**What are the types of anesthesia and their side effects?**

Multiple types of anesthesia can be used for your surgery or medical procedure. The potential risks vary with each. A physician anesthesiologist will be available to address any side effects or other possible complications during and after the following types of anesthesia:

**General Anesthesia-** causes you to lose consciousness. This type of anesthesia, while very safe, is the type most likely to cause side effects including:

* + - **Nausea and vomiting -** this can occur within the first few hours or days after surgery.
    - **Sore throat –** often a device is placed to help you breathe during surgery, this touches your throat and can cause a sore throat afterward.
    - **Postoperative delirium -** confusion upon waking up after surgery is common, but for some people the confusion can come and go for about a week. You may feel disoriented and have problems remembering or focusing. In rare cases long-term memory and learning problems can occur, especially in older patients or those with heart disease, history of stroke, Parkinson’s disease, or Alzheimer’s dementia.
    - **Muscle aches -** medicine used to relax your muscles for surgery can cause soreness.
    - **Itching -** this is a common side effect of narcotic pain medications.
    - **Chills and shivering -** this occurs in up to 50% of patients upon waking up from anesthesia.
    - **Malignant hyperthermia-** Although extremely rare, this inherit disorder can lead to a potentially deadly reaction to anesthesia. This can occur during or after surgery, causing fever and muscle contractions. If you feel that you or a blood relative are susceptible, please notify your physician anesthesiologist.

**Monitored Anesthesia Care/IV Sedation -** Some procedures require patients to simply be sleepy and relaxed without being unconscious, allowing for a faster recovery with fewer side effects than general anesthesia. There are different levels of sedation; some patients are drowsy but able to talk, while others fall asleep and don’t remember the procedure. Potential side effects of sedation generally subside quickly and include headache, nausea, and persistent drowsiness.

**Regional Anesthesia (Nerve Block) or Neuraxial Anesthesia (Spinal or Epidural) -** These types of anesthesia involve an injection of numbing medicine into a specific body part or into the back to provide pain relief during and/or after surgery. Depending on the type of surgery, this numbing injection can be used alone or in combination with sedation or general anesthesia. Each type of injection has separate associated risks and side effects, and these should be discussed with your physician anesthesiologist. Side effects are less common but include:

* **Headache –** This can occur a few days after the procedure if some spinal fluid leaks out when an anesthetic is delivered through the spine, as in an epidural or spinal block for childbirth.
* **Minor back pain –** Soreness can happen at the site if a needle was inserted into the back.
* **Difficulty urinating –** If you were numbed from the waist down, it may be difficult to urinate for a little while after the procedure.
* **Nerve damage –** Although very rare, nerve irritation or injury can occur usually causing temporary pain and/or numbness.

**Local anesthesia.** This is usually a one-time injection of a medication that numbs just a small part of your body where you’re having a procedure. If you’ve had a reaction to [local anesthesia](https://www.asahq.org/whensecondscount/anesthesia-101/types-of-anesthesia/local-anesthesia/) in the past, be sure to tell your physician. This is the type of anesthesia least likely to cause side effects, and any side effects that may occur are usually minor.