

(1) TONSILS & ADENOIDS

(2) Your child has been referred to have his tonsils and adenoids removed. This operation is commonly called an adenotonsillectomy and is one of the most common major operations performed on children. In the early 70s, approximately one million children had this operation each year. This number gradually reduced in the 1980's to approximately 500,000 each year. Now with the advent of increasing bacterial resistance to antibiotics, chronic adenotonsillitis is becoming more common and the number of adenotonsillectomies performed each year is expected to increase.

(3) Indications or reasons to have this operation performed include: Recurrent adenotonsillar infections, airway obstruction as indicated by snoring, chronic mouth breathing and breath holding spells at night.

(4) If your child has these breath holding spells, these are called apnea and is a danger sign and long-term may cause serious and permanent heart and lung damage. This disorder can be caused by enlargement of the patient's tonsils as shown in the right hand picture. Because of this we would recommend having enlarged tonsils and adenoids removed to relieve night time airway obstruction.

(5) To the right is shown a picture, taken with a fiberoptic scope of an enlarged adenoid. The adenoid is behind the nose and can block the drainage of the nose, sinuses and ears. The adenoid is often removed to treat chronic ear and sinus infections.

(6) Shown in this diagram is a section of a human skull. The oral cavity or mouth along with the patient's hypopharynx, pharynx and nasal passages can easily be seen. The tonsils are located above the base of the tongue, on either side of the mouth.

The adenoid is located in the back part of the nose above the soft palate. All of these structures, both tonsils and adenoids are removed through the patient's mouth. There are no external incisions or scars.

(7) The operation takes approximately one half hour to perform plus the time it takes to put the child to sleep and wake up. It requires one day at the hospital, coming in in the morning and leaving that afternoon. The child must have nothing to eat or drink 12 hours before the operation or after midnight. If your child is very young, it may be possible to give him clear liquids such as apple juice or Kool-Aid four hours prior to the operation. It is always best to check with the Anesthesiologist regarding the preoperative eating requirements for surgery.

(8) After surgery, your child will be in a fair amount of discomfort. This tends to be relieved by both pain medications and by feeding him a soft, cool diet. Stay away from foods which are hot, salty or very cold. In general, if your child wishes and can eat the food, let him do that. This usually takes place in approximately four to five days. Afterward, the diet can usually be advanced and the child returns to a normal diet in approximately one to two weeks. A low grade fever often develops in the first one to two days after the operation. This is usually from poor fluid intake. Be sure to encourage your child to drink plenty of fluids and continue to give the antibiotics. If the

temperature rises above 102 degrees you should call our office. During the first four weeks after the operation, the child should refrain from heavy activity and should be out of school for at least one-week, rarely two are required.

(9) Postoperatively, or after the operation we will prescribe antibiotics. These should be taken at least three to four times a day for a period of five days. The child will also be on pain medications and should refrain from taking aspirin, Advil, Bufferin or any other nonsteroidal anti-inflammatory agents. Tylenol is permissible. However, if his pain medication also has Tylenol in it, he should not be double dosed. Ear pain is common and is often referred pain from the tonsillectomy operation.

(10) It is normal for a child to have white patches over the tonsil removal area. All patients develop this. No additional treatment for these patches are required. Please do not be alarmed if you observe these patches.

(11) Children in general may not have an immediate benefit from the operation, especially if the operation is performed for airway obstruction. Swelling may last 7-10 days and snoring and mouth breathing may not be relieved until this time has passed. In addition, if your child has been mouth breathing for several years, just because he can now breathe through his nose, will not necessarily cause him to stop breathing through his mouth during normal activity.

(12) There are a number of complications which can occur after the tonsils and adenoids are removed. Bleeding is by far the most common. In fact, it is even normal to have a little bit of bleeding four to eight days after the operation. This can be treated by having your child swallow ice water. However, if it persists, you should bring your child immediately to the hospital. Approximately 2%, or 1 out of every 50 children, have to be taken back to the operating room for control of bleeding. This bleeding may either occur immediately, right after the operation, or be delayed, occurring four to eight days or even up to three weeks after the procedure is performed. Because of this, we suggest the family not go on any long trips unless the child has been cleared by your doctor for at least three weeks after the operation.

(13) In addition to bleeding, children can develop infections characterized by fever, and abnormalities in speech. Speech abnormalities occur in approximately 1 out of every 3,000 children who have an adenoidectomy performed. Usually, this abnormality will occur in children who have a mental handicap, cerebral palsy or have a cleft palate. Speech abnormalities occur when the soft palate, or back of the roof of the mouth, can not close off the back part of the nose.. In a normal child, this type of complication is rare. The abnormalities in speech sound like this (Dr. Kavanagh gives an example of speech abnormality). The child's speech may be quite difficult to understand. The speech abnormalities are caused from too much air passing into the nose. The child is not able to close the nose after the adenoid has been removed. The treatment is first with speech therapy and if that fails a second procedure is sometimes required to make the

opening between the mouth and the nose smaller. An example of this procedure is called a pharyngeal flap.

(14) Children with Down's syndrome present increased risk for this procedure. Their muscular hypotonia or weakness along with their mental handicap puts them at increased risk for hypernasal speech. In addition, their restricted airway often means that they may have significant swelling and airway obstruction after the procedure. Because of this, these children are often admitted to the hospital and watched in the ICU after the operation. It is recommended that these children also be seen by orthopedics prior to the operation for screening for cervical instability. We want to make sure that both the spine is stable and that the child is as healthy as can be before the operation is performed.

(15) There have been a number of questions regarding older patients and increased risks, and indeed, the older the patient the harder it is to undergo this operation. A child three to four years of age will tend to recover very quickly, returning to normal activity in about a week. It is not uncommon, however, to have an adult not be able to return to work for two to three or even four weeks and to have pain and difficulty in eating during this time.

(16) There have also been a lot of questions regarding laser therapy or laser tonsillectomies. I do not recommend the use of this equipment. It tends to be expensive, increasing the cost of the procedure by nearly \$1,000. In addition, it increases the operative time. It also results in a decreased rate of healing. Pain, however has been

reported to be less the first few days after the operation, but may be greater several days later. Overall, the disadvantages of this technique outweigh its benefits.

(17) The harmonic scalpel has also been advocated for tonsillectomies. This procedure also increases the duration and cost of the operation. There is some evidence that pain may be lessened.

(18) If you have any other questions regarding the procedure of adenotonsillectomy, please talk to me afterward, or call my office at a later time, and I will be happy to discuss this procedure with you.