

Epidural Steroid Injections

An epidural steroid injection is an injection of local anesthetic and steroid into the epidural space. The epidural space is located within the spine, just outside of the sac containing the spinal fluid.

The goal of an epidural steroid injection is to provide pain relief by reducing the inflammation (swelling) and nerve pain signaling of the spinal nerve roots. The injection also helps with confirmation of your diagnosis (confirming the true source of your pain). An epidural steroid injection will not correct the preexisting medical problem (such as spinal stenosis, herniated or bulging disc, arthritis, etc.) causing the pain, but it may improve the level of pain and dysfunction.

It is not unusual for someone to need more than one injection to get long-term benefit. If the pain is significantly improved, no further injection is needed unless the pain begins to come back. Typically, we try to limit the number of injections to three per year, and at that amount any long-term negative effects of the medication are avoided.

What are the risks of the procedure?

The main risk, occurring in less than one in 500-1000 patients, is the risk of a dural puncture. (This rate is higher in patients who have had previous back surgery.) A dural puncture occurs when the needle punctures the membrane that surrounds spinal fluid. If this occurs, there is a risk of developing a spinal headache, which may be severe and may last for days. There is a procedure (epidural blood patch) that can treat the headache if it occurs and does not improve sufficiently in 48 hours.

Other risks are rare and include bleeding, infection, nerve injury, and allergic reaction to the medication.

Some short-term side effects may occur. If local anesthetic spreads to nearby nerves, you may have weakness or numbness that can last for one to two hours. If this happens you will have to stay in the clinic until this resolves. You may have increased pain for a few days after the injection. People with diabetes may have short-term elevation of blood sugars.

The procedure cannot be performed if you have an active infection, flu, cold, fever, very high blood pressure or if you are on blood thinners. For your safety, please make your doctor aware of any of these conditions.

If you have a history of high anxiety related to medical procedures- or nausea, excessive sweating, fainting, or dizziness/lightheadedness with previous medical procedures; oral valium is recommended and can be prescribed for you to take prior to the injection. This will very likely eliminate these reactions (called vaso-vagal reactions). If this is needed, please mention it to our staff so that we can get you the prescription in a timely manner.

Will the injection hurt?

Most people say the stinging/burning of the numbing medicine is the most uncomfortable part of the procedure, although every person's response to any procedure is individual.

What happens during the actual procedure?

The procedure will be performed while you are in the prone position. For certain types of injections (transforaminal injections) in the neck, an IV is started.

The back or neck is then cleansed with an antiseptic soap. The skin is numbed and this is felt as a stinging or burning sensation. The needle is then advanced into the epidural space. Pressure is the usual sensation. If you feel pain, more numbing medicine will be used. Once the needle is in the epidural space, the medication is infused and the procedure is complete. Your skin will be cleansed and a bandage will be applied. Your blood pressure will be checked, and you will be able to leave with your ride after the doctor authorizes your discharge.

How will I feel after the injection?

Most people do not feel any different immediately after the injection, although the pain may be temporarily improved or worsened. The steroid takes two to three days to start to have an effect in most people, and it peaks in about two weeks. Some local tenderness may be experienced for a couple of days after the injection. Using an ice pack three to four times a day will help this. You may take your usual pain medications as well after the injection.

Will I have any restrictions on the day of the procedure?

You may not drive if you have any numbness in the leg/foot or arm/hand, which is common after this procedure. You must have a driver, or else you must wait at least 30 minutes and assess for any numbness or weakness before driving. You should not take a tub bath, or soak in water (such as a pool or hot tub) for two days following the injection. We request that you take a shower prior to the injection. You may eat, drink, and take your medications (except for blood thinners), as usual on the day of the procedure (both before and after) unless told otherwise by your doctor.