

What is an intercostal nerve block?

An intercostal nerve block is a block of nerves that lie underneath the lower edge of each rib. For certain types of injuries, e.g., rib fractures, nerve injuries to the chest wall, postoperative pain along the rib nerves ("intercostal nerves"), injection of a small amount of local anesthetic can significantly diminish pain.

How long does it take to do?

The actual injection takes only a few minutes. Please allow about an hour for the procedure; this will include talking to your doctor before the procedure, signing the informed consent, positioning in the room, and observation by the recovery room nurse afterwards.

What medicines are injected?

The diagnostic injection consists of local anesthetic only. If the diagnostic injection is successful, your doctor may discuss with you the option of injecting other medications that could last for several weeks, months, or even permanently.

Will it hurt?

All of our procedures begin by injecting a small amount of local anesthetic through a very small needle. It feels like a little pinch and then a slight burning as the local anesthetic starts numbing the skin. After the skin is numb, the procedure needle feels like a bit of pressure at the injection site. If you experience any pain during the procedure, your doctor will inject more local anesthetic as needed.

Will I be "put out" for this procedure?

No. This procedure is done under local anesthesia.

How is it done?

It is typically done with you lying on your stomach with your arms stretched upward, if possible. Your blood pressure and oxygenation will be monitored. In addition to your doctor and the x-ray technician, there will be a nurse or medical assistant in the room at all times if you have any questions or discomfort during the procedure. The skin over the affected rib(s) is cleaned with antiseptic solution and then the procedure is done. A very small, slightly blunt needle is carefully placed under the rib, contrast agent is injected and its path is verified by x-ray. Then, the medicine is injected.

What should I expect after the injection?

Shortly after the injection, you may notice that your pain may be gone or considerably less. You will be kept in the recovery room for a short period for observation. Very rarely, this injection can result in a complication called a pneumothorax (collapsed lung) so a chest x-ray may be obtained.

What should I do after the procedure?

We advise the patients to take it easy for a day or so after the procedure. Perform the activities as tolerated by you. Your recovery room nurse will advise you about applying ice to the site.

Can I go back to work the same day or the next day?

You should be able to unless the procedure was complicated. Your doctor or recovery room nurse will discuss this with you.

How long does it last?

The long-term effect of the medication cannot be predicted. For the diagnostic injection, the duration is only for the effectiveness of the local anesthetic. If other agents are used, the block may last for weeks, months, or even permanently.

How many injections do I need to have?

This will vary with each patient; your doctor will discuss this with you.

Can I have more than one injection?

If the first injection is successful but the pain returns, you may be eligible for another injection, if you had relief from pain for a reasonable period of time. Your doctor will discuss this with you.

How will I know if it will help?

It is very difficult to predict how helpful injections will be. Generally, patients who have the symptoms described above will do well. Obviously, since there are several pain generators for back and chest wall pain, the degree of response will vary widely. Patients with recent onset of pain may respond much better than ones with longstanding pain.

What are the risks and side effects?

Overall, this procedure has very few risks. However, as with any procedure, there are some risks and side effects you should know about. Commonly encountered side effects are increased pain from the injection (usually temporary), inadvertent puncture of the "sack" containing spinal fluid (may cause headaches), infection, bleeding, nerve damage, or no relief from your usual pain. One complication that is very rare but can occur with this block is a "pneumothorax" (a collapsed lung). If you develop symptoms of shortness of breath a few hours after the procedure, you should call 911 immediately.

Who should not have this injection?

The following patients should not have this injection: if you are allergic to any of the medications to be injected, if you are on a blood-thinning medication (e.g. coumadin, injectable heparin), or if you have an active infection going on.