Head and Neck Associates of Orange County, Inc.

An Incorporated Medical Group



# ADENOIDECTOMY with BILATERAL MYRINGOTOMY and TYMPANOSTOMY TUBES SURGICAL INSTRUCTIONS

# INTRODUCTION

Your doctor has recommended an adenoidectomy with bilateral myringotomies and tympanostomy tubes for your child. The following information is provided to help you prepare for your child's surgery, and to help you understand more clearly the associated benefits, risks, and complications. You are encouraged to ask your doctor any questions that you feel necessary to help you better understand the above procedure.

The adenoids are a mass of lymphoid tissue located behind the nasal passages and above the soft palate. Infected adenoids may become enlarged, obstruct breathing, cause ear infections, or other problems. Adenoidectomy is a surgical procedure performed to remove the adenoids.

A myringotomy is a surgically placed tiny incision in the eardrum. Any fluid, often thickened secretions, will be aspirated and removed. In most situations, a small plastic tube (a tympanostomy tube) will be inserted into the eardrum to keep the middle ear aerated for a prolonged period of time. These ventilating tubes usually remain in place for 6 months to several years. Eventually they will move out of the eardrum (extrude) and fall into the ear canal. Your doctor may eventually remove the tube during a routine office visit or it may simply fall out of the ear unbeknownst.

The following instructions are designed to help your child recover from surgery as easily as possible. Taking care of your child can prevent complications. It is very important that you read these instructions and follow them carefully. We will be happy to answer any questions.

# **RISKS AND COMPLICATIONS**

Your child's surgery will be performed safely and with care in order to obtain the best possible results. You have the right to be informed that the surgery may involve risks of unsuccessful results, complications, or injury from both known and unforeseen causes. Due to the fact that individuals differ in their response to surgery, their anesthetic reactions, and their healing outcomes, no guarantee can be made as to the results or potential complications. Furthermore, surgical outcomes may be dependent on preexisting or concurrent medical conditions.

The following complications have been reported in the medical literature. This list is not meant to be inclusive of every possible complication. They are listed here for your information only, not to frighten you, but to make you aware and more knowledgeable concerning this surgical procedure. Although many of these complications are rare, all have occurred at one time or another in the hands of experienced surgeons practicing the standard of community care.

Initials

www.hnaoc.com

Anyone who is contemplating surgery must weigh the potential risks and complications against the potential benefits of the surgery, or any alternative to surgery.

- 1. Failure to alleviate every episode of sore throat, or resolve subsequent or concurrent ear or sinus infections/nasal drainage and/or chronic ear drainage/infections. Possible need for additional surgery.
- 2. Bleeding. In very rare situations, a need for blood products or a blood transfusion. You have the right, should you choose, to have autologous or designated donor directed blood prepared in advance in case an emergency transfusion is necessary. You are encouraged to consult with your doctor if you are interested in this option.
- 3. Infection, dehydration, prolonged pain, and/or impaired healing which could lead to the necessity for hospital admission for fluids and/or pain control.
- 4. A permanent change in voice, nasal regurgitation, hypernasality, velopharyngeal (soft palate pharyngeal) insufficiency (rare).
- 5. Failure to improve the nasal airway or resolve snoring, sleep apnea, or mouth breathing.
- 6. Need for allergy evaluation, treatments, or environmental controls. Surgery is not a cure for or a substitute for good allergy control or treatment.
- 7. Persistent perforation after the tube falls out of the eardrum.
- 8. Scarring of the eardrum or nasopharynx and/or hearing loss.
- 9. Need to keep the ear dry and to use earplugs.
- 10. Foreign body reaction to the ear tube itself, for example an allergy to the tube material (rare).
- 11. An in growth of eardrum skin into the middle ear or mastoid (cholesteatoma).
- 12. Eardrum retraction pocket formation.

# **BEFORE SURGERY**

In most situations, the surgery is performed as an outpatient at either the hospital or the Surgery Center. In both facilities, quality care is provided without the expense and inconvenience of an overnight stay. An anesthesiologist will monitor your child throughout the procedure. Usually, the anesthesiologist will call the night before surgery to review the medical history. If they are unable to reach you the night before surgery, they will talk with you that morning. If your doctor has ordered preoperative laboratory studies, you should arrange to have these done several days in advance. Arrange for someone to take you home from the surgical facility and to spend the first night after surgery with you.

Your child should not take aspirin, or any product containing aspirin, within 10 days of the date of your surgery. Non-steroidal anti-inflammatory medications (such as Advil) should not be taken within 7 days of the date of surgery. Many over-the-counter products contain aspirin or Advil type drugs so it is important to check all medications carefully. If there is any question please call the office or consult your Pharmacist. Tylenol is an acceptable pain reliever. Your doctor may give you several prescriptions at the preoperative visit. It is best to have these filled prior to the date of surgery.

If it is your child who is having the surgery, it is advised that you be honest and up front with them as you explain their upcoming surgery. Encourage your child to think of this as something the doctor will do to make them healthier. Let them know that they will be safe and that you will be close by. A calming and reassuring attitude will greatly ease your child's anxiety. Let them know that if they have pain it will only be for a short time period, and that they can take medicines which will greatly reduce it.

Adenoids/Tubes

```
Initials
```

You may want to consider a visit to the surgical facility or hospital several days in advance so that you and your child can become familiar with the setting. Contact the surgical facility or hospital to arrange for a tour.

Your child must not eat or drink anything 6 hour prior to their time of surgery. This includes even water, candy, or chewing gum. Anything in the stomach increases the chances of an anesthetic complication.

If your child is sick or has a fever the day before surgery, call the office. If your child awakens ill the day of surgery, still proceed to the surgical facility as planned. Your doctor will decide if it's safe to proceed with surgery. However, if your child has chickenpox, do not bring your child to the office or to the surgical facility.

# THE DAY OF SURGERY

It is important that you know precisely what time you are to check in with the surgical facility, and that you allow sufficient preparation time. Bring all papers and forms with you including the preoperative orders and history sheets. Your child should wear comfortable loose fitting clothes, (pajamas are OK). Leave all jewelry and valuables at home. They may bring a favorite toy, stuffed animal, or blanket.

Do not take any medication unless instructed by your doctor or the anesthesiologist. In the pre-operative holding room, a nurse may start an intravenous infusion line (IV) and your child may be given a medication to help them relax.

#### **DURING SURGERY**

In the operating room, the anesthesiologist will usually use a mixture of gas and an intravenous medication for the general anesthetic. In most situations, an IV will have been started either in the preoperative holding room or after the patient has been given a mask anesthetic. During the procedure, oxygen saturation (pulse oximetry), cardiac rhythm (EKG), temperature, and blood pressure will continuously be monitored. The surgical team is well trained and prepared for any emergency. In addition to the surgeon and the anesthesiologist, there will be a nurse and a surgical technician in the room.

After the anesthetic takes effect, the doctor will remove the adenoids through the mouth. The base of the adenoids will be cauterized with an electrical cauterizing unit. Next your doctor will use an operating microscope to make a tiny incision in the eardrum via the outer ear canal. There will be no external incisions. Fluid will be suctioned from the ear, and a tube inserted onto the eardrum. Usually antibiotic drops will be placed in the ear, and a cotton plug inserted in the ear canal. The whole procedure usually takes less than 30 minutes. The surgeon will come to the waiting room to talk with any family members or friends, once your child is safely in the recovery room.

# AFTER SURGERY

After surgery, your child will be taken to the recovery room where a nurse will monitor your child. You will probably be invited into the recovery room as your child becomes aware of their surroundings and starts looking for you. Your child may be able to go home the same day of the surgery once they have fully recovered from the anesthetic. This usually takes one to two hours.

 When you arrive home from the surgical facility, your child should go to bed and rest with the head elevated on 2-3 pillows. By keeping the head elevated above the heart, you can minimize edema and swelling. Applying an ice pack to the neck may help decrease swelling. Your child may get out of bed with assistance to use the bathroom.

 Adenoid/Tubes
 Initials\_\_\_\_\_\_

Visitors should be kept to a minimum since they may unknowingly bring infection and cause over excitement. Avoid straining, if they are constipated, give a stool softener or a gentle laxative.

It is best for your child to eat a light, soft, and cool diet as tolerated once they have recovered fully from the anesthetic. Avoid hot liquids for several days. Even though one may be hungry immediately after surgery, it is best to feed slowly to prevent postoperative nausea and vomiting. Occasionally, one may vomit one or two times immediately after surgery, however, if it persists, your doctor may prescribe medications to settle the stomach. It is important to remember that a good overall diet with ample rest promotes healing. You need not worry about nutritional requirements during the recovery so long as your child is drinking an adequate amount of fluid.

For pain management if your child is under the age of 6 we recommend over the counter Tylenol that may be alternated every 4-6 hours with over the counter Motrin as needed if not allergic (follow recommended directions on the box for age and weight). For children 6 years and above, your child may be prescribed some form of a narcotic, (usually Tylenol with Codeine or Lortab elixir), and is to be taken as needed. If there is nausea or vomiting postoperatively, your child may be prescribed an anti-emesis medication such as Phenergan or Zofran. If you have any questions or you feel that your child is developing a reaction to any of these medications, you should consult your doctor. You should not give any other medications, either prescribed or over-the-counter, unless you have discussed it with your doctor.

# **GENERAL INSTRUCTIONS AND FOLLOW-UP CARE**

An appointment for a checkup should be made 14 to 21 days after the procedure. Call the office to schedule this appointment.

Pain is common after an adenoidectomy. It is often hard to predict who will recover quickly or who will have prolonged pain. Immediately after surgery, many patients report only minimal pain. The next day the pain may increase and remain significant for several days. Often times at one week following surgery, patients will appear to relapse when their pain becomes significant again. They usually report pain in the ears especially when they swallow. Overall, most patients will have recovered fully by two weeks after surgery.

It is not uncommon for the patient to have a bad breath, which will go away when everything is healed. It is not unusual to have nasal stuffiness following surgery, which may last for up to several months as swelling decreases. Saline nose drops (Ocean Spray) can be used to help dissolve any clots and decrease edema. You may notice persistent or even louder snoring for several weeks. A temporary change in voice is common following surgery, and will usually return to normal after several months. They, of course, will sound less "nasal" following surgery.

Bleeding occurs infrequently after adenoidectomy. There may be some bleeding from the nose following surgery. If it occurs, pediatric Afrin nose drops can be used. If it is persistent and bright red in color, call your doctor.

An evaluation of the ear and hearing function will be completed on your child prior to the surgery and after its completion by our audiologist. The first test is to establish a baseline, or the amount of impact the infections are having on the ability to hear; while the follow-up test determines if your child's hearing problem has resolved, resulting in an improvement in hearing sensitivity. This may include objective evaluations of the middle and inner ear systems, as well as a standard hearing test which records your child's ability to respond.

Adenoids/Tubes

Initials

The tests to be completed pre- and post-operatively will be determined by the pediatric audiologist.

This protocol is appropriate to obtain a high level standard of care. Charges for pre- and post-operative hearing evaluations are not included in the standard surgical fees; therefore the charges will be billed to your insurance carrier separately.

Any co-payments, co-insurances or deductibles applied by the insurance carrier are the responsibility of the insured.

Water should not be allowed to enter the ear canal while the tubes are in place. Because there is now a passage into the middle ear to allow for ventilation, non-sterile water can also pass into the middle ear space. If this occurs, ear drainage and infection may follow. We recommend that all children try to utilize ear plugs whenever there is a chance of water contamination (swimming, bathing, washing hair). Bathing caps or "ear bandits" are also helpful. Our office can instruct you in earplug fitting. Customized personal ear molds are also available in our office, and can be order through our audiologist (additional charge).

Usually two different types of ear drops will be given to you the day of surgery. Antibiotic ear drops (CiproDex, CiproHC, and Cortisporin) are to be used immediately after surgery for 3-5 days (3-4 drops each ear 2 times per day). If there is drainage from the ear after 5 days continue to use the drops until the day before your office visit. Discontinue these drops if they cause severe pain or a skin rash develops. You may substitute Vasocidin drops if any of these problems develop. Vasocidin drops can also be used in the ear if water accidentally enters the ear canal. This will help prevent water contamination related ear drainage. Vasocidin drops are actually an eye medication, but we prescribe them as a safe gentle medication for the ears. Both drops should be warmed by holding them in the hand for 5 minutes and inserting into the ear canal along the side. You can "pump" them into the ear by pushing on the soft cartilage tissue located in front of the ear canal (the tragus).

Ear drainage may occur immediately after the procedure or at any time while the tubes are in place. Yellow clear fluid or mucous may drain for several days to weeks after the surgery. It is not unusual to see a bloody discharge following surgery. Cotton can be kept in the ear canal and should be changed as needed to keep dry. If after the immediate post-operative period, profuse, foul-smelling discharge drains from the ear this indicates an infection. When this occurs, you should begin by using ear drops for 3 days. If the drainage continues beyond 5 days, then you should call the office to determine if additional medicine and/or an office visit are necessary.

Tympanostomy tubes usually remain in place from 6 months to several years. It is important to have an ear checkup about every 6 months during this time period. An audiogram is usually obtained at some point after the ears have healed to ensure that hearing has returned to normal. It is your responsibility to make the appropriate arrangements for this test. The tubes will eventually fall out of the eardrum and into the ear canal. Some children will note some mild discomfort or bloody drainage at this time. The small hole in the eardrum at the old tube site usually heals within several weeks or months. Your doctor will instruct you to when it is safe to allow water in the ears.

Most patients require only several days off from school. After 7-10 days exercise and swimming can usually be resumed, but no diving for 2 weeks. You should plan to stay in town for at least 2-3 weeks to allow for postoperative care and in case you have bleeding.

Adenoids/Tubes

Initial	s

# NOTIFY YOUR DOCTOR IF YOU OR YOUR CHILD HAS

- 1. A sudden increase in the amount of bleeding from the mouth or nose that lasts more than a few minutes.
- 2. A fever greater than 101.5 degrees F which persistent despite increasing the amount of fluid you or they drink and Tylenol. A child with a fever should try to drink approximately one-half cup of fluid each waking hour, and an adult should drink one cup per hour.
- 3. Persistent sharp pain or headache which is not relieved by pain medications prescribed.
- 4. Increased swelling or redness of the nose, neck, or eyes.
- 5. Dehydration.

# SURGICAL FINANCIAL POLICY

Head and Neck Associates of Orange County will submit claims to your insurance company for any surgical procedures performed by our physicians. Prior to your scheduled surgery date our staff will verify eligibility and benefits. We will also obtain pre-certification and/ or authorization when required by your insurance company. Please be aware however, that this is not a guaranty of payment. Any expenses deemed not covered by your insurance company for any reason, will be your financial responsibility. All monies owed by the patient, i.e., remaining deductible or coinsurance amounts and any procedures or fees deemed not medically necessary, are due prior to the date of surgery. All financial arrangements must be made prior to the date of surgery. Please be aware that this office will bill only for the physicians' services. Any other services related to your surgery, i.e., facility, anesthesiology, radiology, laboratory or pathology will be billed by the facility providing these services, and not included in our billings.

Our office accepts the following forms of payment; Visa or MasterCard, cash and personal checks. A twenty dollar service charge will be assessed to your account for any check returned by your bank.

# **IMPORTANT PHONE NUMBERS**

If you have any questions, do not hesitate to call the office at (949) 364-4361. At night or on the weekends, if your need is urgent and cannot wait until regular business hours call our main number at (949) 364-4361 and you will have an option to redirect your call to the answering service who will contact the doctor on call. If for some reason you cannot reach the doctor on call and your need is life threatening, go to the emergency room.

# IF YOU WOULD LIKE TO LEARN MORE

The physicians of Head and Neck Associates recommend **www.medicinenet.com** as an internet source of information. MedicineNet® is a network of U.S. Board Certified Physicians and Allied Health Professionals. Find easy-to-understand medical information to make smart health decisions with your doctor. Stay informed on all aspects of health and medicine. Get the latest health and medical news delivered to your e-mail box!

Please visit our web site at www.hnaoc.com

Adenoids/Tubes

Initials

#### DISCLOSURE OF OWNERSHIP INTEREST IN MISSION SURGERY CENTER

If you are having your surgery at Mission Surgery Center, we must inform you that the surgeon has an ownership interest in the facility. This disclosure is to acknowledge such ownership interest, and to assure you that you are not compelled to have the surgery performed at the Mission Surgery Center. You are free to select any surgical facility of your choice for this procedure.

# ATTESTATION

I have received, read, and understood the information provided to me regarding my child's upcoming surgery.

I have been given the opportunity to discuss freely with my doctor any concerns, alternative therapies, and have had my questions answered to my satisfaction.

I understand my rights as a patient, which includes the right to a second opinion, and have discussed and made clear my preferences with my doctor. I understand that unless time permits for designated donor blood to be prepared, and my doctors feel that blood must be given emergently, I will accept banked community blood products.

I acknowledge receipt of the above discussion of potential risks and complications, as well as patient information, financial policy, surgery center disclosure and surgery pre & post-operative care information. I am comfortable with all aspects of the upcoming surgery and ask that we proceed with surgery.

Printed Name of Patient

Date of Birth

(Signature of patient or guardian)

(Date)

Witnessed by

(Date)

Adenoids/Tubes

Updated 01/13 rmiller