

Utah Spine Medicine Guide to Spinal Injections

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What is a spinal injection?

Spinal injections, also known as “blocks,” are performed to help decrease pain emanating from structures in the spine. Spine injections also provide diagnostic information to determine the source of a patient’s spine pain. Injections are done under fluoroscopic guidance (real time, X-ray based imaging) to ensure proper placement of the medications.

For therapeutic injections, the main medication used is steroid, also commonly known as “cortisone.” Steroids are the strongest anti-inflammatory medications that we know of and are widely used in many applications to control inflammation and pain. Please note that these steroids are different from the steroids used for strengthening and body building.

What types of spinal injections are there?

Epidural injections place medications around the nerves and the discs of the spine. The “Dura” is a thick lining that encases the nerves and spinal fluid. An epidural injection aims to place medication around (“epi”) this dural layer. The types of epidural injections include transforaminal, interlaminar and caudal injections.

Joint injections in the spine place medications into the facet joints (a.k.a. zygapophysial joints) or sacroiliac joints. Facet joints are paired joints at the back of the spine at every level from our head to our tailbone. The sacroiliac joints are large joints at our tailbone level that connect our spine with our pelvis. Both of these types of joints (which are also the same types of joints as our shoulders, hips and knees) are common causes of back and neck pain.

Medial branch injections place anesthetic onto small nerves that innervate the facet joints. This is a diagnostic procedure. If there is an appropriate response, then the patient may be candidate for a rhizotomy procedure. Radiofrequency rhizotomy (a.k.a. ablation and neurotomy) is a procedure that burns these nerves to provide more prolonged pain relief emanating from the facet joints.

Other joint injections we perform include shoulder and hip joint injections.

What medications are used?

Steroids (e.g. cortisone, dexamethasone, triamcinolone) are very strong anti-inflammatory agents and are used to decrease inflammation to reduce pain.

Local anesthetic (e.g. Lidocaine) is injected to numb the targeted structures and can provide immediate benefit, but generally only lasts several hours. Because anesthetic can cause numbness and weakness in your limbs after the procedure, you need a driver to safely take you home.

Contrast agent (e.g. Isovue, Magnevist) is used to ensure proper needle placement and appropriate flow of the medications under live fluoroscopy. Please be aware that Isovue is an iodine based agent. If you have an iodine allergy, please alert Dr. Cheng or a staff member prior to the procedure, so that we can take the necessary precautions for your procedure.

Betadine is used to sterilize your skin in the area of the injection. Betadine is also an iodine based agent.

**If you have any allergies to any of these medications, please inform Dr. Cheng or a staff member.*

How do I prepare for my injections?

Because the anesthetic can make your limbs numb and weak, you need a driver to after the procedure.

Please notify Dr. Cheng or a staff member if you are on any blood thinners or anti-coagulants (e.g. aspirin, Coumadin/warfarin, Plavix, Eliquis, Xarelto, Lovenox, Aggrenox and others). We will need to take appropriate steps to manage these medications and arrange appropriate scheduling of you procedure.

Please take your other medications as you would normally, especially your blood pressure and diabetes medications. We cannot perform your procedure if your blood pressure or your blood sugar levels are too high.

You may have a light meal prior to the procedure. This might include toast or cereal in the morning, or soup and a sandwich at lunch. Occasionally, these procedures can cause some nausea.

If you are diabetic, we will check your blood sugars prior to the procedure. Steroids can cause your blood sugars to increase to dangerous levels. Therefore, we will not perform the procedure if your blood sugar is higher than 200 mg/dL. Please plan your medications and meals accordingly.

Please wear loose and comfortable clothing. Depending on your procedure, we may have you change into a gown.

What should I expect at my injection appointment?

Please arrive 15 minutes prior to your scheduled time to check in and complete the appropriate paperwork. You will then be taken to an examination room where you will be able to change, if needed, and store your belongings. You may have a family member or friend accompany you to this room. Dr. Cheng will then take you to the Injection Suite and guide you through your procedure. He will be accompanied in the room by our fluoroscopy assistant. Upon completion of your procedure, Dr. Cheng will escort you back to your clinic room where we will ask you to remain with us for 15 minutes to ensure that you remain stable after the injection. We will also ask you for a percentage of response (e.g. 100% is complete resolution of pain and 0% is no change at all) upon your discharge.

How about after the procedure?

The anesthetic can cause transient numbness and weakness in your limbs. This usually improves within a short while, but may last up to several hours. Please remain cautious with your activities for the remainder of the day.

The steroids often have a delayed effect, sometimes taking 2 days and up to 2 weeks to start working. We advise that you give the injection several weeks to monitor its overall effect. We usually have you follow-up between 4 weeks and 3 months after the procedure, depending on your situation.

Between the anesthetic wearing off and the steroids taking effect, you may feel a return or even an increase in pain symptoms. This is a typical response pattern and should not cause alarm. Please call our office with any concerns, but usually we advise that you give the steroids more time to take effect. In the meantime, you may continue your activities as tolerated and your medications as needed.

Tenderness at the injection site is common. You may take your medications for pain if needed. An ice pack may also be helpful. Avoid heat for the remainder of the day after the procedure.

We advise that you avoid baths, pools or hot tubs for 3 days after a procedure to allow time for the injection sites to heal and avoid possible infection.

What are common risks and side effects of these procedures?

As with any invasive procedure, risks include infection, bleeding, damage to blood vessels or nerves, reactions to medications, stroke, paralysis, blindness and death. These risks are rare for spine injection procedures and we follow standard sterile protocols to minimize these risks.

Side effects from steroids may include facial flushing, headaches, agitation, trouble sleeping at night, increased energy, euphoria, and upset stomach. Some women may experience a change in menstrual characteristics. Side effects are usually self-limiting and resolve within several days to weeks.

When should I call if I am having concerns or problems?

Please notify our office if you are experiencing excruciating pain, fevers (temperature > 100°F), loss of motor function in your arms or legs, loss of bowel or bladder control, severe headaches, redness or swelling at the injection site, or other concerns.

Our office number is **(801) 314-5114**. Our after hours number is **(385) 743-1694**.