

Sinus surgery - (Functional Endoscopic Sinus Surgery - FESS)

The sinuses

Our sinuses are hollow air-filled spaces within our face and skull that open into our nasal cavity. There are 4 groups of sinuses: the ethmoid, maxillary, frontal and sphenoid sinuses. In normal circumstances they can produce a large amount of mucus every day which passes into our nasal cavity and subsequently into our throat. The sinuses usually contain no bacteria i.e they are sterile.

Nature of sinus problems

Sinus problems may relate to infections, allergies or the development of benign polyps within the nose or sinuses. This may cause symptoms of nasal obstruction, altered sense of smell, discharge of mucus, pressure or pain.

Sinus Surgery

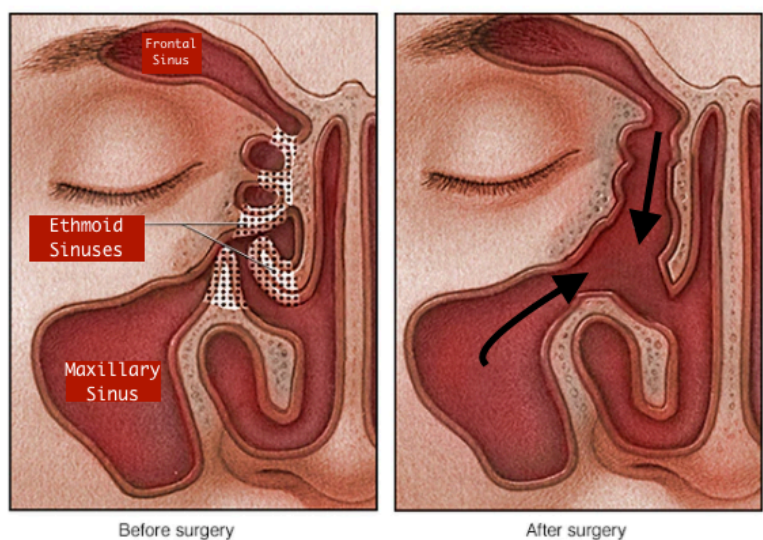
A sinus operation may be required in situations where treatments such as antibiotics, nasal sprays and saline washes have not resolved sinus infections or inflammation.

The aim of sinus surgery is to allow better drainage and ventilation of sinuses by creating wider or clearer pathways into the sinuses. This involves removing soft tissue and fine bony walls between various sinuses. This can aid the resolution of infection or inflammation within the sinuses.

Surgery is performed under a general anaesthetic. The surgery is generally performed within the nose with no external incisions. Your surgeon will discuss with you if some form of external incision is required.

Depending on the extent of surgery, it may take approximately 45 to 90 minutes. In normal circumstances there will be no external swelling, bruising or stitches.

Surgery may involve straightening of the cartilage in the middle of your nose (septoplasty) and / or reduction in soft tissue on the side walls of your nose (turbinate reductions). These procedures can improve access to your sinuses during surgery or improve your ability to breath through the nose.



Dissolvable packing will most often be placed within the nasal cavity. This does not need to be removed and will dissolve within a few days. In a minority of cases removable plastic splints may be placed inside the nose.

Preparation for surgery

Your surgeon will arrange for you to have a CT scan of your sinuses prior to surgery. This is important in determining the extent of sinus problems and identifying the anatomy that is unique to each person.

You should not smoke prior to or after surgery. This can delay healing and increase the risk of complications.

You should not take aspirin containing medication for 1 week prior and at least 2 weeks after surgery. If your usual doctor has recommended you take blood thinning medication regularly, you should discuss this with your surgeon prior to the operation. Other medications such as those to control diabetes can interfere with your anaesthetic. It is vital that your full medical history including use of over-the-counter and herbal medications are discussed prior to surgery.

Post-operative course (See post operative handout for more information)

Most patients are able to be discharged on the same day.

Patients will need someone to take them home.

It is recommended you allow at least 7-10 days away from work and/or studies. Depending on the nature of the surgery, some patients may require a longer period off work.

Sport or vigorous exercise should not be undertaken for 2 weeks.

You can expect to develop significant blockage and tenderness of the nose as well as headaches in the days after the surgery. These symptoms may be quite pronounced for 1 to 2 weeks. Small amounts of blood from the nose in the initial days after surgery is common.

Your surgeon and anaesthetist will prescribe pain relief, nasal washes and occasionally antibiotics.

Pain relief should be taken regularly for maximal effectiveness.

You can commence nasal washes the day after surgery. It is recommended you do not blow your nose for 48 hours after surgery.

It may take at least several weeks for your nasal symptoms to resolve. During this period you may require antibiotics, anti-inflammatory medication, nasal washes or nasal sprays to aid healing of the sinuses.

Outcomes/ Residual Symptoms

The majority of patients (80-85%) obtain good relief of sinus symptoms from surgery. In some situations, it may take longer periods for symptoms to resolve.

Some patients may experience ongoing symptoms or recurrent sinus problems despite surgery. In a small percentage of patients, further surgery may be indicated to help resolve residual symptoms.

Residual symptoms may include reduced sense of smell, post nasal drip, congestion of the nose or headaches.

It is important to understand that surgery is just one part of the overall treatment of sinus disease. Your surgeon may recommend treatments such as nasal sprays, nasal rinses and antibiotics both before and after surgery to help resolve your sinus symptoms

Nasal Polyps

Patients who have nasal polyps have significantly higher rates of residual symptoms. Approximately 30% of patients with nasal polyps will eventually require further surgery.

Nasal Allergy

Although surgery can alleviate some of the symptoms related to nasal allergy, it does not cure the underlying allergy. As such you may still suffer some allergy related symptoms such as sneezing, itchiness and runny noses, despite surgery.

Complications

- Severe or serious complications from sinus surgery are uncommon.
- Approximately 1 in 100 patients will suffer a heavy nose bleed after surgery requiring intervention with either cautery or nasal packing.
- Some degree of swelling or bruising around the eye will occur in less than 1 in 100 patients.
- Surgery on the ethmoid or maxillary sinuses may cause blockage of your tear duct. This may result in persistent watering of your eye. This will occur in approximately 1 in every 500 procedures and may require a further operation to unblock the tear duct.
- Surgery may cause leakage of fluid from around your brain into the nose (CSF leak). This may occur in approximately 1:500 patients. CSF leak creates a risk of meningitis which can be potentially life threatening. A CSF leak will likely mean a longer hospital stay, the involvement of other medical specialists and possibly a second operation to repair the leak.
- Rarely, surgery may cause injury of or bleeding into your eye socket. This can potentially result in permanent loss or changes in vision and may require further surgery
- There are extremely rare reports of permanent loss of vision due to injuries to the optic nerve.

Costs

Our staff will provide an estimate of the costs of surgery prior to your operation. The costs will vary according to the extent of surgery required. Although we do attempt to make our estimates as accurate as possible, it is not always possible to predict the extent of surgery required before the operation. Therefore, final costs related to surgery, anaesthetic and hospital fees may vary slightly from the original quotation.

The out of pocket costs incurred may vary between individual patients as:

- different health funds will provide different rebates for the same procedure.
- health funds may vary the amount of rebate depending on the fee charged by the surgeon.
- different health funds and policies will have different levels of excess payable.

The level of rebate paid by health funds relates to the contract between the patient and their particular health fund and we are unable to intervene regarding this.

We encourage you to check with your health fund prior to surgery to ensure they will provide coverage for your surgery and determine what excess may be payable to the hospital.

Whilst every care has been taken to make this information sheet as accurate as possible, individual experiences and outcomes may differ. It is important to discuss any concerns with your surgeon prior to considering surgery.

This information sheet was written for patients of Ear, Nose and Throat Victoria only. They are not to be copied or distributed in any way without written permission from ENT Victoria.



Post Operative Instructions

Nasal Surgery

Septoplasty, Turbinectomy or Functional Endoscopic Sinus Surgery)

Diet

Eat light foods such as jelly or soup for the first 24 hours as tolerated. Drink as much water or fluids as you can tolerate without feeling sick.

Pain management and antibiotics

Most nasal surgery is not too painful. Take your prescribed medications as ordered by your surgeon. If pain is severe and not relieved by your prescription medication, call the office for advice.

Some pain medicine (Panadeine Forte in particular) can make you dizzy or constipated. Avoid driving if you feel affected by the medication. Laxatives from the chemist may be needed for a few days if bowel habit is a problem.

Avoid aspirin or other blood thinning medications for at least 2 weeks after nasal surgery. You may have been prescribed an antibiotic to help prevent or manage an infection. Make sure you complete the course prescribed.

Caring for your nose

Don't blow your nose for about a week. The nose will be cleansed by using saline rinses (eg. FLO). If prescribed a nasal rinse it should be used as many times a day as you feel comfortable until you see your surgeon.

If you sneeze, do so with your mouth open. The nose will feel congested for 1-2 weeks and occasionally longer. This may cause a temporary increase in snoring or bad breath. Occasionally the nose will have a foul odor inside. This is normal and saline rinses are a good way to help this. Avoid smoking before or after surgery to give your nose the best opportunity to heal and minimize bleeding. Showers should be lukewarm.

For the first few days it is important to sleep with extra pillows and when not in bed, it is ideal to sit upright in a comfortable chair. This will help with swelling and pain.

Nasal Dressings

Your nose will nearly always have some dissolvable dressing in it. These dressings are made of cellulose and are meant to turn black. They are often applied in multiple pieces so if some falls out there will generally be more inside. Sometimes the dressings dislodge and come out from the nostril and occasionally a large amount of this packing material falls out of the nose. **This is normal.** If it is bothering you it may be pushed back in or gently trimmed. It is highly variable as to when the dressings will dissolve or fall out.

Don't deliberately pull on the dissolvable dressing. It is there to prevent bleeding and promote healing.

Bleeding

A small amount of blood stained discharge is normal for the first few days after surgery. If the bleeding becomes heavier, contact the office.

Saline

Saline rinses prescribed after surgery help dissolve the soluble packing placed in the nose. 1-2 nasal rinses per day are recommended. They are best done in the bathroom or shower. Some patients prefer to use the rinses more than twice a day. This is fine.

Exercise

Light exercise such as walking is OK in the first fortnight. Strenuous exercise and heavy lifting is not recommended until your first post-operative visit (2-3 weeks after surgery).

Nasal Splints

Occasionally thin rubber sheeting is placed in the nose during surgery. This needs to be removed at approximately 1 week post op. Your surgeon will advise after the surgery if this affects you.

Time off work

1 week is generally sufficient if work is not strenuous. Occasionally 2 weeks is needed though this depends on the individual and their work environment.

If you need a medical or carer's certificate please contact your surgeon's secretary via email.

Things to report to your surgeon:

- High fever > 38.5 degrees Celcius
- Excessive bleeding that won't settle with simple measures like compressing the nasal tip and placing tissues / cotton wool in the nose
- Excessive swelling of the nose or near any incisions in the nose
- Visual disturbance or severe headache
- Persistent nausea or vomiting