

Transforaminal Injection Information

What is a transforaminal injection?

A transforaminal injection is an injection of long acting steroid into the opening at the side of the spine where a nerve roots exits. This opening is known as a foramen. There is a small sleeve of the epidural space that extends out over the nerve root for a short distance. This epidural root sleeve is just outside the spinal canal. Sometimes these injections are referred to as root sleeve blocks, root blocks or transforaminal epidural blocks.

What is the purpose of a transforaminal injection?

The long acting steroid that is injected reduces the inflammation and swelling of spinal nerve roots and other tissues surrounding the spinal nerve root. This may in turn reduce pain, tingling and numbness and other symptoms caused by such inflammation, irritation or swelling. Also, the transforaminal injections can be used to identify a specific spinal nerve root level or levels that are the source of pain.

How long does the transforaminal injection take?

The actual injection takes five to ten minutes.

What is actually injected?

The transforaminal injection consists of a mixture of saline, local anesthetic and the long acting steroid medication. The amount of medication actually injected is very small, rarely more than one to three milliliters.

Will the transforaminal injection hurt?

The transforaminal injection involves inserting a needle through skin and deeper tissues. There is some pain involved. However, we often numb the skin and deeper tissues with a local anesthetic using a very thin needle before inserting the injection needle. Once numbed, placing the injection needle often feels like more of a strong pressure and pinching, often not as sharp pain. Some patients choose to receive intravenous sedation that can make the procedure easier to tolerate. Certain patients sometimes choose to undergo the transforaminal injection with nothing extra and do surprisingly well.

Will I be "put out" for the transforaminal injection?

No. This procedure is done under local anesthesia. Some patients choose to receive intravenous sedation that can make the procedure easier to tolerate. The amount of sedation given generally depends upon the patient. Some patients have enough sedation that they have amnesia and might not remember parts or all of the actual procedure.

How is the transforaminal injection performed?

Most are done with the patient lying face down in the prone position. Occasionally other positions are used to optimize the X-ray view. All patients receiving sedation are monitored with EKG, blood pressure cuff and oxygen monitoring device. Patients not receiving sedation are monitored if needed. The skin of the neck or back is cleaned with antiseptic solution and sometimes numbed with local anesthetic. Then the injection needle is placed under X-ray guidance. Once in place, the injection is made and this will often feel like the normal pain that

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the patient feels in the distribution of that particular spinal nerve root. Finally, the needle is removed and an adhesive bandage is applied.

What should I expect after the transforaminal injection?

Immediately after the injection, you may feel like your arm or leg is slightly heavy and may be numb, depending on where the injection was done and how much local anesthetic was used. Even so, despite the numbness, most patients can still actively move their arm or leg. This strange effect comes from the concentration of the local anesthetic and not from the amount of local anesthetic. Also, you may notice that your pain may be gone or quite less. This immediate effect is also due to the local anesthetic injected. This will last only for a few hours. Your pain may return and you may have some soreness or aching for a day or two. This is due to the mechanical process of needle insertion, as well as initial irritation from the medications injected. You should start noticing pain relief starting the third day or so.

What should I do after the transforaminal injection?

Any patient receiving sedation must have a ride home. Patients not receiving sedation might be able to drive, although there may be sufficient numbness to make driving difficult, if not impossible for several hours. Thus, we generally advise all patients to have a ride home or backup plans in case one is needed. Most patients are advised to take it easy for a day or so after the procedure until the medication has a chance to work. However, most patients can perform any activity that they could perform before the procedure.

Can I go back to work the next day?

You should be able to go back to work the next day unless the procedure was extensive or complicated and involved a large number of levels. Usually you will feel some soreness or aching at the injection site only.

How long does the effect of the medication last?

The immediate effect is usually from the local anesthetic injected. This wears off in a few hours. The steroid starts working in about 3 to 5 days and its effect can last for several days to several months.

How many transforaminal injections do I need to have?

If the first transforaminal injection does not relieve your symptoms within two weeks, you might be recommended to have a second injection. Similarly, if the second transforaminal injection does not completely relieve your symptoms in about a week to two weeks, you may be recommended to have a third injection. If there was no improvement after two injections, it is unlikely that a third transforaminal injection will help.

Can I have more than three transforaminal injections?

In a six-month period, most patients do not receive more than three injections. This is because the effect of the medication injected frequently lasts for six months or more. If three injections have not helped you much, it is not too likely that you will get any further benefit from more injections. Also, giving more injections will increase the likelihood of side effects from the medications injected.

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Will the transforaminal injection help me?

It is sometimes difficult to predict if the injection will help you or not. Patients who have pain radiating from the spine down into the arms or legs respond better to the injections than the patients who have only pure neck or back pain. Similarly, the patients with a recent onset of pain may respond much better than patients with longstanding pain.

What are the risks and side effects?

Generally speaking, transforaminal injections are is safe. However, with any procedure there are risks, side effects and possibility of complications. The most common side effect is pain from the actual injection once the local anesthetic wears off and this pain is temporary. The other uncommon risk involve spinal puncture with headaches, infection, bleeding inside the epidural space, nerve damage and worsening of symptoms. Other uncommon risks are related to the side effects of the long acting steroid such as weight gain, increase in blood sugar in diabetics, water retention and suppression of body's own natural production of steroids. While extremely rare, as with any invasive procedure, the risks of paralysis and death are possible.

Who should not have a transforaminal injection?

If the patient is on a blood thinning medication, has an active infection going on, or has poorly controlled diabetes or heart disease, they probably should not have the injection or at least postpone it, especially if postponing it may improve their medical condition.

Patient Signature

Date

Witness

Date