

## **Anesthesia for Hand, Wrist, or Arm Surgery**

For hand, wrist, or arm surgery, your surgeon will often request a nerve block for anesthesia. When patients receive a nerve block for anesthesia they often receive sedation during the surgery. But they may also receive general anesthesia. Your wishes and those of your surgeon are important in choosing the type of anesthesia and pain relief you will receive. Your medical condition will also affect the choice.

The type of nerve block offered for hand, wrist, or arm surgery is called a brachial plexus nerve block.

### **What is a nerve block?**

A nerve block means that numbing medicine is placed near nerves that provide feeling to a certain part of the body. For example, a dentist does a nerve block to numb your mouth for dental work.

### **What is a brachial plexus nerve block?**

A brachial plexus nerve block involves injecting numbing medicine in one of 3 places:

- At the base of your neck.
- Near your armpit.
- In your upper arm.

Where it is injected depends on the site of your surgery. The nerves that provide feeling to your arm travel from your neck down into your armpit and then down along your arm into your hand.

### **What are the benefits of a nerve block?**

By placing nerve blocks we reduce the need for narcotic pain medicine during your surgery. This reduces the amount of time it takes you to wake up. It decreases your risk for nausea and vomiting. A breathing tube and general anesthesia are often not needed. This decreases possible breathing problems. Research also shows that using nerve blocks for surgery will speed your recovery time by a number of hours. You may not need pain medicine for up to 12 hours after a nerve block, because the surgery site remains numb. For these blocks, your fingers, hand, and most of your arm will remain numb for 12 to 18 hours.

## What are the risks of a nerve block?

There is always risk to any medicine or procedure. In the case of brachial plexus nerve blocks the specific risks are the ones listed below.

- Bleeding caused by needle.
- Infection started by needle.
- Nerve damage caused by needle.
- Damage caused to your lung.
- Damage caused to blood vessels in the area.
- Shortness of breath.
- For a time, you may have a droopy eyelid or small pupil.

We take many steps to keep these nerve blocks as safe as possible. These steps include the use of ultrasound for placement of the injections when possible. In most cases, the benefits outweigh the risks. We will discuss this with you on the day of surgery. These blocks have been done very successfully at this hospital for many patients who are having hand, wrist, or arm surgery.

## The Day of Surgery

1. You will arrive in pre-surgery area. You will change into a gown. A nurse will review your health history and surgery plan.
2. You will see an anesthesiologist. He or she will talk to you about your health and anesthesia choices for the day. If you will be getting a nerve block, you will meet the block nurse. The block nurse will talk to you about your health. The block nurse will take you to a special room where the nerve blocks will be placed.
3. If you get a nerve block, you will be made sleepy with intravenous medicine. An ultrasound machine will be used to help guide the injections for the nerve block. Your skin may be numbed at the injection site.
4. When the nerve block is complete, you will go to the operating room. We will confirm your name, birth date, and procedure. You will receive medicines that will allow you to sleep during the surgery.
5. Once the operation is over, you will wake up. You will return to your pre-surgery room. You will be able to go home once you have met certain standards.
6. If you have **general anesthesia**, you will go to the operating room from your pre-surgery room. We will confirm your name, birth date, and procedure. You will have intravenous medicine to make you fall asleep. You will have a breathing tube placed. You will remain unconscious during the surgery. At the end of your surgery, we will wake you up. The breathing tube will be removed. You will go to the recovery room. Here you will continue to wake up. You will receive any treatment you need for pain or nausea. After this recovery time, you will return to your pre-surgery room. You will be able to go home or to your hospital room once you have met certain standards.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright ©4/2015. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7296.