PROCEDURE

Endoscopy

Upper endoscopy uses a flexible camera to examine and sometimes treat the oesophagus, stomach, and upper small intestine.

PURPOSE
Examine, sample, or treat the upper digestive tract

PROCEDURE TYPE
Diagnostic and therapeutic; minimally invasive endoscopic procedure

WHERE IT IS DONE
Endoscopy suite, operating theatre, outpatient clinic, or bedside

ANAESTHESIA
Local throat anaesthetic; moderate or deep sedation, rarely general

HOW LONG IT TAKES
Usually 10 to 30 minutes

PREPARATION
Fasting, medication review, and an escort after sedation

RECOVERY
Same day; no driving for 24 hours after sedation

MAIN RISKS
Bleeding, perforation, aspiration, and sedation reactions

RESULTS
Visual findings immediately; pathology after several days or longer

Overview

An upper gastrointestinal endoscopy, also called gastroscopy or EGD, uses a thin, flexible tube with a light and camera to examine the oesophagus, stomach, and duodenum.

The endoscope passes through your mouth and throat without blocking breathing. Images appear on a screen, and small instruments can be passed through the scope to take tissue samples, called biopsies, or provide treatment without a surgical incision.

Why the procedure is performed

Upper endoscopy can investigate difficulty swallowing, upper abdominal pain, repeated

vomiting, persistent heartburn, anaemia, or signs of digestive-tract bleeding.

It may detect inflammation, ulcers, narrowing, abnormal growths, or enlarged veins. Biopsies can test for conditions including Helicobacter pylori infection, coeliac disease, and abnormal cell changes.

Endoscopy can also be used to:

Before consenting, ask what the procedure is intended to find and whether treatment might be performed at the same time.

- Stop bleeding
- Remove a foreign object
- Widen a narrowed area
- Remove or sample an abnormal growth
- Treat enlarged veins
- Place a feeding tube or stent

Who should and should not have it

Endoscopy may be appropriate when direct examination, biopsy, or treatment could change your care, or when less invasive tests have not provided enough information.

An elective procedure may be delayed, modified, or avoided if:

These issues do not always prevent endoscopy. The team may adjust sedation, arrange anaesthetic support, avoid biopsy, or use a hospital setting. In an emergency, the benefits may outweigh concerns that would delay a routine procedure.

- You do not consent
- You have not followed fasting instructions
- A serious heart or lung condition makes sedation unsafe
- You cannot safely protect your airway
- Bleeding risk is too high for the planned biopsy or treatment
- Pregnancy affects the need, timing, or sedation plan
- You do not have a responsible adult to take you home when required

How to prepare

Follow your facility's instructions because fasting and medication plans vary. You will usually need to stop eating and, for a shorter period, drinking. This reduces the risk of stomach contents entering your lungs.

Provide a current list of medicines, supplements, allergies, and medical conditions. Tell the team if you:

Do not stop prescribed medicine unless the treating team gives you a specific plan. Stopping a blood thinner like warfarin or apixaban can cause harm, while continuing it may increase bleeding during some treatments.

If receiving sedation, arrange for a responsible adult to take you home and follow instructions about supervision afterward.

- Take blood thinners or medicines affecting platelets
- Use insulin or other diabetes medicines
- Are pregnant or could be pregnant
- Have heart, lung, kidney, or liver disease
- Have sleep apnoea, swallowing problems, or previous sedation difficulties
- Have loose teeth, dentures, crowns, or bridges

What happens during the procedure

A nurse checks your identity, medicines, allergies, fasting status, and ride home. The endoscopist explains the procedure, possible treatments, alternatives, and risks before obtaining consent.

You may receive throat-numbing spray and sedation through a vein. Sedation can make you sleepy, and you may remember little. General anaesthesia is used only in selected situations.

You lie on your side with a mouth guard in place. If sedation is used, the team monitors oxygen, breathing, heart rate, and blood pressure.

As the scope passes through your mouth and throat, you may feel pressure, fullness, or the urge to burp. Air or carbon dioxide is used to improve the view. The endoscopist examines the lining and may take biopsies, which you usually cannot feel.

Recovery and what to expect afterward

A mild sore throat, bloating, burping, or temporary discomfort is common and usually improves within a day or two. Severe or worsening pain is not expected.

Wait until throat numbness has worn off before eating or drinking, as directed. You can usually resume your normal diet unless treatment was performed or the team advises otherwise.

After sedation, rest for the day and avoid alcohol, important decisions, machinery, and activities requiring coordination. Do not drive yourself home. Many facilities require no driving for 24 hours, even if you feel alert.

Many people return to desk-based work the next day. Allow longer if your work involves driving, machinery, physical labour, or if you received treatment.

Risks and possible complications

Upper endoscopy is generally well tolerated, but possible complications include:

Minor bleeding may follow a biopsy. Significant bleeding or perforation may require observation, another endoscopy, a transfusion, radiology treatment, or surgery.

- Sedation reactions affecting breathing, blood pressure, or heart rhythm
- Aspiration of stomach contents into the lungs
- Bleeding, especially after removing or treating tissue
- Perforation of the oesophagus, stomach, or duodenum
- Infection, which is uncommon after routine diagnostic endoscopy
- Damage to teeth, crowns, or other dental work

Results and follow up

The endoscopist can often explain visual findings immediately. If you received sedation, written information or a support person can help because you may not remember the discussion.

Biopsy results take several days or longer. Before leaving, confirm:

Routine follow-up is not a substitute for prompt care if concerning symptoms develop.

- When and how you will receive results
- Who will explain them

- Whether you need an appointment or repeat endoscopy
- Whether medicines, food, or activities need to change

Alternatives

Alternatives depend on why endoscopy was offered. They may avoid sedation but often cannot provide a biopsy or treatment.

A barium swallow or upper gastrointestinal X-ray can show swallowing problems, narrowing, or digestive-tract shape. A CT scan can assess the digestive tract and nearby organs but may miss small lining changes. Both use radiation and cannot take biopsies.

Breath or stool tests can detect H. pylori but do not show ulcers, bleeding, or abnormal tissue. A capsule camera mainly examines the small intestine and cannot take biopsies or provide treatment.

For selected lower-risk concerns, observation or a trial of medicine may be reasonable, although diagnosis may be delayed. Surgery or interventional radiology can replace some endoscopic treatments but are generally more invasive or used for different problems.

When to call your healthcare team

Contact your healthcare team promptly for persistent vomiting, increasing chest or abdominal discomfort, swallowing that is worse than before, fever, or mild symptoms that do not improve as expected.

Seek urgent or emergency care for:

Use the facility's emergency contact details when available. If symptoms are severe, call local emergency services rather than waiting for an appointment.

- Severe or worsening chest or abdominal pain
- Difficulty breathing
- Vomiting blood or material resembling coffee grounds
- A large amount of black, tar-like stool or fresh blood
- Fainting, marked weakness, confusion, or difficulty waking
- A swollen or rigid abdomen

Common questions

Will I be asleep?

Not necessarily. Moderate sedation makes you sleepy but able to respond. Deep sedation reduces awareness, while general anaesthesia makes you fully unconscious. Some people receive only throat-numbing spray.

Can I drive home?

Not after sedation. Arrange a ride and follow the facility's restriction, often 24 hours. Different rules may apply if you have throat spray alone.

How painful is it?

It is usually uncomfortable rather than painful. You may gag briefly or feel pressure and bloating. Tell the team if you are uncomfortable.

Can I breathe while the scope is in?

Yes. The scope enters the oesophagus, not the windpipe.

When will I know the results?

Visual findings are often discussed the same day. Biopsy results usually take several days or longer.

Can the endoscopist treat a problem immediately?

Sometimes. Bleeding, narrowing, foreign objects, and certain growths may be treated during the procedure. Other findings require later treatment.

Sources

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