

# What is a Peripheral Nerve Block?

Information for Patients  
and Families



Hôpital  
Hotel Dieu  
Hospital



Hôpital Général de  
Kingston General  
Hospital

## **What is a Peripheral Nerve Block?**

A peripheral nerve block is local anesthetic, or freezing, given to numb a specific part of your body for surgery. The arm, leg, back and abdomen are the most common areas for a peripheral nerve block.

### **How long will it last?**

Often, your anesthetist will give you a single injection of freezing. It could take up to 36 hours for the freezing to wear off. As feeling returns, you may feel tingling in the skin, and this is normal. You should start taking pain relief medications before the freezing wears off completely. This is important as the pain can appear quite suddenly. If the freezing does not wear off after 36 hours, be sure to let your nurse know.

Other times, they may insert a soft, thin tube (catheter) into the tissues surrounding the nerve where freezing can be delivered continuously through a medication pump. The freezing will last for up to 24 hours after the pump is turned off.

### **What are the benefits of nerve blocks?**

1. Better pain relief than with other methods because the nerves surrounding the incision will be numb.
2. Improved pain relief allowing for activities that will promote healing such as deep breathing, coughing, walking, and eating nutritious foods, in turn reducing the risk of complications such as pneumonia, infection, and blood clots.
3. Fewer side effects such as nausea, vomiting, constipation, drowsiness, and confusion.

## **What if I don't want a nerve block?**

During your pre-anesthetic visit, your anesthesiologist will discuss your option for pain control. You have the right to help plan your care. It is your choice as to whether you want to have a nerve block. Other pain relief options include a combination of Tylenol and anti-inflammatory medications, as well as opioid (narcotic) medications.

## **Can anyone have a continuous nerve block?**

**No. A nerve block is not for everyone.** Together with your anesthesiologist, you will decide if a nerve block is right for you.

Be sure to tell your anesthesiologist if:

1. You are taking any blood thinners or have any problems with bleeding or blood clotting
2. Have any signs of infection
3. Have any pre-existing nerve damage
4. Have an allergy to local anesthetic
5. Have had problems with a nerve block in the past

## **How is a nerve block inserted?**

First, a nurse will insert an IV line in your arm to give you fluids and you will be connected to a monitor to measure your blood pressure, heart rate, and oxygen. Your anesthesiologist may use an ultrasound to find the nerves to numb. Once the nerves are found, a needle is put through your skin into the tissue near the nerve. Local anesthetic, or freezing, is given through the needle into tissues around the nerve to be numbed. When the freezing starts working, a sensation of warmth and numbness gradually develops. Notify the anesthesiologist or the nurse if you feel a sharp pain when the needle is inserted.

## Will it be painful?

The anesthetist will inject local anesthetic, or freezing, before inserting the catheter. The freezing will sting briefly, for about 10 seconds. When the needle is being inserted, you will feel some pressure, however most people do not find this to be unpleasant, just a bit strange.

## What are the potential complications

Generally, this is a safe procedure, however occasionally infection, bleeding, or swelling may occur. Other risks depend on the location of the nerves being frozen.

1. **Nerve Blocks of the Upper Limb:** Nerve blocks for surgeries of the shoulder and arm involve freezing a group of nerves called the brachial plexus. The anesthetist targets these nerves by inserting a needle in the side of your neck. You may develop a hoarse voice, droopy eyelid, and/or difficulty breathing. This will resolve as the block wears off.
2. **Nerve damage:** The risk of nerve damage caused by a brachial plexus block is about 1 in 5,000 blocks performed. If the block is performed lower down in your arm, the risk of nerve damage and its consequences may be less. Studies show 1 in 10 patients notice a lingering patch of numbness or tingling in the arm. These symptoms will resolve for 95% of patients within 4-6 weeks and for 99% of patients within a year.
3. **Bleeding or vessel injury and/or organ damage:** The anesthetist will use an ultrasound machine to find the nerve that will be frozen. This will help them to guide the needle exactly where it needs to be in order to prevent bleeding, vessel injury, or damage.

4. **Block failure:** Occasionally, the nerve block may not provide adequate pain relief. In this case, your anesthetist and nurse will work with you to create a plan to get your pain under control.
5. **Allergy:** It is rare, but you may have an allergy to the freezing medication that you did not know about. A full assessment of your health history will be performed before you have the nerve block. You will be monitored by the health care team after the nerve block to ensure you do not have any side effects.

### **How do I care for the frozen limb?**

While the freezing is working, you will not be able to move the frozen area. Be especially careful around heat and cold sources that could touch your skin. You will not feel heat or cold while the limb is numb so burns or frost bite can happen quickly. You will need to manually reposition your blocked limb frequently to prevent pressure areas and skin breakdown.

1. **Nerve Blocks of the Upper Limbs:** If you have had surgery on your shoulder or arm, you will be given a sling for support and protection.

2. **Nerve Blocks of the Lower Limbs:** If you have had surgery to the hip or lower legs, you will not be able to move your legs. Do not try to stand if your legs are numb, as you will not be able to support yourself and you will fall. Please ask for help from your nurse for your first time up.

**Questions you may like to ask your anesthetist regarding your nerve block**

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Kingston Health  
Sciences Centre

Centre des sciences de  
la santé de Kingston

76 Stuart St., Kingston,  
ON, Canada K7L 2V7  
Tel: 613.549.6666  
[www.KingstonHSC.ca](http://www.KingstonHSC.ca)

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