

CT: Guided Nerve Block

How to prepare

Nerve blocks are medicines that are injected to lessen pain. A CT-guided nerve block uses a special X-ray machine to help your doctor deliver the medicine to the right area of your body. This handout explains how this procedure works and what to expect afterward.

What is a CT-guided nerve block?

In a *nerve block*, a medicine is injected into a certain nerve or group of nerves to treat pain. The medicine may be an *anesthetic* (numbing medicine) or an *anti-inflammatory* medicine.

- Anesthetics “turn off” a pain signal that is coming from a specific area in the body.
- Anti-inflammatories reduce inflammation in that area to lessen pain.

A *computed tomography* scan (CT or CAT scan) is used to help the doctor place the needle in the best location so that you receive the most benefit from the injection.

How does it work?

During the scan, you will lie on a table inside the CT machine. You will need to hold still for up to 1 hour or more.

Many X-ray beams will be passed through your body as the X-ray tube revolves around you. The machine will take pictures from many angles, forming cross-section images (*slices*) of the area. Your doctor will view the pictures on a computer.

How should I prepare?

You do not need to do anything special to prepare for your procedure. When you arrive for your procedure:



During the scan, you will lie on a table inside the CT machine.

- We will ask you to change into a hospital gown. Your belongings will stay with you during your visit.
- Use the restroom before your procedure begins.
- Tell your radiologist or the CT technologist if there is any chance you may be pregnant.

How is the procedure done?

- The CT technologist will help you get onto the CT table. Pillows will be used to help you hold the correct position during your procedure so your doctor has good access to the injection site.
- Your doctor will then locate the spot to place the needle, using *palpation* (touch) and CT guidance.
- Next, this area will be cleaned with antiseptic solution. Then, your doctor will insert the needle at the depth that will deliver the medicine as close as possible to the nerve or group of nerves that is causing pain.
- You may need more than 1 injection, depending on how many areas of pain you have or how large the area is. Your doctor will most likely tell you when the needle is being inserted and when the injection is done.

What will I feel during the procedure?

You will probably feel a pinch when the needle is inserted. As soon as the medicine is injected, you should feel less discomfort. It is important to hold still so that the needle reaches the right area.

If you need an injection close to a major nerve or bundle of nerves, your doctor will tell you to tell us if you get a sudden jolt of pain. This happens very rarely, but it means that the needle has come too close to a nerve.

After the injection, you will probably have pain relief in the area injected. This pain relief may last several weeks or months. How long it lasts depends on the cause of the pain and what medicine is injected. In some cases, the pain never returns.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

- UWMC Imaging Services: 206.598.6200
- UW Roosevelt Radiology: 206.598.6868
- Harborview Imaging Services: 206.744.3105

What happens after the procedure?

The *radiologist* (doctor) will give you information about what symptoms to watch for after your procedure. Your doctor who referred you for the nerve block will follow up with you and talk with you about next steps in your treatment. Some patients need more injections for longer-lasting or permanent pain relief.