The nasal turbinates are the primary controller of nasal airflow. We have three (occasionally 4) turbinates on each side wall of our nose. The inferior turbinate is the largest of the turbinates, and plays the most significant role in normal nasal respiratory function. The mucosa, or overlying mucous membrane of the turbinate is an essential tissue for proper respiratory function. Its roles include air humidification, air filtration, and the warming of inspired air. Nasal obstruction from especially inferior turbinate hypertrophy (enlargement) is a common problem, and when more conservative treatments fail (nasal steroids, allergy management, saline rinses, etc.) turbinate surgery may be considered.

The turbinates play a critical role in the ‘nasal cycle’. This is an important feature of normal nasal physiology. The turbinate tissue between the bone and the mucosa is vascular erectile tissue. This type of tissue is what allows the turbinates to swell and decongest rhythmically. This cycle causes turbinate enlargement to periodically alternate between the 2 sides of the nose, causing periodic unilateral obstruction approximately every 3 hours. Some of us notice this occurring and others don’t. In addition, in sleep this cycle causes the down side of the nose to congest, and the up side of the nose to open; and then when we roll to the other side the new down side congests and the up-side decongests.

Multiple different techniques are designed to reduce the size of the inferior turbinates. Some of the procedures simply push the inferior turbinate more to the side (often done in conjunction with turbinate reduction surgery), some reduce the size of the bony portions of the turbinate, some reduce the size of the erectile tissue that swell and constrict along with the ‘nasal cycle’, and other procedures reduce both the bone structure and the overlying tissues. Irrespective of the technique, most surgeons try to preserve as much overlying mucosa as possible while removing or shrinking the appropriate amount of turbinate bulk below the mucosa. This allows for the normal turbinate mucosa physiology to continue.

Most often, turbinate reduction surgery is performed in conjunction with septoplasty, or other nasal surgeries. In these situations, the surgery is typically performed under general anesthesia. Occasionally turbinate surgery is performed as a stand-alone procedure. In these situations the procedure can occasionally be performed in the office setting under local anesthesia, or in the operating room under a twilight or a general anesthetic.

The goal of turbinate reduction surgery is to improve your sense of airflow through your nose, but not to open the nose so much as to allow too much air to flow through the nose, as this would not allow for normal nasal physiology and would cause the air flowing through the nose to be too dry.
After turbinate surgery, there may be crusting in the nose for 2-6 weeks. During this time we may suggest you use some form of nasal saline irrigation once or twice daily (i.e. Simply Saline or NeilMed saline rinses). Depending on your situation, there may be packing placed in your nose for a couple days after the surgery. As the nasal cycle continues over the years, occasionally nasal congestion may recur from turbinate re-enlargement. In these occasional situations, repeat turbinate reduction surgery may be considered.

**Risks:** As with any surgical procedure, risks exist. Fortunately turbinate surgery is well tolerated, associated with little pain, offers nearly universal improvement in nasal respiration, and few risks.

- Persistent nasal congestion. This is uncommon and can have multiple causes. Occasionally, this can be due to too little or too much debulking of the turbinate. We are purposefully conservative in the tissue removal to avoid an overly dry nose. If the turbinate/s remain too large, then more can be done. If too much debulking (fortunately very rare with the techniques that we use), this is a difficult problem to repair. In addition to the congestion, your nose can be too dry. Persistent nasal congestion may also be due to unrelated factors such as persistent deviated septum or other medical or structural conditions.

- Bleeding. Serious bleeding from turbinate surgery is rare. If this was to occur, then appropriate treatment would be recommended, which may include prolonged nasal packing or return to surgery to control the bleeding.

- Poor or unexpected scarring. Also rare, but if occurs, may need additional surgery.

- Loss or change of smell sensation. The nerves that carry smell up to our brain are located at the top of the nasal cavity. This surgery should not impact those nerves but there is a very rare association of any form of intranasal surgery resulting in a loss or a change in the sense of smell.

**Alternatives:** Turbinate reduction surgery is an elective procedure. Your alternative is to not have the procedure performed and/or to continue medical therapy for your congested nose.

At *Suburban ear, Nose and Throat Associates Ltd.*, we go to great lengths to try to help you understand your plan of care. If at any time you have questions or concerns please call us at (847)-259-2530.

I have been given an opportunity to ask questions about my condition, alternative forms of therapy, risks of non-treatment, the procedure and risks and hazards involved. I have sufficient information to give this informed consent. I understand every effort will be made to provide a positive outcome, but there are no guarantees.

Patient PRINTED Name:_________________________________________________________

Patient SIGNATURE (or Parent or Guardian if applies):________________________________

If applies, Parent or Guardian Name and relationship: ________________________________

Date:___________________________ Time:________________________

Witness:___________________________ Date:________________________