
Anesthesia for Surgery

Anesthesia literally means the loss of feeling or sensation. It involves giving medications to patients to make them as comfortable as possible and to keep them safe and stable during surgery. Anesthesia may also involve procedures designed to maintain your vital functions such as breathing and circulation. Anesthesia is administered by specially trained doctors called anesthesiologists and certified registered nurse anesthetists.

Types of anesthesia

There are three basic types of anesthesia: *local*, *regional*, and *general anesthesia*.

Local

If your surgery is in a small area or involves only a superficial incision, the doctor may decide on *local anesthesia*. In this case, the anesthetic is injected directly into the surgical area and numbs only the area being worked on.

Regional

For more extensive surgery, *regional anesthesia* may be used, such as spinal or epidural anesthesia, which blocks a major system of nerves so that feeling is lost in a larger section of your body, but not the entire body.

With local or regional anesthesia, you may also be given intravenous medications to help you relax or to induce a light sleep during surgery.

General

For some surgery, you may require *general anesthesia*, which affects the brain and the entire body. With general anesthesia, you are unconscious. Some medications that produce general anesthesia (referred to as general anesthetics) are given by intravenous injection. Others are inhaled with oxygen in a breathing circuit. Throughout the procedure, your anesthesiologist or nurse anesthetist will stay with you and monitor your condition continuously.

There are many different kinds and combinations of anesthetics. The type of anesthesia chosen for your surgery is selected after a careful review of your medical history, your physical condition, and the type of surgery you are having. The specific risks you may encounter depend on the type of anesthesia used, your health, and how you respond to the anesthetic. Major side effects and complications of anesthesia are uncommon.

Before surgery

The anesthesia specialist will review your medical and surgical history and perform any necessary diagnostic tests such as blood tests or an electrocardiogram. The type of anesthetic that is judged best for you will be discussed, including benefits, risks, and alternative techniques when appropriate.

The anesthesia specialist will answer any questions or concerns that you may have about undergoing anesthesia. He or she will also prescribe appropriate pre-surgery medication, which the nurses will give to you before anesthesia. Be sure to tell the doctor if you have any drug allergies.

Eating and drinking before surgery

In general, you will be asked not to eat or drink for a period of time before your surgery. Your health care team will give you specific instructions. In most cases, you will be asked not to eat anything after midnight on the night before surgery. However, if you're told to continue some of your medications, you can sip a small amount of water to swallow pills. For children, please check with the surgeon or anesthesiologist about the guidelines for eating and drinking before surgery.

The reason why it is so important to have a completely empty stomach for your operation is because unconscious patients lose their protective reflexes in their throats. If you vomit while under anesthesia, you could inhale some of it into your lungs causing serious lung damage or even death. If you forget and do eat or drink something before surgery, it is important that you tell your surgeon and anesthesiologist. They can then take steps to avoid complications.

Other considerations

If you smoke, stop at least two weeks before surgery. Smoking puts your lungs under extra strain during surgery. A smoker also has a greater chance of developing pneumonia and other respiratory problems after surgery. Also, if you develop a cold or fever prior to surgery, please contact your surgeon immediately.

After surgery

Once your procedure is complete and you have begun to emerge safely from the effects of the anesthesia, you will be brought to an area of the clinic or hospital called the postanesthesia care unit (PACU), often called the recovery room. This is a special care unit where people complete the recovery from anesthesia under careful supervision.

Common side effects after any form of sedation include mild dizziness or sleepiness. Headache can occur after spinal anesthesia. A headache that hurts only when you are sitting or standing but goes away when you lie down may be a spinal headache. If you think you have a spinal headache, you should call your anesthesiologist for instructions. If you have severe back pain or worrisome symptoms, such as leg weakness or numbness, bowel or bladder trouble, or fever, you should go to the hospital right away.

Common side effects after general anesthesia include nausea, headache, sore throat, fatigue, or a "hung-over" feeling. These symptoms usually get better quickly with a little bed rest. If your symptoms are severe, call your surgeon or anesthesiologist for advice.

Your post-surgery nurse will discuss any discharge instructions related to anesthesia. Because very small concentrations of anesthetic and sedative agents may be in your body for up to 24 hours, it is important not to drive, operate dangerous machinery, or make major decisions for about 24 hours after your anesthesia.

Finally, it's a good idea to help your lungs and circulation recover from anesthesia by trying to gradually move around as soon as you feel able. Getting out of bed to walk to the bathroom is a good start. Later, take a short walk around your home, and, later still, add in longer walks.

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- Check your *Kaiser Permanente Healthwise Handbook*.
- Listen to the Kaiser Permanente Healthphone at 1-800-332-7563. For TTY, call 1-800-777-9059.
- Visit your facility's Health Education Department for books, videos, classes, and additional resources.

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