

Forms of Anesthesia

There are different forms of anesthesia:

- General anesthesia. The whole body is numbed and you are temporarily unconscious.
- Loco-regional anesthesia. This involves temporarily making a part of the body numb (spinal puncture and nerve blocks).
- Sedation.
- Combinations of the above-mentioned forms of anaesthesia.

Which anesthesia is most suitable for you depends on several factors, such as age, your physical condition and the type of surgery you are undergoing. You can discuss your own wishes during intake appointment at the Anesthetics Clinic.

–You are connected to a monitoring equipment before the anesthesia is applied. Several stickers are placed on your chest to measure the heart rate and a clip is placed on your finger to check the oxygen level in your blood. You will also be given a band on your arm to measure blood pressure. An IV needle is placed in your hand or arm to administer medicine.

General Anesthesia

After you are connected to the monitoring equipment, the anesthesiologist will administer the medicines for the anesthesia through the IV needle. You fall asleep quickly. While you are asleep, the anesthesiologist will usually insert a plastic tube down your throat. This is to monitor your breathing during anesthesia. During the operation, the anesthesiologist or nurse anesthetist will stay with you at all times. Thanks to modern monitoring equipment and medicines, the anesthesiologist can determine exactly how your body reacts to the operation. Breathing and circulation can be adjusted if necessary and drugs are administered to maintain the anesthesia.

Effects

You may feel sleepy after surgery. You may also be nauseous and vomit. You may also experience pain. The nurse knows exactly what you can get for the pain and/or nausea. You can also ask for it.

Complications

Serious complications with general anesthesia are rare. Allergic reactions to medicines can occur. Inserting the breathing tube can damage your teeth. An unfortunate position during surgery can pinch a nerve in your arm or leg. As a result, you may temporarily suffer from tingling and loss of strength.

Do you use the contraceptive pill?

With general anesthesia, the anesthesia can reduce the reliability of the contraceptive pill. It is therefore wise to temporarily use another contraceptive in addition to the contraceptive pill from the operation until you start with the next pill strip.

Loco – Regional Anesthesia

With loco-regional anesthesia a part of the body is numbed. This is done by injecting an anesthetic around a nerve or nerve pathway.

- **Epidural:** With the so-called epidural (spinal or epidural anesthesia) the entire lower body and the legs can be numbed.
- **Nerve blocks:** Nerve blocks can be used during surgery on the hand, arm, foot or leg. This is also increasingly used in some other operations these days. The anesthetic is injected around the nerves in your armpit, neck, buttock, groin or popliteal fossa.

You remain conscious with these types of anesthesia. You will not see the operation because you are covered with drapes. If you prefer to sleep, the anesthesiologist can give you a light sleep aid. If you remain conscious, you will notice that your sensation in the numb part of the body does not disappear completely. It is normal to feel that you are being touched, but you do not feel any pain. The muscles are also disabled with the anesthetic. You are temporarily unable to move the anesthetized body part. Once the anesthetic wears off, you will have normal muscle strength and control.

Spinal or Epidural Anesthesia

The lower body and legs are numbed with an epidural. The epidural is no more painful than a regular injection. An epidural can be performed via a 'spinal anesthesia' or an 'epidural anesthesia'.

With a spinal anesthetic, the anesthetic fluid is injected into the space where the spinal fluid is located. This anesthetic works very quickly. You will immediately notice that your legs are getting warm and start to tingle. Later they become numb and limp as does the rest of the lower body. Depending on the drug used, it can take three to six hours for the anesthetic to wear off completely. Pain may also occur as the anesthetic wears off. Do not wait too long to ask the nurse for a painkiller.

With an epidural anesthesia, the anesthetic fluid is injected around the spinal cord. This anesthetic takes effect more slowly than the spinal one. With this technique, a catheter (tube) can be left behind, to which a 'pain pump' is connected. Pain relief can be administered through the tube after surgery.

Combination of anesthetics

If necessary, epidural anesthesia is combined with spinal anesthesia (for example for an operation on the hip) or with general anesthesia (for example for an operation on the abdomen).

Sometimes an epidural is insufficient. The anesthetist will then give additional medicines. Or a different form of anesthesia is chosen, for example general anesthesia. The anesthetist will discuss this with you.

Effects

Side effects of an epidural may include:

- Low blood pressure may occur during the procedure. The anesthetist pays close attention to this and takes measures if this is the case with you.
- The anesthetic may spread further upwards than intended. You notice this because your hands start to tingle. You may find it more difficult to breathe. The anesthetist will give you extra oxygen. This usually resolves the complaints.
- It may become more difficult to urinate after surgery. This is because the bladder is also numb. It may be necessary to empty the bladder with a catheter.
- After the procedure, back pain sometimes develops at the place where the epidural was given. This has to do with the position during the operation. The symptoms usually disappear within a few days.
- Headaches may occur after an epidural. Typically, this headache lessens when lying flat and gets worse when standing up. These headaches usually go away on their own within a week. If the symptoms are so severe that you have to stay in bed, please contact the anesthesiologist. This has possibilities to speed up the natural recovery.

Sedation

Sedation is used to make an unpleasant examination or treatment as comfortable as possible. Because you experience less discomfort, such as stress, fear and pain, the procedure or examination can take place more easily. In the case of sedation, you will be given a sleeping aid through an IV. The goal is to lower your consciousness to such an extent that the unpleasant procedure can still be performed safely. Your reflexes and breathing remain intact.

Painkillers can also be given to suppress the painful moments of the examination. Sedation can range from mild sleepiness to deep sleep.

Examples of procedures that can be performed under sedation are gastrointestinal examination, curettage or certain cardiac catheterizations.

After Surgery

After the operation you will be taken to the recovery room. There, specially trained nurses keep an eye on whether everything is going well with you.

If you are undergoing a long-term laparoscopic procedure in an extreme Trendelenburg position (head down), the anesthesiologist may choose to give you a short-term ventilator after the recovery. This gives a possible swelling the chance to subside.

Pain rating

The nurse in the recovery room and on the nursing ward will ask you a few times how much pain you are in. You rate the pain between zero and ten. Zero means no pain; ten is the worst pain imaginable. The nurse will also ask if the pain hinders you when coughing, moving or breathing. A grade of four or higher indicates moderate to severe pain. Then it is necessary that you receive extra medicine for the pain. A pain rating lower than four means the pain is bearable for you.

Important

It is important that you let the nurse know how the pain is. The pain medication can then be adjusted in time, if necessary. You will remain in the recovery room until you are pain free and can safely go to the ward.