Surgery of the Inside of the Nose and/or Sinuses

Here is some information on the surgery that might benefit you. Based on the information available so far, that surgery is likely to be:

 functional endoscopic sinus surgery (FESS)
 septoplasty
 inferior turbinate reduction
 polypectomy
 other:

Reasons to have surgery

Usually surgery is done to resolve bothersome symptoms that medications and other non-surgical treatments are not controlling or resolving. These may include, but are not limited to, congestion, constant or frequent infections, cough, excessive drainage, problems with sense of smell and/or taste, and headache. On occasion the surgery is done in order to diagnose the cause of the problem but not necessarily resolve the problem.

The Nose, Septum, Sinuses, and Turbinates

The septum is a wall of bone and cartilage that separates one nasal air passageway from the other. It usually goes straight back through the center of the nose but can be deviated to one or both sides. This is usually due to genetics or trauma to the nose at birth or later in life. A deviated septum can cause difficulty breathing through the nose and / or sinus problems. Very rarely it causes headaches.

The sinuses are air chambers located inside the bones of the skull. They drain into the nose and throat. Frequent or chronic sinus infections are commonly caused by obstruction of the drainage areas, damaged sinus lining, and / or allergies. Rarely a problem with the immune system or another general medical illness can affect the sinuses.

Turbinates are long, hot dog shaped structures that protrude into the nasal air passageway from the sidewalls of the nose and run from the front to the back of the nose. If the turbinates are too big, they can cause congestion, sinusitis, and / or headaches.

How is a septoplasty performed?

This is done entirely inside the nose. It is usually done with a general anesthesia and takes about 45 minutes. Most patients go home the same day. An incision is made inside the nose and the deviated portions of cartilage and bone are removed and/or reshaped. Dissolvable sutures are used to close the incision. Thin pieces of plastic are usually then sutured inside the nose to hold the septum in place. The plastic is not visible on the outside and is removed in the office about a week after surgery. There is usually mild swelling of the tip of the nose. There are no black and blue eyes or external bandages. It is unusual these days to have packing placed inside the nose. A septoplasty is often done at the same time as turbinate surgery.

How is inferior turbinate reduction surgery performed?

This is also done inside the nose with a general anesthetic. This takes about 30 minutes and

patients generally go home the same day. The procedure involves removing the extra turbinate tissue. This decreases the turbinate size and thereby decongests the nose. There are many ways to do this procedure. Your doctor will discuss with you the method we think would be best in your case.

How is endoscopic sinus surgery, (FESS), performed?

Endoscopic sinus surgery is performed through the nose without incisions on the face. It is also done with a general anesthetic and patients usually go home a few hours later. Using small telescopes and other state-of-the-art equipment, the nasal passageways and natural sinus openings are visualized and sources of obstruction are removed. The technique includes delicate cutting, shaving, and removal of diseased tissue, polyps, and obstructing bone. If all goes in the usual manner, there is no outer sign of surgery and no internal bandages. A dissolvable gel is placed in the nose to stop bleeding.

What happens prior to the surgery?

Depending on one's age, other medical conditions, and the type of surgery planned, one may need to have blood work, an EKG, a chest x-ray, and/or see another specialist for "medical clearance" before the surgery.

What happens after surgery?

There is mild pain following turbinate surgery. There is usually moderate pain following septal and sinus surgery. Pain medication and sometimes an antibiotic are prescribed. Initially there is quite a bit of congestion. This gradually resolves over 4 to 6 weeks. Bleeding is expected for several hours after surgery. It should diminish rapidly thereafter. However, variable amounts of mucous and bloody drainage are expected for several weeks.

If plastic splints inside the nose are used, it is common to gradually develop some redness, swelling and tenderness at the front of the nose. This will subside once the splints are removed. Placing an over the counter antibiotic ointment, such as Bacitracin, around the tip of the nose will help. The doctor should be called if the symptoms seem excessive.

Two, "4 x 4" gauze drip pads are often initially secured beneath the nostrils to catch bloody drainage so that the nose does not need to be wiped often. The doctor should be called if these drip pads become saturated with blood and need to be changed more than 3 times an hour.

If you must sneeze or cough, do so with the mouth open (i.e. do not try to "suppress" a sneeze as this will generate potentially harmful air pressures inside your sinuses).

It is ok to wear eyeglasses or contacts starting the evening of surgery.

For turbinate surgery, one can usually return to full activities within 48 hours.

For septal and sinus surgery, patients can walk casually, drive, and do light work as soon as they feel well enough. This might occur as soon as 3 days after surgery, but usually takes 2 weeks. Strenuous activities, such as working out or lifting more than 20 lbs, can be started after 14 days. Activities that risk trauma to the nose or face, such as contact sports, should be avoided for 4 - 6 weeks. Swimming can resume once you are told that the nasal and sinus tissues have healed. It is not uncommon for sinus and septal surgery patients to be tired and uncomfortable for 10-14 days. In some cases it can take 4 to 6 weeks to feel totally normal again.

Important instructions for after surgery:

Starting the night of surgery and continuing for only 3 days, use a 12 hour, over the counter, decongestant nose spray, such as Afrin, 2 sprays each nostril every 12 hours. Stop this after 3 days.

Starting the day after surgery, and continuing until you are told that you have healed, use a lot of salt water in your nose. Neilmed sinus rinse, gently using the squeeze bottle dispenser, is best. Flushing 2 to 4 ounces through each nostril 3 to 4 times a day is recommended. The option is to use any over the counter saline nasal spray, 3-4 sprays each nostril every hour that you are awake. The more regularly you do this, the sooner your nose and sinuses will heal.

Medications include a pain medicine and possibly an antibiotic. Instructions regarding any previously prescribed allergy medicines will be given. In general, allergy and asthma pills are continued after the surgery. Allergy sprays are discontinued until the surgical sites are healed. Aspirin, Motrin, and other anti-inflammatories should not be taken. They can cause bleeding.

Follow-up in the office.

Patients are usually seen once every week or two for 4 to 6 weeks until healed. In general, the more salt water the patients use, the quicker they heal and the less follow-up appointments that are needed. Septoplasty and turbinate surgery patients usually require fewer visits than sinus surgery patients. For sinus surgery patients, the visits entail the use of a topical anesthetic spray for the nose and then an endoscopic examination of the surgical sites with gentle removal of any loose crusts and other debris.

What are the risks and limitations of these surgeries?

Usually the surgery goes well, heals uneventfully, and patients are satisfied with the results. However, all surgeries have their risks and limitations. The risks noted below, unless otherwise stated, occur in about 5% or less of the patients.

Sinus, Turbinate, and Nasal Septum Surgery

When the surgery is done to relieve congestion, one side of the nose may heal clearer than the other. (It is impossible to make each nasal passage exactly the same size.) Most patients are not aware of this and it is not a problem. For those patients for whom the nasal congestion remains a problem, or recurs in the subsequent months or years, additional medical and / or surgical treatment may be necessary.

There is a chance of bleeding requiring placement of packing. It is extremely rare to require a transfusion or additional surgery to stop the bleeding.

Infection during the period of healing is also possible and can usually be taken care of with oral antibiotics.

Rarely a septoplasty will lead to the development of an indentation just above the tip of the nose. This is called a saddle deformity. If it occurs and if it is bothersome, it can be surgically corrected.

Very rarely one's senses of taste and / or smell are diminished after surgery.

If too much tissue is removed from inside the nose there can be problems with frequent crusting inside the nose and the need for ongoing irrigations and other treatment to keep the nose clear and infection free. Also, in these cases, the nose will actually feel congested even though it is widely patent.

Occasionally, extra scarring can occur inside the nose requiring a minor procedure to correct.

Sinus Surgery

The endoscopic sinus surgery is done very close to the eyes and the brain. Statistically there is about a 1 in 10 chance of getting a black and blue eye. There is about a 1 in 17,000 chance of sustaining a serious injury to the eye or brain. Rarely a tear duct scars shut and requires a revision surgery.

When done to improve one's sense of taste and / or smell, there is a 50/50 chance the surgery will be successful in this regards.

When done because of frequent infections, the surgery is considered successful if the patient has 3 or less sinus infections per year, each of which resolve with about 2 weeks of antibiotics. Patients with allergies will need to continue to treat the allergies in order to get the best result from the surgery.

When done because of a chronic infection, the infection may have caused irreversible damage to the sinus making the patient more prone to infection then they otherwise would be. In these cases it is likely that there will still be sinus problems after the surgery. The goal of the surgery, in these cases, is to resolve the current infection and make subsequent infections treatable and / or preventable with medical therapy.

When done for polyps there is always a risk that the polyps will recur. To minimize the chance of needing additional surgeries in the future, it is usually necessary to be on allergy medications and be checked a few times a year. If any polyps are found on the recheck visits, they can often be controlled with an in office, endoscopic, painless injection of steroids into the polyp.

What are the alternatives to surgery and the risks of not having surgery? In most cases, the alternative to surgery is to continue the medications and / or irrigations that have been tried, while tolerating the persistent symptoms. If not previously tried, allergy testing and allergy shots may be a consideration. When surgery is being considered because of infection, there is a small chance that the persistent infection could spread to the eye, brain, or elsewhere and cause blindness, stroke, or other serious complications. When the surgery is being done to diagnose the cause of the nasal or sinus abnormality and the abnormality is a tumor, the consequences of delaying the surgery could be life threatening.

Please let us know if you have any questions.

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