PROCEDURE

EGD - esophagogastroduodenoscopy

An EGD uses a flexible camera to examine and treat the upper digestive tract.

PURPOSE
Examine, sample, or treat the upper digestive tract

PROCEDURE TYPE
Diagnostic and therapeutic, minimally invasive endoscopic procedure

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

ANAESTHESIA
Moderate or deep sedation, sometimes throat numbing alone

HOW LONG IT TAKES
Usually 15 to 30 minutes

PREPARATION
Fasting and medication review, especially blood thinners

RECOVERY
Same day; no driving after sedation

MAIN RISKS
Bleeding, perforation, aspiration, sedation-related breathing problems

RESULTS
Visual findings immediately; biopsy results after several days

Overview

An EGD examines the upper digestive tract using a thin, flexible tube called an endoscope. A camera sends images of the esophagus, stomach, and duodenum-the first part of the small intestine-to a monitor.

Small instruments can pass through the endoscope to collect tissue samples, stop bleeding, remove certain growths or objects, open narrowed areas, or place a tube or stent. A tissue sample is called a biopsy.

You may be awake but relaxed under sedation or deeply asleep. General anaesthesia is used in selected situations. The endoscope enters the esophagus rather than the windpipe, so it does not normally prevent breathing.

Why the procedure is performed

Your healthcare team may recommend an EGD for:

Biopsies can help identify inflammation, cancerous or precancerous changes, celiac disease, or Helicobacter pylori , a bacterium linked to some ulcers.

EGD can also control bleeding, stretch a narrowing, remove a foreign object, or place a feeding tube or stent. A stent helps keep a narrowed passage open.

- Difficulty or pain when swallowing
- Persistent upper abdominal pain, nausea, vomiting, or indigestion
- Vomiting blood or passing black, tar-like stool
- Unexplained iron-deficiency anaemia or weight loss
- Suspected ulcers, inflammation, narrowing, or abnormal growths
- Follow-up of Barrett's esophagus or certain ulcers
- Abnormal findings on imaging or another test

Who should and should not have it

EGD is useful when direct viewing, a biopsy, or treatment may affect your care. It is not always needed for uncomplicated heartburn, nausea, or indigestion; medicines or less invasive tests may sometimes be tried first.

The procedure may need to be delayed if:

A standard EGD may be avoided if a tear or hole in the digestive tract is suspected, unless endoscopy is part of urgent specialist treatment. Severe swallowing blockage or a high aspiration risk may require general anaesthesia and airway protection.

Pregnancy, older age, and long-term illness do not automatically rule out EGD, but they may change its timing, sedation, or monitoring.

- You have not followed fasting instructions
- Blood thinners or diabetes medicines have not been managed safely
- You have an unstable heart or breathing condition
- Infection or illness makes sedation unsafe
- Valid consent cannot be obtained

How to prepare

Follow your facility's instructions, even if they differ from general guidance. You will usually need to stop eating for several hours. Clear-liquid and solid-food cutoffs may differ. An empty stomach improves visibility and reduces the risk of stomach contents entering the lungs.

Tell the team about all medicines, vitamins, and supplements, especially:

Do not stop a prescribed blood thinner like warfarin or apixaban on your own. The plan must balance bleeding and blood-clot risks.

Tell the facility if you could be pregnant, have heart or lung disease, use a breathing device for sleep apnea, have loose teeth, or have difficulty opening your mouth.

If receiving sedation, arrange for a responsible adult to take you home. Some facilities also require someone to stay with you afterward.

- Blood thinners and antiplatelet medicines
- Insulin and other diabetes medicines
- Medicines that affect stomach emptying
- Previous reactions to sedation or anaesthesia

What happens during the procedure

The team confirms your identity, allergies, medicines, consent, and planned procedure. An intravenous line is usually placed for sedation.

You generally lie on your left side while monitors check blood pressure, pulse, breathing, and oxygen. You may receive oxygen, throat-numbing spray, and a mouth guard.

The clinician guides the endoscope through your mouth. If lightly sedated, you may feel pressure, gagging, or fullness. Air or carbon dioxide opens the digestive tract for a clearer view.

Biopsies usually do not hurt. If needed, instruments are passed through the endoscope for treatment. The procedure commonly takes 15 to 30 minutes but may take longer if treatment is performed.

Recovery and what to expect afterward

A mild sore throat, belching, bloating, or gas is common and should improve. Severe or increasing pain is not expected.

Wait until swallowing and your gag reflex have returned before eating or drinking. Follow the facility's dietary instructions.

After sedation, rest for the day. Do not drive, operate machinery, drink alcohol, sign legal documents, or make major decisions until permitted-often the next day. Follow your discharge instructions exactly.

Many people return to work the next day, but you may need longer after treatment or if your work involves driving, machinery, or strenuous activity.

Risks and possible complications

Possible complications include:

Minor biopsy bleeding often stops without treatment. Significant bleeding may require medicines, another endoscopy, transfusion, interventional radiology, or surgery. A perforation may require hospital care, antibiotics like amoxicillin or doxycycline , endoscopic repair, or surgery.

Risk depends on the procedure, treatments performed, medicines, and overall health.

- Bleeding, especially after treatment or tissue removal
- A tear or hole in the esophagus, stomach, or duodenum
- Sedation-related breathing, blood pressure, or heart rhythm problems
- Aspiration of stomach contents into the lungs
- Infection
- Injury to teeth, dental work, lips, or throat

Results and follow up

The clinician can often explain visual findings shortly afterward, although sedation may affect your memory. Written results or having a support person present can help.

Biopsy results often take several days; specialised testing may take one to two weeks. Ask when and how you will receive results and who will review anything pending.

Results may lead to medicine changes, further testing, specialist treatment, or surveillance endoscopy. Keep all follow-up appointments, even if you feel well.

Alternatives

Alternatives depend on why EGD was offered, and none provides the same combination of direct viewing, biopsy, and treatment.

Ask what the EGD is intended to find or treat and what an alternative could miss.

- Treatment without immediate testing: May suit uncomplicated symptoms but can delay diagnosis of a structural problem
- Barium swallow or upper gastrointestinal X-ray: Can show some swallowing or structural problems but uses radiation and cannot provide biopsy or treatment
- CT scan: Shows surrounding organs and complications but may miss subtle lining changes
- * Breath or stool testing for H. pylori : * Detects the bacterium but cannot show ulcers, bleeding, narrowing, or abnormal tissue
- Capsule endoscopy: Uses a swallowed camera but mainly examines the small intestine and cannot take biopsies or treat problems
- No procedure for now: Avoids immediate risks, but important symptoms or abnormalities may remain unexplained

When to call your healthcare team

Contact the endoscopy team promptly for symptoms that do not improve, fever, repeated vomiting, worsening swallowing difficulty, or increasing chest or abdominal pain.

Seek emergency care for:

Use the emergency contact information in your discharge papers. For severe or rapidly worsening symptoms, call emergency services rather than waiting for an appointment.

- Severe chest or abdominal pain
- Trouble breathing
- Vomiting blood or material resembling coffee grounds
- Large amounts of black or bloody stool
- Fainting, severe weakness, confusion, or marked dizziness

Common questions

Will I be asleep?

Many people receive moderate or deep sedation. Some procedures use throat numbing alone, while selected cases require general anaesthesia.

Can I drive home?

No, not after sedation or general anaesthesia. Arrange for an adult to take you home and follow the facility's discharge rules.

How painful is an EGD?

It is usually uncomfortable rather than painful. You may notice gagging, pressure, or bloating. A temporary sore throat is common, and biopsies usually are not felt.

When will I know the results?

Visual findings are usually available shortly afterward. Biopsy results generally take several days and sometimes longer.

Can I breathe with the tube in my throat?

Yes. The endoscope enters the esophagus rather than the windpipe, and your breathing and oxygen level are monitored.

Can the clinician treat a problem at the same time?

Often, yes. Treatment may include stopping bleeding, stretching a narrowing, removing certain growths, or retrieving a foreign object.

Sources

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