

Anesthesia is a way to control pain during a surgery or procedure by using medicine called anesthetics. It can help control breathing, blood pressure, blood flow, and heart rate and rhythm.

There are several anesthesia options for patients undergoing hand surgery. These include local anesthesia, regional anesthesia, or general anesthesia. The type of anesthesia used depends on the type and length of the surgery, the patient's health and medical conditions, and preferences of the patient, surgeon, and anesthesiologist.

The numbing medications used in regional anesthesia can provide between one and 24 hours of pain relief, depending on the medication used. Some local anesthetics may last as long as three days.

## General Anesthesia

With general anesthesia, the patient is unconscious and does not feel anything during the surgery. The patient may receive the medicine by breathing it in or through an intravenous (IV) line.

## Local Anesthesia

Local anesthesia typically means anesthesia for a small area. With this type of anesthesia, numbing medicine is injected at the site of surgery. The patient is wide-awake during the surgery and can fully cooperate with any instructions from the surgeon, such as to move the hand or fingers. It contains medicine to stop excessive bleeding and to minimize pain in the operated area. Other medications to help you relax can also be given with this type of anesthesia. The relaxing medications are typically given through an IV line.

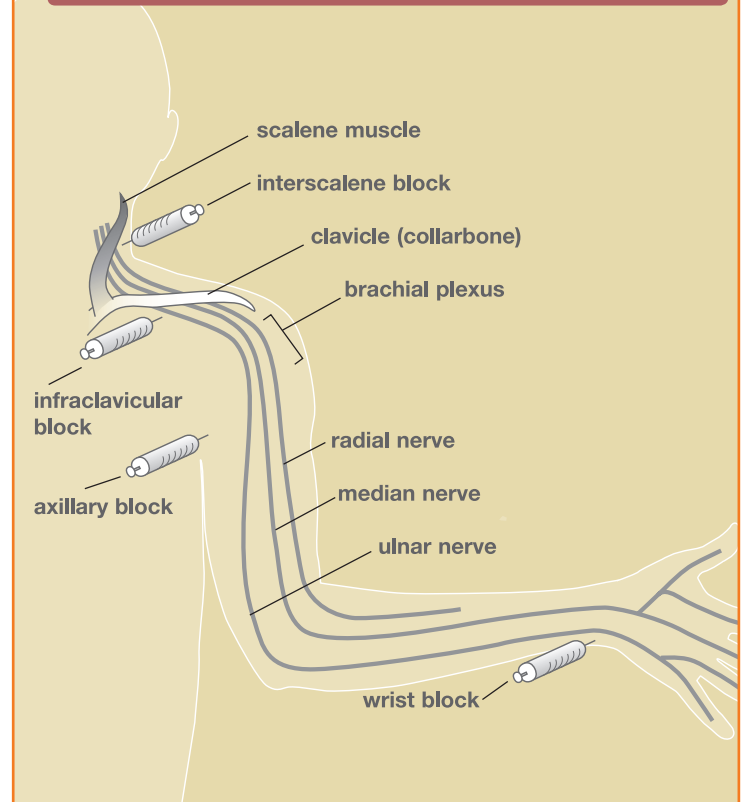
## Regional Anesthesia

Regional anesthesia puts parts of your body to sleep by injecting numbing medicine through a needle placed along the path of nerves. This may be around the collarbone or neck, under the arm, at the wrist, in the palm, around your finger, or through an IV in your arm. As with local anesthesia, the anesthesiologist or nurse anesthetist may add relaxing medication given through an IV line.

The injection of numbing medicine with a needle can be slightly uncomfortable or painful, but you will have IV medication to help you relax and feel comfortable during the injection. Sometimes, the anesthesiologist may use a needle connected to a nerve stimulator to precisely locate the nerve. This causes the arm or hand muscles to twitch and move, which is not painful, although it can feel strange.

# Anesthesia

**Figure 1.** Diagram of the regional blocks used to numb the nerves of the arm.



Some of the proven advantages of regional anesthesia include less need for pain medicine after surgery, faster recovery from anesthesia, less nausea, and, for some surgeries, less blood loss and lower risk of blood clots.

## Will I be Awake During Surgery?

Some patients prefer to be awake during surgery. Others prefer to be asleep. During your surgery you can be awake or asleep, depending on what you and the surgical team decide. You will not be able to see the surgery itself because a large sterile drape is placed between you and the surgeon. This is to protect the "sterile field," the important area of your surgery, from any contamination of germs that can cause infection.

## What Are the Risks?

Some risks associated with regional or local anesthesia include pain, soreness or bruising at the needle site, or tingling that lasts for several days. Serious complications can occur, such as bleeding, infection or nerve injury, but these are very rare. Your surgeon and anesthesia provider will check to make sure you are comfortable before, during and after the procedure. Do not hesitate to tell them if you are not.