PROCEDURE

Nasal endoscopy

Nasal endoscopy uses a thin viewing tube to examine inside your nose and sinus openings.

PURPOSE
Examine the nose and sinus openings, and sometimes collect samples

PROCEDURE TYPE
Diagnostic and sometimes therapeutic; minimally invasive endoscopic examination

WHERE IT IS DONE
Outpatient clinic, usually an ear, nose and throat office

ANAESTHESIA
Usually topical local anaesthetic; sedation is not normally needed

HOW LONG IT TAKES
Usually 5 to 10 minutes

PREPARATION
Usually none; fasting only if sedation is planned

RECOVERY
Same day; driving usually allowed unless sedated

MAIN RISKS
Discomfort, minor nosebleed, gagging, fainting

RESULTS
Visual findings immediately; biopsy or culture results after several days

Overview

Nasal endoscopy is a procedure used to look closely inside your nose. It is usually performed by an ear, nose and throat specialist, also called an ENT specialist.

The endoscope is a thin tube with a light and camera. It may be flexible or rigid. The clinician gently passes it through a nostril to examine areas that cannot be seen well with a routine nasal examination.

The procedure can show the nasal septum, which divides the nostrils, and the turbinates, which help warm and moisten air. It can also show the openings where the sinuses drain and the space at the back of the nose. A flexible scope may be moved farther back to examine the throat or voice box when needed.

Most nasal endoscopies are done during a clinic visit without sedation.

Why the procedure is performed

Nasal endoscopy can help investigate symptoms or monitor a known condition. It gives a direct, magnified view of the tissue inside your nose.

Your healthcare team may recommend it to:

The findings may help decide whether you need medication, imaging, surgery or no further testing.

- Investigate ongoing nasal blockage, facial pressure, discharge or reduced smell
- Look for swelling, nasal polyps or structural narrowing
- Find a source of repeated or unexplained nosebleeds
- Check for signs of infection or poor sinus drainage
- Examine an area that looked unusual during another test
- Check healing after nasal or sinus surgery
- Remove crusts, mucus or a small foreign object
- Collect mucus, cells or a small tissue sample

Who should and should not have it

Nasal endoscopy may be appropriate when a standard examination does not provide enough information. It is also useful when your clinician needs to see a particular area directly or collect a targeted sample.

It may not be worthwhile if the result would not change your care. A simple examination may be enough for some short-term or uncomplicated problems.

The procedure may need to be delayed or adjusted if you have:

Blood-thinning medicines do not always prevent a visual examination. They matter more if a biopsy or another treatment is planned. Do not stop a prescribed medicine unless your healthcare team tells you to.

Young children and people who cannot tolerate an office examination may need a different approach. In selected cases, examination under sedation or general anaesthesia may be considered.

- Heavy active bleeding that must be controlled first
- Recent nasal injury or surgery affecting the route of the scope

- A severe blockage that prevents safe passage
- A bleeding disorder or increased bleeding risk
- A previous reaction to a proposed local anaesthetic or decongestant
- Difficulty remaining still or following instructions

How to prepare

Your treating facility's own instructions take priority because preparation may change if sedation, a biopsy or another procedure is planned.

Most people can eat, drink and take their usual medicines before a routine nasal endoscopy. Fasting may be required if you will receive sedation or general anaesthesia.

Tell the healthcare team about:

You may be asked to blow your nose before the examination. Unless instructed otherwise, avoid applying extra nasal medicines immediately beforehand.

You usually do not need someone to drive you home. Arrange transport if sedation is planned or your facility tells you not to drive.

- Medicines that affect bleeding, including anticoagulants and antiplatelet medicines
- Bleeding disorders or frequent heavy nosebleeds
- Medicine, latex or local anaesthetic allergies
- Previous fainting during examinations or injections
- Recent nasal surgery or injury
- Whether you might be pregnant

What happens during the procedure

You will usually sit upright in an examination chair. The clinician may first look into your nose with a small lighted instrument.

A decongestant spray may be used to reduce swelling. A local anaesthetic spray may then numb the lining of your nose. These sprays can taste bitter or make your nose and throat feel temporarily numb.

After allowing the spray time to work, the clinician guides the endoscope into one nostril. The scope does not need to pass through your sinus cavities. It travels along the open passage

inside your nose while the camera sends images to a screen.

You may feel pressure, watering of your eyes or the urge to sneeze. Breathing slowly through your mouth may help. Tell the clinician if you have sharp pain or feel faint; the scope can be paused or removed.

Both nostrils may be examined. If needed, the clinician may suction mucus, take a swab or remove a small tissue sample. These extra steps can make the procedure longer.

Recovery and what to expect afterward

Pain: Mild tenderness, pressure or irritation can occur for a short time. Significant or increasing pain is not expected after a routine examination.

Eating: You can usually eat and drink normally. If your mouth or throat feels numb from the spray, wait until normal sensation returns and follow the clinic's instructions.

Activity: Most people can return to normal activities straight away. Avoid picking or forcefully blowing your nose if it feels irritated or if a sample was taken.

Driving: You can usually drive after topical spray alone. Do not drive if you received a sedative. Follow the restriction given by your facility.

Work: Most people can return to work or school the same day. You may need more time off if the endoscopy was combined with a biopsy, treatment or sedation.

Risks and possible complications

Nasal endoscopy is generally well tolerated, but it is not completely risk-free.

Temporary effects can include pressure, sneezing, watering eyes, gagging or a bitter taste. The lining of the nose may become irritated, causing light spotting or a minor nosebleed.

Some people have a fainting response caused by stress or stimulation inside the nose. This may cause nausea, sweating or light-headedness. Tell the clinician promptly if you feel unwell.

Less common problems include injury to the nasal lining, heavier bleeding or a reaction to the local anaesthetic or decongestant spray. A biopsy or treatment carries more bleeding risk than examination alone.

Results and follow up

The clinician can usually explain what was seen immediately after the procedure. You may also be shown the images.

Findings might include inflammation, thick mucus, polyps, crusting, a narrowed passage, a bleeding point or tissue that needs further investigation. A normal examination can also be useful, although it may not rule out every sinus or nasal condition.

Laboratory results take longer. A culture checks a sample for organisms such as bacteria or fungi. A biopsy is examined under a microscope. Your healthcare team should tell you when and how those results will be provided.

Follow-up may involve medication, a scan, allergy assessment, another examination or discussion of surgery. Ask who to contact if you have not received an expected result.

Alternatives

There is no single alternative that provides the same direct view. The most suitable option depends on what your healthcare team needs to find out.

Sometimes endoscopy and imaging provide different information and are used together rather than as substitutes.

- Routine nasal examination: Faster and less uncomfortable, but it cannot show as far into the nose or around corners.
- Treatment without endoscopy: Nasal sprays or other medicines may be tried first, but the cause may remain uncertain and targeted samples cannot be taken.
- CT scan: Shows the sinuses and surrounding bone in detail, but uses radiation and does not provide a live view of the nasal lining.
- MRI scan: Gives detailed images of soft tissue without radiation, but takes longer and cannot collect a sample or provide treatment.
- Watchful waiting: Avoids an immediate procedure, but may delay an explanation if symptoms continue or worsen.
- Examination under anaesthesia: May help when an office examination is not possible, but involves more preparation, cost and anaesthetic risk.

When to call your healthcare team

Contact your healthcare team during routine hours if discomfort or irritation does not settle, your symptoms continue to worsen, or you have questions about results or follow-up.

Seek prompt medical advice if you develop:

Call emergency services for trouble breathing, severe swelling of the face or throat, collapse, or other signs of a serious allergic reaction.

- Persistent or heavy bleeding
- Increasing pain or swelling
- Fever or unusual discharge after a biopsy or treatment
- Ongoing dizziness or repeated fainting

Common questions

Will I be asleep?

Usually not. Most nasal endoscopies are performed while you are awake, using no anaesthetic or a numbing spray. Sedation or general anaesthesia is reserved for selected situations.

Can I drive home?

Usually, yes. A topical nasal spray does not normally prevent driving. You must not drive if you received sedation or were specifically told not to.

How painful is nasal endoscopy?

Most people describe pressure or discomfort rather than sharp pain. The numbing spray and a slow, careful technique can make it easier. Tell the clinician if it hurts.

Can I eat before nasal endoscopy?

Usually, yes. Fasting is generally unnecessary unless sedation, general anaesthesia or another procedure is planned.

When will I know the results?

The visual findings are normally discussed immediately. Cultures and biopsy results may take several days or longer, depending on the laboratory test.

Can nasal endoscopy make me gag?

It can, especially if a flexible scope is used to examine the back of the throat. Slow mouth breathing may help, and the scope can be removed if needed.

Sources

- American Academy of Otolaryngology-Head and Neck Surgery. Clinical Indicators: Diagnostic Nasal Endoscopy
- American Academy of Otolaryngology-Head and Neck Surgery. Position Statement: Diagnostic Nasal Endoscopy
- Johns Hopkins Medicine. Nasal Endoscopy
- Cleveland Clinic. Nasal Endoscopy: Procedure and What to Expect