



Diagnostic Injections

Diagnostic injections are usually performed in order to confirm or diagnose the source of pain and direct future treatments. The location of your pain will determine the injection site of the medication. A local anesthetic is used to temporarily block the suspected pain generator. It is important to understand that this injection is a means of gathering information; it is not a definitive treatment for your pain. The anesthetic will work very quickly, but only lasts for a few hours. Use your Post-Procedure Pain Log to record your symptoms and bring this with you to your follow up appointment. Your provider will use this information in determining your treatment plan.

Steroid Injections

Steroid injections are indicated to treat a variety of symptoms. The location of your pain will determine the injection site of the medications. Most injections also include local anesthetic to help with procedural discomfort. Often patients experience immediate relief from the local anesthetic, which will last up to a few hours. Once the local anesthetic begins to wear off, you can expect to have recurrent pain for a period of time. Patients normally notice improvement in their symptoms from the steroid medication within 2-3 days, or at most 5-7 days after the procedure. Use your Post-Procedure Pain Log to record your symptoms and bring this with you to your follow up appointment. Your provider will use this information to determine future treatment options.

Regenerative Medicine

PRP (Platelet Rich Plasma)

PRP injections are indicated to treat a variety of symptoms. The location of your pain will determine the injection site of the medication(s). Typically, patients experience increased pain in the treatment area for 2-5 days, with the pain returning to baseline after 7-14 days then gradually improving over the next several weeks. Use your Post-Procedure Pain Log to record your symptoms and bring this with you to your follow up appointment.

BMAC (Bone Marrow Aspirate Concentration)

Stem cells are regenerative cells responsible for repair and rebuild damaged tissue. The body's richest reservoir of these repair cells is in the bone marrow. These unique cells are the only cells in the body that have the capacity to become many different cell types. They can be harvested from the bone marrow and concentrated for injection into an area that is not healing properly. This is called bone marrow aspirate concentrate (BMAC). Once deposited at the injury site, they have the ability to divide in order to generate cells of the exact type that are required for healing. The concentrated cells can also accelerate the healing process, promote strength, pain relief and improve overall function.

Stem Cells (donor)

Stem cells are regenerative cells responsible for repair and rebuild damaged tissue. These unique cells are the only cells in the body that have the capacity to become many different cell types. They can be harvested from multiple types of donor tissue for injection into an area that is not healing properly. Once deposited at the injury site, they have the ability to divide in order to generate cells of the exact type that are required for healing. The concentrated cells can also accelerate the healing process, promote strength, pain relief and improve overall function.

Spinal Cord Stimulation

Spinal cord stimulation is an implantable device that can be used to help control neuropathic pain. There are different types of devices available. Your provider can give you device-specific information if this is a therapy recommended for you.

Intrathecal Pump

Intrathecal pump is an implanted drug delivery device that can be an option for patients with chronic pain that has not responded to any other treatment. Your provider will determine if you are a candidate for this device and provide device-specific information.

Injection FAQs

What medicine will be used for my procedure?

Our providers perform a variety of injections. The medication used will be determined by the type of injection you are scheduled for. Typically, diagnostic injections include a local anesthetic/numbing medicine such as Lidocaine or Bupivacaine to numb the injection area. Some injections include a steroid medication such as Dexamethasone, which can reduce inflammation and pain. Steroids are contraindicated in some instances and therefore not used. X-ray contrast is also used in some of our procedures. Please let us know if you have had allergic reactions to any of these medications in the past.

Why do I need a driver for the procedure?

The local anesthetic/numbing medicine used during the procedure may affect nerves that control your arms or legs by making your arm or leg feel slightly numb or heavy for a few hours after your procedure. Driving in this condition is not recommended. If you do not have a driver for your procedure, it will be rescheduled.

How long will the procedure take?

Typically, you will be ready for discharge in less than 30 minutes.

Will the procedure hurt?

Pain levels and tolerances vary from patient to patient. There are many factors that can impact the amount of discomfort that you may feel during the procedure, including but not limited to: your diagnosis and anatomy, the severity of the underlying condition, the amount of inflammation present, the location of the injection and volume of medication injected. Every effort will be made to make you as comfortable as possible. Procedures are generally tolerated very well.

What should I expect after my procedure?

You may feel immediate pain relief after your procedure. This is the effect of the local anesthetic/numbing medicine used during your procedure. This will wear off and your pain will return to baseline a few hours after the procedure, although you may experience increased aching or tenderness. If steroid medication was used for your procedure, it will take a few days before you begin to notice the therapeutic effects of the steroid. During this time, you may continue your normal pain medications or whatever you've been doing up to this point to control your pain.

How long will the benefits from my injection last?

This depends on the purpose of the procedure. Some procedures are only intended to gather diagnostic information, and therefore are not intended to have lasting effects. Therapeutic injections that may include steroid can last for a longer time. However, this varies from patient to patient, depending on each patient's individual diagnosis and the severity of the underlying condition. Talk to your healthcare provider about the expected outcome of your injections.

Can I eat before/after my procedure?

Eating does not affect the procedure. However, many procedures are performed with the patient lying on their stomach, so you may want to eat a lighter meal than normal so you are not uncomfortable in this position.

If my procedure includes steroid, will it make me gain weight?

No, this is **not** the same type of steroid that is used by some athletes and bodybuilders. Normal side effects of this type of steroid are temporary and can include:

- Fluid retention/bloated feeling
- Facial flushing
- Anxious or hyper feeling
- Trouble sleeping
- Increased blood sugar

Can I take my normal medications before and after the procedure?

You may take all of your normal medications except prescription blood thinners. Some, but not all, procedures require blood thinners to be temporarily discontinued. If this is recommended for your procedure, your prescriber will be contacted for approval. Our scheduling staff will give you specific information about this. Please do not stop taking any of your routine medications unless our office staff tells you to do so.

What if I'm taking antibiotics?

If you are sick or being treated for infection, please notify our office at 573-332-7746. We will discuss your symptoms and ensure your safety prior to proceeding with your injection. In some cases, your appointment may need to be rescheduled due to risk of complications.