PROCEDURE

General anesthesia

General anesthesia uses medicines to keep you unconscious and unaware during a procedure.

PURPOSE
Prevent awareness, movement, and pain during a procedure

PROCEDURE TYPE
Both; medication-based support for surgical, endoscopic, or bedside procedures

WHERE IT IS DONE
Operating theatre, procedure suite, or critical care bedside

ANAESTHESIA
General

HOW LONG IT TAKES
Minutes to many hours, matching the planned procedure

PREPARATION
Fasting, medication review, and an arranged ride home

RECOVERY
Usually same day; no driving for at least 24 hours

MAIN RISKS
Nausea, sore throat, dental injury, breathing or heart problems

RESULTS
Immediate anaesthetic effect; procedure results follow separately

Overview

General anesthesia is a controlled state of unconsciousness produced by medicines. You are not aware of the procedure and should not feel or remember it.

An anesthesia professional gives the medicines and monitors you continuously. This may be an anesthesiologist, who is a doctor specializing in anesthesia, or another qualified anesthesia professional working within the care team.

General anesthesia affects your breathing and protective reflexes. You will usually need an airway device, such as a breathing tube or a mask placed over the voice box. A ventilator may breathe for you until the anesthetic medicines are reduced or stopped.

General anesthesia is different from sedation. With sedation, you may be sleepy but are not

always fully unconscious. Local or regional anesthesia numbs a specific area while you remain awake or lightly sedated.

Why the procedure is performed

General anesthesia allows procedures to be performed when being awake would be painful, unsafe, or impractical. It may be recommended when a procedure:

It is commonly used for major operations. It may also be used for some scans, endoscopic procedures, dental treatments, or emergency care when another form of anesthesia would not provide enough comfort or safety.

- Is expected to cause significant pain
- Requires you to remain completely still
- Takes a long time or involves a large area of the body
- Affects breathing or requires control of your airway
- Cannot be completed comfortably with local anesthesia or sedation

Who should and should not have it

General anesthesia may be appropriate when its benefits are greater than the risks of being unconscious and needing breathing support. Your anesthesia plan is based on the procedure, your health, previous experiences with anesthesia, and your preferences.

It may be avoided when local anesthesia, regional anesthesia, or sedation can provide suitable conditions with less recovery time. An elective procedure may need to be delayed if you have not followed fasting instructions or if a new illness makes anesthesia less safe.

Tell the anesthesia team about:

These issues do not always rule out general anesthesia. They may change the medicines, monitoring, airway plan, or location of care. In an emergency, treatment may proceed despite increased risk because delaying the procedure could be more harmful.

- Heart, lung, kidney, liver, or neurological conditions
- Sleep apnea, heavy snoring, or use of a breathing device at night
- Pregnancy or the possibility of pregnancy
- Allergies and all medicines, supplements, alcohol, cannabis, or other drugs

- Loose teeth, dental work, limited neck movement, or difficulty opening your mouth
- Previous nausea, difficult airway management, or awareness under anesthesia
- A personal or family history of malignant hyperthermia, a serious reaction to certain anesthetic medicines

How to prepare

The treating facility's own instructions take priority because fasting and medication plans are tailored to your procedure and health.

You will be told when to stop eating and drinking. Food or liquid in the stomach can enter the lungs while you are unconscious, a problem called aspiration. If you accidentally eat or drink after the stated time, tell the team rather than hiding it.

Provide a complete list of prescription medicines, over-the-counter products, vitamins, and supplements. Ask which medicines to take on the day. Do not stop blood thinners like warfarin or apixaban , diabetes medicines, or other important treatments unless your care team specifically instructs you to do so.

Tell the team if you develop a fever, cough, breathing problem, vomiting, or another new illness. Also report any changes in pregnancy status or medication use.

Remove jewelry, contact lenses, and removable dental appliances as directed. Avoid makeup or nail products if your facility asks, because they can interfere with examination or monitoring.

Arrange for a responsible adult to take you home after outpatient anesthesia. You may also need someone to stay with you for the first night.

What happens during the procedure

Before anesthesia starts, the team confirms your identity, procedure, allergies, fasting status, and medical history. An intravenous line, or IV, is usually placed in a vein.

Monitors are attached to measure your heart rhythm, blood pressure, oxygen level, breathing, and temperature. You will usually breathe oxygen through a mask before the anesthetic begins.

Most adults receive an induction medicine through the IV. In some situations, anesthesia starts with a gas breathed through a mask. You become unconscious quickly.

After you are unconscious, the anesthesia professional places an airway device and supports your breathing. You may receive pain medicines, medicines to relax your muscles, and other

drugs to control nausea, blood pressure, or heart rate.

The anesthesia professional remains responsible for monitoring and adjusting the anesthetic throughout the procedure. Near the end, the medicines are reduced or stopped. The airway device is usually removed as you begin breathing adequately and protective reflexes return.

Recovery and what to expect afterward

Pain after anesthesia usually comes from the procedure rather than the anesthetic itself. Tell the recovery team if you are uncomfortable. They can adjust pain treatment while watching for sleepiness, nausea, or breathing problems.

You may begin with small sips of fluid and light food once you are awake enough and are not feeling very sick. Follow any diet restrictions related to your procedure.

Plan to rest. Drowsiness, slowed reactions, mild dizziness, nausea, shivering, and a sore throat can occur. Get up with help at first, especially if you feel unsteady. Follow the activity limits for the operation or procedure itself.

Do not drive for at least 24 hours after general anesthesia, or longer if your facility instructs you. Do not drive while taking medicines that make you sleepy. Avoid alcohol, operating machinery, making major decisions, or signing important documents during this period.

Returning to work depends on the procedure and your job. Some people can return to light work after a day or two, while surgery or safety-sensitive work may require longer. Follow the procedure-specific advice from your care team.

Risks and possible complications

Temporary effects can include nausea, vomiting, sore throat, hoarseness, shivering, dizziness, itching, muscle aches, or confusion. Older adults may be more likely to experience delirium, which is a sudden period of confusion after surgery.

Possible injuries include damage to teeth, lips, tongue, eyes, nerves, or skin. Positioning and airway equipment can contribute to these problems.

More serious complications include breathing difficulty, aspiration, severe allergic reaction, abnormal heart rhythm, heart attack, stroke, or infection. Awareness during general anesthesia is possible but uncommon. It means becoming conscious or forming memories while the procedure is still happening.

Malignant hyperthermia is a serious inherited reaction to certain anesthetic medicines. A

known or suspected family history allows the team to choose different medicines and prepare appropriate treatment.

Severe brain injury or death can occur, although these outcomes are uncommon. Your personal risk is shaped by your health, the urgency and type of procedure, and whether complications occur during treatment.

Results and follow up

The immediate result is that you remain unconscious while the procedure is performed and then wake as the anesthetic wears off. The team monitors your breathing, circulation, alertness, comfort, and ability to drink or move safely.

General anesthesia does not usually produce a diagnostic result. Findings from surgery, imaging, endoscopy, or laboratory testing are reported separately. Some are available the same day, while tissue samples may take several days or longer.

Routine follow-up focuses on recovery from the main procedure. Mention ongoing nausea, throat discomfort, confusion, memory concerns, dental injury, or any unexpected memory of the procedure. This information can guide future anesthesia plans.

Alternatives

The practical alternatives depend on what is being done.

Local anesthesia numbs a small area while you remain awake. It usually allows a faster recovery but does not prevent awareness, anxiety, pressure, or movement.

Regional anesthesia, such as a spinal, epidural, or nerve block, numbs a larger part of the body. It may avoid full unconsciousness and can provide longer pain relief, but the block may be incomplete and is not suitable for every procedure.

Moderate or deep sedation makes you relaxed and sleepy. Recovery may be shorter, but you may still respond, move, or remember parts of the procedure. Deep sedation can still affect breathing and may need airway support.

Some procedures can be delayed, changed, or managed without an operation. This avoids anesthesia now but may leave the underlying problem untreated or allow it to worsen. Ask whether an alternative would provide the same likelihood of completing the procedure safely.

When to call your healthcare team

For routine advice, contact your healthcare team if a sore throat, nausea, dizziness, or unusual tiredness is not gradually improving. Also report dental damage, persistent confusion, memory problems, or any memory of events while you were meant to be unconscious.

Seek urgent same-day advice for repeated vomiting, inability to keep fluids down, worsening shortness of breath, new weakness or numbness, difficulty urinating, or pain that is severe despite the recommended treatment.

Call emergency services for severe trouble breathing, chest pain, collapse, inability to wake, signs of stroke, or swelling of the face or throat. Follow the discharge instructions for your main procedure, which may identify additional urgent symptoms.

Common questions

Will I be completely asleep?

Yes. General anesthesia is intended to keep you unconscious and unaware. The anesthesia professional continuously adjusts the medicines and monitors your response.

Can I drive myself home?

No. Arrange for a responsible adult to take you home. Do not drive for at least 24 hours, longer if instructed, or while taking sedating medicines.

How painful is general anesthesia?

The IV may briefly sting. You should not feel the procedure while unconscious. Afterward, pain usually relates to the procedure, and your team will plan pain relief.

When will I wake up?

You usually begin waking soon after the anesthetic medicines are reduced or stopped. How quickly you become fully alert is influenced by the procedure, medicines, age, and health.

Will I remember anything?

Most people do not remember the procedure. Tell your care team if you recall voices, pressure, pain, or events from a time when you expected to be unconscious.

When will I know the procedure results?

Your clinician may explain initial findings after you are alert enough to understand them. Results involving scans, laboratory tests, or tissue analysis may take longer.

Sources

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