Intermountain® Healthcare

Anesthesia

What is it?

Anesthesia is the use of medications called anesthetics to block most feeling, including pain. These medications can affect a specific area or region of your body, or your whole body.

- **General anesthesia.** General anesthetics block most sensation throughout your body. They cause you to lose consciousness completely.
- **Monitored anesthesia care (MAC).** This is a reduced level of anesthesia that sedates (calms) you and may put you to sleep. It does not cause you to lose consciousness completely.
- **Regional or local anesthetics** act on a specific region or area of the body. Epidural and spinal blocks are often used to numb the lower half of your body. Other nerve blocks can be injected or given through an IV or a catheter to affect a specific area, such as an arm or leg.

You may get just one of these types of anesthesia, or a combination. A doctor or nurse with specialized training will recommend anesthesia options based on your unique situation. A doctor who specializes in anesthesia care is called an **anesthesiologist.** A nurse with specialized training in anesthesia care is called a **CRNA** (Certified Registered Nurse Anesthetist).

What happens before?

You may be instructed not to eat or drink for 2 to 12 hours before surgery. Follow these instructions carefully. It's important to report the last time you ate or drank. The medications used for anesthesia can also cause the stomach muscles to relax. Stomach contents can come up, causing choking or vomiting. You could also breathe stomach contents into your lungs, which could cause serious problems.

Your healthcare provider will take a complete medical history. This is very important for safe anesthesia care. Be sure to report all medical problems, recent illnesses, allergies, and current medications (including vitamins and over-the-counter medications). Also, be sure to report previous reactions to anesthesia for both you and your family members. This is essential to allow your anesthesia provider to plan the safest possible care.

You may have lab tests, x-rays or other tests to evaluate your health status before surgery.

What happens during?

You may have an IV or small catheter (tube) placed into a vein in your arm. This allows you to receive fluids and medications.

You may have a tube inserted through your mouth and into your airway (windpipe) to help you breathe during surgery. This happens after you are asleep.

Monitors will be used to help the anesthesiologist continually evaluate your breathing, heart rate, blood pressure, and temperature.

What happens after?

What you feel after surgery depends on the type of anesthesia used. The table on the back of this fact sheet summarizes some possible side effects. Your healthcare providers will continue to work with you to manage your pain after surgery. You may take pain pills or get pain medication through an IV, a catheter, or an injection. You may even have a device that lets you control how often you get pain medication.

Is anesthesia safe?

Though **very rare**, all forms of anesthesia carry risk **of severe complications** such as infection, bleeding, drug reactions, blood clots, paralysis, stroke, brain damage, heart attack, or death. The table on the back of this fact sheet summarizes the most common forms of anesthesia, including benefits and potential risks. Other less common risks are also possible. Be sure to ask your anesthesia provider if you have questions or concerns.

What it is	How it's given	Actions and potential benefits	Potential risks or side effects
General anesthesia Causes complete loss of consciousness. Used for many major surgeries.	• Anesthesia medication is given through an IV or as an inhaled gas — or both. • After you're asleep, a tube may be inserted through your mouth into your airway to help you keep breathing.	• Can be started quickly and causes rapid loss of consciousness • Blocks most sensation, including pain	• Throat pain, hoarseness, or injury to your mouth or teeth from the breathing tube • Drowsiness, confusion, or restlessness as you wake up • Teeth clenching as you wake up, which may cause injury to your teeth, mouth, or dental work • Nausea or vomiting • Breathing problems, pneumonia • Very rarely, heart problems, stroke, or other life threatening complications • Awareness
Monitored anesthesia care (MAC) Calms you and may put you to sleep, but does not cause unconsciousness. Used for minor surgeries when general anesthesia is not needed.	• Anesthesia medication is given through an IV.	• Keeps you comfortable during surgery, and often causes sleep • Allows you to wake up more quickly after surgery • Fewer side effects than general anesthesia	• Loss of memory for what you heard or felt during surgery • Loss of consciousness • Breathing problems • Anxiety • Nausea and vomiting • Awareness
Epidural or spinal anesthesia This type of pain relief may be used after surgery with other types of anesthetics to help with pain management. May also be chosen as preferred anesthesia.	• With an epidural, a needle is inserted into the epidural space around your spinal canal. A thin catheter is then threaded through the needle. The needle is removed and the catheter stays in place. This way, medication can be given through the catheter more than one time, with dosage increased or decreased as needed. • With a spinal block, medication is injected through a needle directly into the spinal canal in your lower back.	• Blocks most feeling from the waist or chest down • Takes effect quickly • You may remain awake • Medication can be given through a catheter more than one time, with dosage increased or decreased as needed • May also be used to give other types of pain medication after surgery	• Headache or backache • Buzzing in your ears • Convulsions • Low blood pressure • Dizziness or lightheadedness • Nausea or vomiting • Numbness spreading too high in the body, resulting in the need for a breathing tube • Blood-vessel injury or infection • Unrelieved pain • Very rarely, permanent injury or death • Itching
Local anesthesia / nerve block May be chosen as preferred anesthesia.	• Pain medication is injected into the skin or muscle around the incision, near a joint, or near a specific nerve. • A catheter may be placed so that more medication can be given as needed.	• Temporary loss of feeling and/or movement of a specific limb or area • Very few side effects • You may remain awake	• Infection • Convulsions • Persistent numbness • Weakness • Unrelieved pain • Blood-vessel injury or infection
Bier Block (IV injection to a specific limb) For procedures to a specific limb when the anesthesiologist feels it is safer not to use a general anesthetic.	• A tourniquet (tight band) is fastened around the arm or leg to be numbed. • The doctor injects a local anesthetic directly into a vein in that arm or leg.	• Temporary loss of feeling and/or movement of a specific limb	• Infection • Convulsions • Persistent numbness • Unrelieved pain • Blood-vessel injury or infection

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