



MARSHFIELD CLINIC®

EPIDURAL AND OTHER SPINAL INJECTIONS

WHAT IS AN EPIDURAL INJECTION

An epidural injection is a procedure where lidocaine (a numbing medicine) and cortisone (a very strong anti-inflammatory medication) are injected in the epidural space of the spine. The epidural space surrounds the spinal cord and the nerve roots.

WHAT IS THE PURPOSE

The cortisone injected in the epidural space reduces inflammation (flare-up with redness, swelling, and pain) of the epidural area and the nerve roots nearby that come out of spinal cord at or near the level of injection. It helps to calm down the 'angry' nerves in the epidural space to offer some relief while the body tries to heal itself.

WHAT CAUSES THE INFLAMMATION

There could be a number of causes. The most common cause is a degenerative disc condition. When the outer covering of the disc cannot hold inner gel material, it may ooze out, causing inflammation resulting in mostly back/neck pain. Disc herniation or displacement of disc may cause compression on the nerve root with inflammation, resulting in sciatica with shooting pain down the leg. In the neck it can cause similar pain down the arm and hand down to the finger. Tightness of the spinal canal or spinal stenosis can cause pressure in the nerves resulting in inflammation and pain as well.

WHAT IS ACTUALLY INJECTED

- Lidocaine/novocaine/Xylocaine®: local anesthetic (numbing medication)
- Triamcinolone/methyl prednisolone/celestone: which are generally known as cortisone (a kind of steroid and a very strong anti-inflammatory medication); our body produces cortisone on a regular basis

DOES THE INJECTION HURT

It is an injection and you can expect some pain, but most patients tolerate it very well. Skin and deeper tissue is numbed with local anesthetic to reduce discomfort. Patients feel a sting from a very fine needle, followed by a burning sensation for about 1 minute while the numbing medicine starts to take effect. If the injection is a caudal epidural (done in the tail bone area), expect some pressure sensation while injecting the medication. Most of the time patients find it less painful than they had initially thought.

WILL I BE "PUT TO SLEEP" FOR THE PROCEDURE

No. It is not a surgical procedure and patients tolerate this very well with local anesthetic (numbing medication). It is safer if the doctor can communicate with the patient while doing the injection. Also, the doctor needs to know from the patient if there is any immediate pain relief following numbing medicine injection over the painful area.

DO I NEED TO FAST BEFORE THE INJECTION

It is recommended that you do not eat or drink (except sips of water for taking routine medication) for 4 hours prior to the actual injection. You will be asked to come to the clinic at least 30 minutes before the actual injection.

If you have diabetes and take insulin, eat a light breakfast early and take your insulin as you have been doing.

SHOULD I CONTINUE MY REGULAR MEDICATIONS

Yes. Please see under 'who should not have this injection' and the separate chart about medications to be discontinued days before the injection.

HOW IS THE PROCEDURE DONE

The patient is usually positioned face down (some procedures are done while the patient is on their side). The skin is cleaned with antiseptic solution. Patients are monitored with EKG, blood pressure, and blood oxygen. There is an X-ray machine above the patient and the procedure is done under X-ray guidance, so the doctor can place the tip of the needle accurately. A small amount of contrast dye is then injected, which can be seen under X-ray to make sure the exact path of the medication to be injected. It is a very precise procedure and in fact it literally is a "needle-point" injection, if not "pin-point".

HOW LONG DOES THE PROCEDURE TAKE

Depending on the type of injection and whether it is single or multiple injections, the duration of the procedure may vary. In general, a single injection usually takes 5 – 10 minutes from the time the needle is put in and taken out. However, the total time a patient may need from when they come in and leave the clinic may be over an hour.

WHAT SHOULD I EXPECT AFTER THE INJECTION

Your legs may feel somewhat heavy or numb from the numbing medicine, which will gradually disappear in the next several hours. You may feel immediate pain relief from the numbing medication, however the pain may return in a couple of hours as the numbing medicine wears off. You should start to feel pain relief again about the third day, when the cortisone starts to kick in. In about one week you will know how much better you may get. Expect mild discomfort over the area of the injection for the first 1 – 2 days. Rarely patient may feel increased pain, which should get better in the following days.

CAN I GO BACK TO WORK THE NEXT DAY

You should be able to if you are working now. Actually you should be able to continue your regular activities within a few hours after the injection, though we recommend no driving on that day. You should have a ride home after the injection.

WHAT ARE THE RISKS AND SIDE EFFECTS

In general the injections are safe. However, with any procedure there are risks, side effects, and possible complications. Serious complications are extremely rare. Those who have high blood pressure or diabetes may experience a temporary increase in blood pressure or blood sugar for several days, which should come back down by itself. We recommend that you contact your primary care doctor if your blood pressure or blood sugar is unexpectedly high.

Occasionally some patients may experience some flushing of the skin of the face and increased warmth in the area. If there is no skin rash or itching, it is unlikely to be an allergic reaction and should go away within a week. If you do develop an allergic reaction to any of the medications, it could be skin rash and/or itching. You may take Benadryl®, 25 mg tablet, which is over-the-counter. If that does not help or you develop any sensation of swelling in the tongue or throat, or difficulty in breathing, you should seek immediate medical attention either through Urgent Care or Emergency Room, or call 911. Please be sure to tell your doctor if you know you have an allergy to contrast dye, cortisone/steroids, or numbing medication.

WHAT IF THE INJECTION DOES NOT HELP

Do not consider the injection as a 'permanent fix' for your back. The injection is to help calm down the 'angry' nerve, to offer you comfort while your body tries to heal or recover. If that does not happen, you may need other measures including consideration of surgery. If the injection helped for weeks or months and then the same pain returned, the injection may be repeated.

WHO SHOULD NOT HAVE THIS INJECTION

- If you are taking a blood thinner like Coumadin® (warfarin) or Plavix® (clopidogrel), the medication needs to be stopped for some days prior to the injection. Stopping this medication may carry some risks that need to be determined by the doctor who put you on the medications.
- If you are taking aspirin (even baby aspirin) or other anti-inflammatory medications like ibuprofen/naproxen/Motrin®/Aleve®, talk to your doctor who will perform the injection to determine if and when you should stop them before the injection.
- Details of the medication lists that are to be discontinued should have been supplied to you in a separate sheet with this information.
- If you are pregnant or may be pregnant, inform the doctor.
- If you are being treated for or have an active infection, you should wait until the infection is over.