to the end of the message and you will hear instructions on how to page the nurse on call for immediate attention.

Nights, weekends & holidays

- Call the Children's Hospital Boston paging operator at 617-355-6369. Ask