

Peripheral Nerve Block

PATIENT EDUCATION

PERIPHERAL NERVE BLOCKS

A peripheral nerve block has been requested by your surgeon for improved pain control after surgery. It is a type of regional anesthesia that involves an injection of numbing medicine (local anesthetic) around the nerves to reduce transmission of pain signals to the brain to keep you comfortable and control your pain.

A peripheral nerve block does not put you to sleep. However, you will likely receive IV sedation to relax you prior to the start of your nerve block. The type of peripheral nerve block you will receive depends on the type of surgery. Peripheral nerve blocks are performed by a board certified anesthesiologist under ultrasound guidance often with electric stimulation.

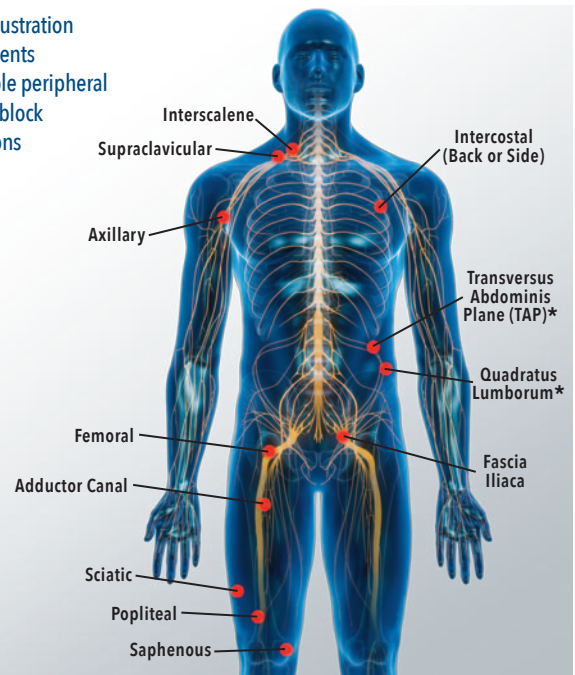
The reverse side of this document lists the most common types of nerve blocks based on the type of surgery. Site of the injection depends on the part of the body being treated. A peripheral nerve block can partially or completely block sensation in an arm, leg or other area for surgery but doesn't put you to sleep. It can be combined with sedation or general anesthesia during surgery.

After surgery, your treated limb may have decreased sensation; it may feel heavy or weak. You may have trouble controlling your limb and may need to use a sling or crutches while the anesthetic wears off. Depending on the type, location and medications used, the effects of the nerve block can last from eight to 20 hours or more after surgery. If requested by your surgeon, you may have a peripheral nerve catheter in place that provides pain relief for up to 72 hours after surgery.

Benefits of a Peripheral Nerve Block:

- Reduced need for narcotic (opioid) pain medication after surgery
- Improved pain control after surgery

This illustration represents possible peripheral nerve block locations



*These blocks are performed on both sides (bilateral) whereas the other blocks may only be performed on side of surgery.

Risks and Possible Complications of a Peripheral Nerve Block:

Peripheral nerve blocks are very safe and rarely cause significant side effects or complications. However, risks can include:

- Infection
- Nerve injury
- Irregular heartbeat
- Decreased blood pressure
- Seizures (very rare)
- Allergic reaction (very rare)
- Cardiac arrest (very rare)

The type of nerve block you will receive will depend on the type of surgery. See reverse side for additional information regarding the type of nerve block you will likely receive based on your surgery or procedure.



IMPORTANT

You're required to view the short educational video Anesthesia with Peripheral Nerve Blocks at least 48 hours before your surgery or procedure. You will then be asked to acknowledge that you have viewed the video in its entirety.

Scan the code above with your smart phone or tablet to view this document and related educational video(s). You may also access them at EisenhowerHealth.org/anesthesia

ABDOMINAL SURGERY (LAPAROSCOPIC, OPEN OR ROBOTIC)

You may receive a transversus abdominis plane (TAP) or subcostal nerve block which is performed by administering a local anesthetic injection on both sides of the abdomen, occasionally at the level of the belly button and/or just below the rib cage.

On occasion, especially with laparoscopic and robotic surgery, a rectus sheath nerve block is performed by administering an injection to either side of the belly button. These blocks work well for controlling pain primarily on the inside and outside of the abdominal wall.

The anesthesiologist may advise a quadratus lumborum nerve block which involves one injection toward the rear of each flank (the areas around the sides of your body from your upper abdomen to your back). These blocks work well for controlling surgical pain deeper in the abdomen.



TAP Block

CHEST AND SELECTIVE ABDOMINAL SURGERY

Occasionally, placement of a continuous epidural catheter is advised to deliver medication. This requires a catheter (a thin tube) to be placed in the middle of your back threaded into the epidural space to control your pain. This is also what is done to control the pain of labor and childbirth. The epidural space is just outside the sac where the spinal fluid runs. This is different than a spinal anesthetic.

For chest surgery, the epidural catheter is placed in the middle of the spine between the shoulder blades for continuous infusion of medication. These blocks work well for controlling chest pain after surgery, allowing one to take deep breaths, cough and mobilize phlegm in an effort to prevent breathing problems or pneumonia after surgery.

For abdominal surgery, in most cases, a single injection of narcotic in the epidural space in your back provides improved pain control for 24 hours or more after surgery. In some cases, an epidural catheter is placed in the back for pain control after surgery.



Thoracic Epidural

SHOULDER, ARM, ELBOW AND WRIST SURGERY

A local anesthetic is injected at the base of the neck above the clavicle on the side of surgery termed brachial plexus nerve block. It decreases sensation of the shoulder, elbow and wrist or hand. It can help control your pain after surgery and usually lasts 10 to 24 hours.

Your anesthesiologist may place a catheter, through which anesthetic can be given as needed. Your arm will have decreased sensation during that time, making it difficult to move. Your arm will be placed in a sling for support. Arm function will return to normal after the block wears off.



Brachial Plexus Nerve Block

ANKLE, UPPER AND LOWER LEG SURGERY

Femoral nerve block is performed by injecting medication in the upper middle thigh on the surgical side to decrease pain in the upper part of your leg. It can be used to block pain before and after surgery.

Depending on the extent of surgery, a sciatic nerve block may be administered on the back of the thigh above the knee. This block is given to provide pain relief along the back of the leg and foot following your surgery. If these blocks are performed, you may be fitted with a knee brace to prevent you from falling if weight bearing after surgery. The effect lasts for 8 to 20 hours or more. You may be given other medicine to keep your pain under control when the block wears off.



Femoral Nerve Block

KNEE SURGERY

An adductor canal nerve block is performed by administering an injection to the inside mid-thigh of the surgical side. Frequently, a catheter is placed at that site and a continuous infusion is maintained, improving knee pain after surgery for up to 72 hours.

Often, a second injection is administered behind the knee to control pain. You should be able to perform physical therapy later that day as these blocks typically do not cause weakness.



Adductor Canal Nerve Block