PROCEDURE

Laryngoscopy and nasolaryngoscopy

Laryngoscopy uses a small scope to examine the voice box and sometimes take a biopsy or perform treatment.

PURPOSE
Examine the voice box, diagnose problems, or perform treatment

PROCEDURE TYPE
Both; endoscopic and usually minimally invasive

WHERE IT IS DONE
Outpatient clinic, bedside, endoscopy suite, or operating theatre

ANAESTHESIA
Local for flexible exams; general for direct laryngoscopy

HOW LONG IT TAKES
About 5 to 45 minutes, based on procedure type

PREPARATION
Often none; fasting and medicine changes for general anaesthesia

RECOVERY
Usually same day; no driving after sedation or general anaesthesia

MAIN RISKS
Nosebleed, dental injury, bleeding, or breathing difficulty

RESULTS
Visual findings immediately; biopsy results usually within several days

Overview

Laryngoscopy is an examination of your larynx, commonly called the voice box. It allows a healthcare professional to see your vocal cords and nearby parts of your throat.

Nasolaryngoscopy is usually performed with a thin, flexible scope passed through a nostril. The scope contains a light and camera. You are generally awake, and the examination often takes only a few minutes.

Direct laryngoscopy uses a rigid or flexible instrument passed through your mouth. It provides a closer view and allows the specialist to take tissue samples, remove a growth, retrieve a foreign object, or perform other treatment. It is usually done under general anaesthesia, meaning you are unconscious.

You may also hear the term microlaryngoscopy. This is direct laryngoscopy performed with a microscope or magnified camera for a detailed view of the vocal cords.

Why the procedure is performed

Laryngoscopy may be recommended when your healthcare team needs to look directly at structures that cannot be examined well during a routine mouth and throat examination.

Reasons can include:

A flexible examination can show whether your vocal cords open, close, and move normally while you breathe, speak, or swallow. Direct laryngoscopy may be needed when a more detailed examination, biopsy, or treatment is required.

- Ongoing hoarseness, voice changes, throat pain, or an unexplained cough
- Noisy breathing or concern about narrowing of the airway
- Difficulty or pain when swallowing
- A feeling that something is stuck in the throat
- Coughing up blood or unexplained ear pain linked to the throat
- Checking vocal cord movement after surgery or nerve injury
- Examining a lump, swelling, ulcer, or abnormal scan finding
- Taking a biopsy, which is a small tissue sample for laboratory testing
- Removing a foreign object, polyp, cyst, or other abnormal tissue

Who should and should not have it

You may benefit from laryngoscopy if your symptoms, examination, medical history, or imaging suggest that your larynx needs to be inspected directly. It is also used to monitor a known condition or plan treatment.

It may not be the right first step for a brief, mild throat or voice problem that is already improving. Your healthcare professional may recommend observation or another test first.

Flexible nasolaryngoscopy may need to be modified or delayed if you have severe nasal blockage, recent nasal injury, or active heavy bleeding from the nose. The scope may sometimes be passed through the other nostril or mouth instead.

An elective direct laryngoscopy may be delayed if you have not followed fasting instructions,

have an uncontrolled medical condition, or have an active illness that makes general anaesthesia less safe. Blood-clotting problems and medicines that affect clotting require advance planning, especially if a biopsy is expected.

These concerns are not always absolute reasons to avoid the procedure. In an urgent situation, the benefit of examining or protecting your airway may outweigh them.

How to prepare

Your treating facility's own instructions take priority because preparation differs between a short clinic examination and direct laryngoscopy under anaesthesia.

Flexible nasolaryngoscopy often needs little or no preparation. You may be asked not to eat immediately beforehand if gagging or swallowing difficulties are a concern. Tell the healthcare professional if you have frequent nosebleeds, nasal surgery, allergies to local anaesthetics, or a possible pregnancy.

For direct laryngoscopy, you will usually need to stop eating and drinking for a set time beforehand. The facility will give you exact fasting instructions.

Provide a current list of medicines and supplements. Make sure the team knows if you take anticoagulants or antiplatelet medicines, sometimes called blood thinners. Do not stop these on your own; the plan should account for both bleeding and clotting risks.

Arrange transport home if you will receive sedation or general anaesthesia. You may also need an adult to stay with you afterward. Tell the team about loose teeth, crowns, dentures, previous anaesthesia problems, sleep apnoea, and heart or lung conditions.

What happens during the procedure

For flexible nasolaryngoscopy, you sit upright. A decongestant may be sprayed into your nose to open the nasal passage, followed by a local anaesthetic to numb it. The spray may taste bitter or make your nose and throat feel unusual.

The clinician gently guides the flexible scope through one nostril and into the upper throat. You can continue breathing. You may be asked to say certain sounds, sniff, swallow, or move your head so the vocal cords can be assessed. The scope does not normally block your airway.

You may feel pressure, watering of the eyes, an urge to cough, or brief gagging. The scope is then removed.

For direct laryngoscopy, you are usually under general anaesthesia in an operating theatre. A

rigid laryngoscope is passed through your mouth while your teeth and lips are protected. The specialist examines the larynx and may take photographs, collect a biopsy, remove tissue, or perform another planned treatment.

Recovery and what to expect afterward

After flexible nasolaryngoscopy, your nose or throat may feel mildly sore or irritated. A small nosebleed can occur. After direct laryngoscopy, a sore throat, hoarse voice, or discomfort when swallowing is common for a short period. Use only the pain relief recommended for you.

Do not eat or drink until throat numbness has fully worn off and swallowing feels normal. After direct laryngoscopy, you may be advised to begin with fluids or soft foods. Follow any special diet instructions if tissue was removed.

Most people can return to light activity after an office examination. Following direct laryngoscopy, rest for the remainder of the day and avoid strenuous activity for the period your team recommends. You may receive instructions about limiting talking or avoiding whispering if your vocal cords were treated.

You can usually drive after flexible nasolaryngoscopy if you received no sedating medicine and feel well. Do not drive after sedation or general anaesthesia until the restriction given by your facility has ended.

Many people return to work immediately after a simple flexible examination. After direct laryngoscopy, you may need one or more days away, especially if your job requires heavy activity or extensive speaking.

Risks and possible complications

Flexible nasolaryngoscopy is generally well tolerated. Possible problems include nasal discomfort, gagging, coughing, light-headedness, or a nosebleed. Reactions to numbing or decongestant medicines can occur.

Direct laryngoscopy has additional risks because instruments pass through the mouth and treatment may be performed. These include:

Your individual risk is affected by the type of procedure, whether a biopsy or treatment is planned, and your general health.

- Injury to a tooth, crown, lip, tongue, or gum

- Bleeding or infection
- Temporary worsening of hoarseness or swallowing discomfort
- Vocal cord scarring or lasting voice change after some treatments
- Swelling or spasm affecting breathing
- Risks related to general anaesthesia

Results and follow up

The clinician can usually explain what the larynx looked like immediately after a flexible examination. If you had general anaesthesia, the initial findings may be discussed once you are awake or with the person you nominated.

Photographs or video may be saved as part of your medical record. The report may describe swelling, vocal cord movement, irritation, a growth, or no visible abnormality.

Biopsy results take longer because the tissue must be processed and examined under a microscope. Your facility should tell you how and when you will receive the result.

Routine follow-up may involve reviewing biopsy findings, checking healing, arranging voice therapy, ordering imaging, or discussing treatment. Keep the scheduled appointment even if you feel well, particularly if tissue was removed.

Alternatives

The useful alternatives depend on why laryngoscopy was offered.

A mirror examination through the mouth is quick and does not require a scope through the nose. However, it gives a more limited view and cannot reliably examine every part of the larynx.

CT or MRI scans can show deeper tissues, masses, and nearby structures. They do not show vocal cord movement as directly, and they cannot take a biopsy. Imaging may complement laryngoscopy rather than replace it.

Ultrasound can assess some neck structures but usually cannot provide a clear view inside the adult larynx.

Videostroboscopy uses carefully timed flashes of light to assess vocal cord vibration. It can provide more detail for certain voice problems, but it still requires a scope and does not replace a biopsy when abnormal tissue needs testing.

Observation may be reasonable for a mild, short-lived symptom without concerning features. The trade-off is that the larynx is not directly examined during that time.

If a biopsy or removal of a lesion is needed, there may be no non-invasive alternative that provides the same information or treatment.

When to call your healthcare team

For routine concerns, contact your healthcare team if pain, hoarseness, swallowing difficulty, or a minor nosebleed is not improving as expected. Also call if you develop a fever, worsening throat swelling, persistent vomiting, or signs of infection.

Seek urgent medical advice for bleeding that is more than a small amount, repeated coughing or vomiting of blood, worsening difficulty swallowing, or inability to keep fluids down.

Call emergency services for severe trouble breathing, rapidly increasing throat or neck swelling, blue or grey lips, collapse, or heavy bleeding. These are emergency symptoms rather than routine recovery.

Common questions

Will I be asleep?

You are usually awake for flexible nasolaryngoscopy in a clinic. Your nose may be numbed. Direct or microlaryngoscopy is usually performed under general anaesthesia, so you are unconscious.

Can I drive home?

You can generally drive after an uncomplicated flexible examination if you had no sedative and feel normal. You must not drive home after sedation or general anaesthesia.

How painful is it?

Flexible nasolaryngoscopy is more often described as uncomfortable than painful. You may feel pressure, gagging, or an urge to cough. Direct laryngoscopy can cause a sore throat afterward, and pain relief may be offered.

When will I know the results?

The visual findings are often available immediately. A biopsy result takes longer because it requires laboratory examination.

Can I breathe while the scope is in?

Yes. A flexible scope is narrow and does not normally block your airway. You can breathe throughout the examination.

Can laryngoscopy affect my voice?

Temporary hoarseness can follow the examination, particularly after a biopsy or treatment. Lasting voice change is less common and is more relevant when tissue on or near a vocal cord is removed.

Sources

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