SNORING IN KIDS, OBSTRUCTIVE SLEEP APNOEA, TONSIL AND ADENOID REMOVAL

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There are a number of well-established and valid reasons for the removal of the tonsils or adenoids, and some patients will have more than one reason for tonsillectomy or adenoidectomy.

WHAT ARE TONSILS AND ADENOIDS?

Tonsils and adenoids are similar to the lymph nodes or glands found in the neck, groin, and armpits. Tonsils are the two round lumps in 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 or nose without special instruments.

WHAT AFFECTS TONSILS AND ADENOIDS?

The two most common problems affecting the tonsils and adenoids are recurrent infections of the nose and throat, and significant enlargement that causes nasal obstruction and/or breathing, swallowing, and sleep problems such as sleep apnoea. Abscesses around the tonsils, chronic tonsillitis, and infections of small pockets within the tonsils that produce foul-smelling white deposits can also affect the tonsils and adenoids, making them sore and swollen.

ENLARGED TONSILS AND/OR ADENOIDS AND THEIR SYMPTOMS

If your child's adenoids are enlarged, it may be hard to breathe through the nose. If the tonsils and adenoids are enlarged, breathing during sleep may be disturbed. Other signs of adenoid and or tonsil enlargement are:

- Breathing through the mouth instead of the nose most of the time
- Nose sounds blocked when the person speaks
- Chronic runny nose/cough
- Noisy breathing during the day
- Recurrent ear infections
- Snoring at night, restlessness during sleep, bed wetting in older children, pauses in

breathing for a few seconds at night may indicate obstructive sleep apnoea

SLEEP DISORDERED BREATHING/SNORING/OBSTRUCTIVE SLEEP APNOEA

Sleep disordered breathing (SDB) represents a spectrum of disorders ranging in severity from primary snoring to obstructive sleep apnoea (OSA). The prevalence of OSA in the pediatric population is 1% to 4%; as many as 10% of children have primary snoring. Up to 30% to 40% of children with clinically diagnosed SDB exhibit behavioural problems that include enuresis, hyperactivity, aggression, anxiety, depression, and somatisation. OSA is also associated with poor school performance and a decrease in quality of life. There are no studies to date that demonstrate a significant clinical impact of tonsillectomy on the immune system**.**

Children with SDB have a significantly higher rate of antibiotic use, 40% more hospital visits, and 2x the health care usage mostly from increased respiratory tract infections. Children with tonsillar disease, including children with throat infections and SDB, also showed significantly lower scores on several quality of life subscales including general health, physical functioning, behaviour, bodily pain and caregiver impact when compared with healthy children.

Indications for surgery

- Snoring/obstructive sleep apnoea
- Blockage of the nose and throat – they are too big
- Chronic and recurrent tonsillitis – sore throats
- White debris in the tonsils – bad breath, tonsil stones
- Recurrent middle ear infections/glue ear
- Unusual enlargement or appearance – as a biopsy for suspected tumour

Bacterial infections of the tonsils, especially those caused by Streptococcus, are first treated with antibiotics.

Removal of the tonsils (tonsillectomy) and/or adenoids (adenoidectomy) may be recommended if there are recurrent infections despite antibiotic therapy, and/or difficulty breathing/obstructive sleep apnoea due to enlarged tonsils and/or adenoids.

Chronic infections of the adenoids can affect other areas such as the Eustachian tube -the passage between the back of the nose and the middle ear. This can lead to frequent ear infections and build up of fluid in the middle ear that may cause temporary hearing loss. Studies also find that removal of the adenoids may help some children with chronic earaches accompanied by fluid in the middle ear (otitis media with effusion).

Procedure

The procedure to remove the tonsils is called a tonsillectomy; excision of the adenoids is an adenoidectomy. Both procedures are often performed at the same time; hence the surgery is known as a tonsillectomy and adenoidectomy, or T&A. T&A is a surgical procedure lasting between 30 and 45 minutes and performed under general anesthesia. Patients usually stay overnight in hospital.

RISKS

- Bleeding – up to 14 days after surgery and maybe necessitating return to theatre
    - Please go to the Austin Hospital emergency department if you experience bleeding
- Pain – pain will increase over the first 5-7 days before improving
    - Referred ear pain
- Dehydration
    - It is very important to drink liquids after surgery to avoid dehydration
- Dental/oral damage
- Recurrent adenoid growth – may necessitate repeat adenoidectomy
- Smelly breath – due to white coating which develops over the tonsil bed

WHEN THE TONSILLECTOMY PATIENT COMES HOME

Most children take seven to ten days to recover from the surgery. Some may recover quickly; others can take up to two weeks for a full recovery. The following guidelines are recommended:

Drinking: The most important requirement for recovery is for the patient to drink plenty of fluids. Starting immediately after surgery, children may have fluids such as water or apple juice. Some patients experience nausea and vomiting after the surgery. This usually occurs within the first 24 hours and resolves on its own after the effects of anaesthesia wear off. Contact your doctor or go to ED if there are signs of dehydration (urination less than 2-3 times a day or crying without tears).

Eating: Generally, there are no food restrictions after surgery, but a soft/plain diet is recommended during the recovery period. The sooner the child eats and chews, the quicker the recovery. Tonsillectomy patients may be reluctant to eat because of throat pain; consequently, some weight loss may occur, which is gained back after a normal diet is resumed.

Fever: A low-grade fever may be observed the night of the surgery and for a day or two afterward.

Activity: Activity may be increased slowly after 2 weeks, with a return to school after normal eating and drinking resumes, pain medication is no longer required, and the child sleeps through the night. Travel on airplanes or far away from a medical facility is not recommended for two weeks following surgery.

Breathing: The parent may notice snoring and mouth breathing due to swelling in the throat. Breathing should return to normal when swelling subsides, 10-14 days after surgery.

Scabs: A scab will form where the tonsils and adenoids were removed. These scabs are thick, white, and cause bad breath. This is normal. Most scabs fall off in small pieces five to ten days after surgery.

Bleeding: With the exception of small specks of blood from the nose or in the saliva, continuous bright red blood should not be seen. If such bleeding occurs, take your child to the emergency department.

Pain: Nearly all children undergoing a tonsillectomy/adenoidectomy will have mild to severe pain in the throat after surgery. Some may complain of an earache (so called referred pain) and a few may have pain in the jaw and neck. You will be prescribed pain medication and it is important to **take pain medication regularly** regardless of how severe the pain is. Missing doses of medication will lead to inability to drink fluids/eat and increases the risk of bleeding.

The pain medication will be in a liquid form or sometimes a rectal suppository will be recommended. Pain medication should be given as prescribed and if you are close to running out of your medication please see your GP or call Dr. Chow's office well in advance to provide a script. Strong pain medications require an original script in order for the pharmacist to dispense – copies are not accepted.

If you are troubled about any phase of your child's recovery, contact Dr. Chow's office, GP or emergency department.