Regional Anesthesia FAQs

The following is intended to provide helpful answers to frequently asked questions (FAQs) for patients scheduled for surgery who may be candidates for regional anesthesia techniques that can help with pain control after surgery. Not all anesthesiology practices offer regional anesthesia services or perform ultrasound-guided regional anesthesia, and not all patients or surgical procedures are ideal candidates for regional anesthesia. Please consult your anesthesiologist and surgeon to determine whether or not regional anesthesia is right for you.

What is regional anesthesia?

“Regional anesthesia” is a targeted type of anesthesia. It involves injecting numbing medicine around nerves that provide sensation to specific regions or parts of your body (e.g., arm, leg, foot) and can be used instead of general anesthesia or in addition to general anesthesia as a way to control pain after surgery. Anesthesiologists can perform these procedures before surgery to prevent pain, or they can provide regional anesthesia as a “rescue” technique to relieve pain after surgery. Types of regional anesthesia procedures include spinal, epidural or peripheral nerve block. Depending on the type of numbing medicine (local anesthetic) used, a nerve block can last for a few hours or up to a whole day. For more painful surgeries, anesthesiologists can insert a tiny tube (also known as a “catheter”) that can continuously bathe the nerves in numbing medicine for an additional 2-3 days (see “nerve block catheter” section below).

There are many advantages to regional anesthesia. Because you will have decreased sensation, you need to take less opioid (narcotic) pain medicines even though you will commonly have these medications prescribed to you. Patients who receive regional anesthesia also have less nausea, recover more quickly immediately after surgery, and sleep better overnight compared to patients who do not have regional anesthesia.

Even if you choose regional anesthesia instead of general anesthesia, you don’t have to be “awake” during surgery. Anesthesiologists often combine regional anesthesia with either intravenous sedation or general anesthesia, both of which can allow you to “sleep” during surgery. You should discuss your preferences with your anesthesiologist prior to surgery.

There are always risks associated with performing any procedure. Fortunately, serious complications associated with regional anesthesia are exceedingly rare. Anesthesiology practices that specialize in regional anesthesia commonly have systems in place to prevent complications and treat them quickly if or when they occur.
What can I expect on the day of surgery?

Before surgery (or on the day of surgery at the latest), you will meet with an anesthesiologist who will evaluate whether or not regional anesthesia is the right option for you. If you are eligible and desire regional anesthesia preoperatively, the anesthesiologist will perform your nerve block approximately 30-60 minutes before your surgery. Nerve blocks may be performed in a specialized area ("block room") outside of the operating room. After your IV is inserted, your anesthesiologist may provide you with sedating medication during the performance of your nerve block. Before the procedure starts, your anesthesiologist will perform a "time-out" with you to confirm the correct site and side of your surgical procedure. It has become increasingly common for anesthesiologists to use ultrasound to identify your unique anatomy and safely inject numbing medication around the nerves. After the nerve block, your affected limb will “go to sleep” over the next 10-20 minutes.

What are my regional anesthesia options for hand, wrist, forearm, or elbow surgery?

For hand, wrist, forearm, or elbow surgeries (e.g., carpal tunnel release, fracture repair, or tendon transfer) there are a few different locations in which to place the nerve block depending on the site of surgery and expected placement of the tourniquet (if utilized). Most commonly, the nerve block is performed above the collar bone (“supraclavicular block”) or below the collarbone (“infraclavicular block”). For extensive surgeries involving bones and/or joints, your anesthesiologist can place a catheter that will bathe the nerve in numbing medicine for an additional 2-3 days (see “nerve block catheter” section below). An infraclavicular catheter may have advantages over the supraclavicular catheter in terms of pain control.

What are my regional anesthesia options for upper arm or shoulder surgery?

For surgeries involving the upper arm or shoulder, nerve blocks are most commonly performed in the neck (“interscalene block”). For extensive arthroscopic shoulder surgery and shoulder replacement, a catheter near the nerves that can deliver numbing medicine for 2-3 days is recommended (see “nerve block catheter” section below). This type of pain relief helps you perform physical therapy and reduces your need for opioid (narcotic) pain medications.
What are my regional anesthesia options for knee surgery?

For surgeries involving the knee including total knee replacement, nerve blocks are routinely placed near the groin (“femoral nerve block”) or on the inside part of the thigh where the nerves to the front of the knee are located (“adductor canal block”). For patients having total knee replacement, your anesthesiologist may place a catheter to deliver numbing medicine near the nerves for 2-3 days (see “nerve block catheter” section below). This type of pain relief will help you perform physical therapy, reduce your need for opioid (narcotic) pain medications, and decrease the time it takes for you to achieve discharge criteria. An adductor canal catheter may help patients walk further immediately after total knee replacement surgery compared to a femoral nerve catheter although both provide effective pain relief.

It is important to realize that any nerve block may also cause weak muscles. Therefore, after your nerve block, you must realize that you are at increased risk of falling because your leg may not be strong enough to support your weight. Anesthesiology practices that provide regional anesthesia for pain relief after joint replacement are advised to have a comprehensive fall prevention program in place. However, in the immediate postoperative period it is important to always ask for assistance anytime you need to get out of bed. Do not attempt to walk by yourself.

What are my regional anesthesia options for hip surgery?

For hip surgery, nerve blocks are performed above the groin crease near the nerves that affect the front and side of the hip (“fascia iliaca block” or femoral nerve block) or in the back (“lumbar plexus block”); both approaches provide similar pain relief. Alternatively, a spinal block with numbing and/or opioid (narcotic) pain medication may be placed.

It is important to realize that any nerve block may also cause weak muscles. Therefore, after your nerve block, you must realize that you are at increased risk of falling because your leg may not be strong enough to support your weight. Anesthesiology practices that provide regional anesthesia for pain relief after joint replacement are advised to have a comprehensive fall prevention program in place. However, in the immediate postoperative period it is important to always ask for assistance anytime you need to get out of bed. Do not attempt to walk by yourself.

What are my regional anesthesia options for foot or ankle surgery?

For surgeries involving the foot or ankle, nerve blocks are most commonly performed in the area behind your knee ("popliteal sciatic block") or at the level of the ankle (“ankle block”). For more invasive surgeries of this area (e.g., tendon/ligament repairs and fractures), your anesthesiologist may recommend a catheter near the nerves that can deliver numbing medicine into the area for 2-3 days (see “nerve block catheter” section below). This type of pain relief helps you perform physical therapy and reduces your need for opioid (narcotic) pain medications.
**What are my regional anesthesia options for facial surgery?**

For surgeries involving the face and neck, it may be possible to perform specific nerve blocks to minimize your postoperative pain. These may be performed by your anesthesiologist or surgeon. Common procedures that are suitable for these nerve blocks include skin cancer excision, endoscopic sinus surgery, septoplasty, and rhinoplasty. Your anesthesiologist will discuss these options with you on the day of surgery and determine if you are a good candidate for regional anesthesia.

**What are my regional anesthesia options for chest or abdominal surgery?**

For major surgeries involving the chest or abdomen, your anesthesiologist may offer you an epidural or spinal block in addition to general anesthesia. Alternatively, special types of nerve block procedures, paravertebral blocks and TAP blocks, have also been shown to provide effective pain relief after these surgeries. Your anesthesiologist will discuss these options with you on the day of surgery and determine if you are a good candidate for regional anesthesia.

**How long will the numbness from the local anesthetic medication last?**

The intensity and duration of your block largely depends on the type of numbing medicine (local anesthetic) that was used, as well as whether you receive a single dose of medication or have a nerve block catheter in place. As a single dose, some local anesthetic medications provide a few hours of numbness while others can provide numbness that lasts up to a day.

**What should I know about the “nerve block catheter”?**

A nerve block catheter is a skinny tube placed near your nerves in order to continuously bathe your nerves with local anesthetic (numbing) medication. The catheter is attached to a pump the size of a small grapefruit or a similar type of device. This pump is filled with local anesthetic (numbing) medication which is continuously delivered through the catheter to provide you with pain relief for 2-3 days. Once the medication runs out, the catheter should be removed. Removal is a simple procedure that you or a caretaker can do at home. Your anesthesiologist or another health care provider should follow up with you daily (by phone if you are at home) and be available for any questions that you may have regarding the catheter and pump.

Catheters are more suitable for certain surgeries and nerve sites than others. Your anesthesiologist will help you determine whether or not this is a good option for you.
Does it hurt to get a nerve block?

Getting a nerve block should be no more painful than getting an IV. We numb the skin before placing the nerve block and can also provide you with mild sedation prior to the procedure. Also, using ultrasound to locate the nerves during the procedure minimizes the amount of pain that you feel.

Can you put the nerve block in after I’m asleep?

Although any of these procedures can be performed under general anesthesia, doing so prevents you from giving us feedback as we work around your nerves. Placing the nerve block while you are “awake” (but comfortably sedated) adds an additional measure of safety to the procedure.

Is it safe to get a nerve block?

There are always risks associated with performing any procedure. Fortunately, serious complications associated with regional anesthesia are exceedingly rare. Anesthesiology practices that specialize in regional anesthesia commonly have systems in place to prevent complications and treat them quickly if or when they occur. We perform this procedure in a sterile manner to minimize the risk of infection. The possibility of trauma to the nerves exists, but your anesthesiologist may take special precautions, including the use of ultrasound, to decrease this risk. Most commonly, patients report mild bruising or soreness from the site of injection.