PROCEDURE

Turbinate surgery

Turbinate surgery reduces enlarged tissue inside the nose to improve airflow.

PURPOSE
Improve nasal airflow by reducing enlarged turbinates

PROCEDURE TYPE
Therapeutic, minimally invasive or surgical through the nostrils

WHERE IT IS DONE
Outpatient clinic or operating theatre

ANAESTHESIA
Local or general; sedation may accompany local anaesthesia

HOW LONG IT TAKES
Usually 15 to 45 minutes

PREPARATION
Follow facility instructions; fasting may be required

RECOVERY
Same day; no driving after sedation or general anaesthesia

MAIN RISKS
Bleeding, infection, crusting, persistent or excessive openness

RESULTS
Improvement judged after swelling settles over several weeks

Overview

Turbinates are curved structures along the side walls inside your nose. They warm, moisten, and filter the air you breathe. Most people have three pairs, but surgery usually treats the lower pair, called the inferior turbinates.

Turbinates naturally swell and shrink. Allergy, irritation, or long-term inflammation can leave them enlarged and make nasal breathing difficult.

Turbinate surgery reduces their size while trying to preserve the moist surface lining. It is also called turbinate reduction. The procedure is usually performed through the nostrils, without cuts on the outside of the nose.

Several techniques are available. Some use radiofrequency energy, heat, or a powered instrument to shrink tissue beneath the lining. Others remove a limited amount of bone or soft

tissue. The surgeon may also move a turbinate outward to create more space.

Turbinate surgery is sometimes performed with septoplasty, which straightens the wall between the nostrils, or with sinus surgery. It does not cure allergies or correct every cause of nasal blockage.

Why the procedure is performed

The main aim is to improve airflow through the nose when enlarged inferior turbinates are a major source of blockage.

Surgery may be considered when symptoms continue despite appropriate non-surgical treatment. This treatment may include saline rinses, avoiding known irritants, allergy treatment, or a corticosteroid nasal spray.

It may also be offered when enlarged turbinates:

An examination is important because a bent septum, nasal polyps, sinus disease, or narrowing at the nasal valve can produce similar blockage.

- Contribute to ongoing mouth breathing or disturbed sleep
- Make it harder to use prescribed nasal or sleep-apnoea equipment
- Remain enlarged after other causes of blockage have been assessed
- Need treatment during septoplasty or another nasal operation

Who should and should not have it

You may be a candidate if an ear, nose, and throat specialist confirms that enlarged turbinates are limiting airflow and reasonable medical treatment has not provided enough relief. The expected benefit should be meaningful to you and greater than the procedure's risks.

Surgery may not be the right choice if the turbinates are not the main cause of your blockage. Treating them will not correct a severely bent septum, nasal valve collapse, or polyps.

An elective procedure may be avoided or delayed if you have:

Removing too much turbinate tissue can interfere with normal airflow sensation and moisture control. For this reason, tissue-preserving procedures are generally favoured when they can provide enough space.

- An active respiratory or nasal infection

- A medical condition that is not stable enough for surgery or anaesthesia
- A bleeding disorder that has not been addressed
- Medicines that increase bleeding risk and cannot safely be adjusted
- Pregnancy, when the procedure can reasonably wait
- Severe nasal dryness or major loss of turbinate tissue from previous surgery

How to prepare

Your treating facility's own instructions take priority because preparation differs by technique and type of anaesthesia.

Tell the team about all medicines, supplements, allergies, previous reactions to anaesthesia, bleeding problems, and health conditions. Include aspirin, anti-inflammatory medicines, anticoagulants like warfarin or apixaban , and antiplatelet medicines. These can affect bleeding, but do not stop a prescribed medicine unless the clinician responsible for it gives you a plan.

If you will have sedation or general anaesthesia, you will receive instructions about when to stop eating and drinking. Following these fasting instructions is important for safety.

Arrange for an adult to take you home if you are having sedation or general anaesthesia. You may also want to obtain any recommended saline spray or rinse supplies before the procedure.

Contact the facility if you develop a significant cold, fever, chest illness, or new health problem before surgery. The team can decide whether it is safer to continue or reschedule.

What happens during the procedure

Before treatment, the team confirms the procedure and which side or sides will be treated. A decongestant may be placed in your nose to shrink the lining temporarily.

For an office procedure, the clinician usually applies numbing medicine inside the nose. Some procedures use sedation. More extensive reduction, or surgery combined with septoplasty, is often done under general anaesthesia, meaning you are unconscious.

The surgeon works through the nostrils. The chosen method may:

The aim is to leave enough lining and tissue for the turbinates to keep warming and moistening air.

Dissolvable material, temporary packing, or internal splints may be used, although these are

not needed for every technique. You then move to a recovery area until it is safe to leave.

- Shrink tissue using radiofrequency, controlled heat, or coblation energy
- Remove tissue beneath the surface with a powered instrument
- Remove a limited amount of turbinate bone or soft tissue
- Move the turbinate outward to widen the airway

Recovery and what to expect afterward

Pain: Discomfort is often described as pressure, burning, or tenderness rather than severe pain. Use only the pain medicine recommended by your team. Contact them if pain is increasing instead of settling.

Eating: After local anaesthesia, you can usually eat once you feel comfortable and the numbness is wearing off. After sedation or general anaesthesia, begin according to the facility's instructions. Nausea may make light food easier at first.

Activity: Temporary congestion, blood-stained drainage, crusting, and swelling are expected. Your nose may feel more blocked before it improves. Avoid blowing or picking your nose until permitted. Follow the specific limits you receive for exercise, bending, heavy lifting, and bathing.

Driving: Do not drive home after sedation or general anaesthesia. Follow the facility's instructions about when driving can safely resume. Do not drive while taking medicine that makes you sleepy or if nasal discomfort affects your concentration.

Going back to work: Office or school activities may be possible after a few days, while physical work may require longer. The timing is influenced by the technique, any combined surgery, and how you are recovering.

Saline spray or rinses may be recommended to reduce crusting and keep the lining moist. Use them exactly as instructed, especially if packing or splints are present.

Risks and possible complications

Possible risks include:

Excessive removal can cause long-term dryness and an abnormal feeling of blockage despite an open nasal passage. This is sometimes called empty nose syndrome. Preserving useful turbinate tissue helps reduce this risk.

Your individual risks are affected by the planned technique, previous nasal surgery, bleeding risk, and whether another operation is being performed at the same time.

- Bleeding during recovery or, less often, bleeding needing further treatment
- Infection
- Dryness, crusting, or an unpleasant smell while the nose heals
- Scar tissue joining surfaces inside the nose, called an adhesion
- Temporary changes in smell
- Continued blockage or return of enlargement over time
- A need for further treatment or another procedure
- Reactions related to sedation or general anaesthesia

Results and follow up

The airway may not feel better immediately because swelling and crusting temporarily narrow the nose. Improvement is usually judged after healing progresses over several weeks.

Routine follow-up allows the team to check healing, remove non-dissolvable packing or splints, and clear crusts if needed. Keep these appointments even if you feel well.

Turbinate surgery reduces tissue but does not remove the underlying tendency toward allergy or inflammation. You may still need saline, allergy treatment, or a prescribed nasal spray. Some turbinate tissue can enlarge again, so improvement is not always permanent.

If tissue is removed and sent to a laboratory, your team will explain whether a pathology result is expected and when it will be available. Routine reduction often does not require a tissue diagnosis.

Alternatives

You can choose not to have surgery. This avoids surgical and anaesthetic risks, but the blockage may continue.

Non-surgical options include saline rinses, reducing exposure to irritants or allergens, and medicines such as a prescribed corticosteroid or antihistamine nasal spray. These are less invasive and preserve all turbinate tissue, but they require continued use and may not overcome fixed structural narrowing.

Decongestant nasal sprays may provide short-term relief, but prolonged use can cause rebound congestion. Use them only as directed.

If another structure is the main problem, a different procedure may be more useful. Septoplasty treats a bent septum, nasal valve surgery supports a narrowed or collapsing nasal entrance, and sinus or polyp treatment addresses disease higher in the nasal passages. These procedures have their own recovery and risks.

There are also different turbinate techniques. Methods that shrink tissue beneath the lining preserve more surface tissue but may need repeating. Removing more tissue may create a larger airway, but it generally brings greater concern about bleeding, crusting, and long-term dryness.

When to call your healthcare team

For routine advice, contact the team if congestion is not improving in the expected timeframe, crusting remains troublesome, or you are unsure how to use rinses or medicines. These concerns can usually be discussed during office hours.

Seek prompt medical advice for:

Get emergency help for heavy uncontrolled bleeding, trouble breathing, fainting, confusion, or another severe reaction after the procedure.

- Bleeding that continues despite following your discharge instructions
- Fever, worsening pain, or foul-smelling discharge
- Inability to drink enough fluid
- New swelling around the eyes or a change in vision

Common questions

Will I be asleep?

You may be awake with local numbing medicine for a limited office procedure. More extensive treatment may use sedation or general anaesthesia. Your team should tell you which is planned before you consent.

Can I drive home?

Not after sedation or general anaesthesia. Arrange for an adult to take you home. Even after local anaesthesia, follow the facility's driving instructions.

How painful is turbinate surgery?

Many people have pressure, tenderness, burning, and congestion rather than intense pain. Discomfort should gradually improve. Increasing or severe pain needs medical advice.

When will I know whether it worked?

Not immediately. Early swelling and crusting can block airflow. The result becomes clearer as these settle over the following weeks.

Will it change the shape of my nose?

Turbinate reduction is performed inside the nose and does not usually change its outside shape. A combined nasal procedure may have different effects.

Can the turbinates grow back?

Remaining tissue can enlarge again, particularly if allergy or inflammation continues. Further medical treatment or, occasionally, another procedure may be needed.

Sources

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