Spinal Injections

Patient's Guide to Spinal Injection Procedures

- What is a Spinal Injection?
- What Medication Do I Get During the Procedure?
- Are There Different Types of Injections?
- What Happens After the Injection?
- What Can I Expect?
- Can All Spine Problems be Treated by a Block?
- Should I Do Anything to Prepare for the Procedure?
- What are the Potential Complications?
- For What Reasons Should I Call the University of Maryland Spine Team?
- Who Should I Call If There is a Problem?

What is a Spinal Injection?

The spinal injection you will have is also known as a block. Following your evaluation at the University of Maryland, it will be determined is made by objective findings, such as your physical examination, test results (EMG, lab work), and radiology studies (MRI, CT Scan, Bone Scan) as well as subjective information (the actual symptoms and pain you are experiencing). We then decide which specific block you should get.

The injection is performed under X-ray guidance, also known as fluoroscopy. This enables the physician to visualize your spine to ensure accurate needle placement. The benefits of having the injection done under X-ray guidance are, reduced risk of complication and improved chances of positive results. This information is determined by comparing this approach to blind injections (without X-ray guidance), Published reports have shown that blind injections deposit medication in the wrong place 25-40% of the time.

What Medication Do I Get During the Procedure?

Generally, there are three substances injected during the block procedure. They are local anesthetic (to numb the area), contrast agent or dye (to outline the structures in your spine) and steroid (the medication used to reduce inflammation and decrease your pain). You should report any known allergy to one of these substances to a member of the University of Maryland Spine Team immediately. If the allergy is to the contrast agent, or if you have a reaction to seafood, shellfish or iodine, you will require an allergy preparation prior to your injection. A member of the University of Maryland Spine Team will supply you with a prescription and explain how the medication should be taken.
Are There Different Types of Injections?

A variety of injections are performed at the University of Maryland and each one is directed at specific structures in your spine. All of the injections fall under two general categories: diagnostic block -- test injections where only a contrast agent and local anesthetic are used, and therapeutic blocks -- where a contrast agent, local anesthetic, and steroid are used. A diagnostic block is required when the source of your pain has not been clearly identified. It is a test used to determine which spinal structure is causing your symptoms. In order to be effective, the diagnostic injection must be performed while you are experiencing your usual amount of discomfort. If you are pain-free the day of your scheduled appointment, please cancel and reschedule. **PLEASE DO NOT TAKE YOUR PAIN MEDICINE THIS DAY.** During the procedure, the local anesthetic will be injected at the site most likely to be causing your pain. Shortly thereafter, you will be assessed by a member of the University of Maryland Spine Team to determine whether the local anesthetic has relieved your pain. It is important to remember diagnostic blocks are tests. They are not intended to cure your problem. Once the local anesthetic has worn off (within one hour) your usual symptoms will return. You may require one or more diagnostic blocks. The number of diagnostic blocks you receive is determined by your response immediately following your initial injection. If you have a positive response (you were significantly relieved of pain immediately following the injection), you will then receive therapeutic injections. If you do not have pain relief, another diagnostic block will require.

Therapeutic injections differ from diagnostic ones in only one way. In addition to a local anesthetic and contrast agent, a therapeutic block utilizes a steroid. The steroids used in these injections do not build muscles; they are not the kind of medicine the body builders and athletes take. The purpose of the steroid is to reduce inflammation, thereby decreasing pain. The therapeutic injection will not give you immediate relief of your symptoms. The steroid effect begins anywhere from 4 to 6 hours to one week after your block. It provides a gradual but steady relief of your symptoms. It is not a "quick fix".

The injections performed at the University of Maryland are one component of a total rehabilitation program. They are used in conjunction with a physical therapy and medication regimen to maximize the probability of a good outcome. Therefore, you should continue doing everything you were instructed to do in your initial evaluation, unless told otherwise by a member of the [University of Maryland Spine Team](https://uofmhealth.org/spine).

What Happens After the Injection?

After your injection is completed you can change into your clothes. A member of the University of Maryland Spine Team will then give you any additional instructions you may need.

What Can I Expect?

The most common side effect of this procedure is a transient increase in pain for the first 24-72 hours after the injection. This occurs because the substances injected are placed in an area where there is already inflammation. You should not be alarmed by this. Your symptoms should gradually diminish in the days following the block.
There may also be some tenderness at the needle insertion site. Should you experience this problem, you place an ice pack on the area to reduce the discomfort, as often as you require.

The above side effects are not a reason to cancel your subsequent injections. Your injections should be canceled if you have 90-100% symptom relief, on a consistent basis, which lasts up to the day prior to your next block. You should then call our office and speak with a member of the University of Maryland Spine Team to determine whether your block should be canceled.

The expected success rate for these injections depends on your diagnosis. You should be aware the procedure may be ineffective. It should also be noted, the duration of the procedures effectiveness is unpredictable.

Can All Spine Problems be Treated by a Block?

The injections we perform are not appropriate for everyone. It is conceivable your condition cannot be treated with non-surgical measures. If this applies to your situation, surgery may then be recommended. Likewise, if there are not medical remedies for your condition, you will be apprised of that opinion at the time of your initial evaluation at the University of Maryland.

Should I Do Anything to Prepare for the Procedure?

If your procedure is scheduled in the morning, you should have a light breakfast such as toast and cereal, nothing heavy.

Those patients scheduled for afternoon procedures should eat a normal breakfast (i.e. cereal, toast, etc.) and a light lunch, such as a sandwich and soup. You may take your regularly scheduled medications; however, there are some exceptions. Hold any anticoagulants, such as Coumadin, Heparin or Lovenox, for three days prior to your procedure. Hold Glucophage the day of the procedure and 48 hours post procedure. If you are having a test injection, hold your pain medication. Please take all your medications on the day of procedure other than the ones you have been informed to stop. Please call the University of Maryland Spine staff prior to your appointment if you have any questions or concerns.

You should arrive at the office one-half hour prior to your procedure. You will then be asked to change into a patient gown and be taken to the fluoroscopy suite, where the injection is performed. You should expect to be here approximately 1-2 hours for morning procedures and anywhere from 1-4 hours for afternoon procedures. You must have someone drive you home after the procedure. Please take all your medications on the day of procedure other than the ones you have been informed to stop.

What are the Potential Complications?

As with any invasive procedure, there are possible complications you may experience. These include: allergic reaction, infection, excessive bleeding, lightheadedness, necrosis of bone, steroid flush, permanent nerve damage, dural puncture, headache, seizure, cardiovascular
collapse, loss of bowel and bladder control, sexual dysfunction, paralysis, spinal headache, stroke, meningitis, cardiac arrest, fainting, and death.

If you have any additional questions about the potential risk factors, a member of our team will be happy to discuss them with you.

**For What Reasons Should I Call the University of Maryland Spine Team?**

- A temperature of 100 degrees or more
- Excruciating pain
- Loss of bowel or bladder control
- Loss of motor function in arms or legs
- Headache in the standing or sitting position, which is fully relieved by lying down