Connecticut Orthopaedics

EpiDural Steroid Injections

An epidural injection delivers steroids into the epidural space around spinal nerve roots to relieve pain - back pain, leg pain, or other pain — caused by irritated spinal nerves. The steroid used in the epidural steroid injection reduces the inflammation of those nerves, which is often the source of the pain. It is important to note that an epidural steroid injection should not be considered a cure for back pain or leg pain: rather, the goal is to help patients get enough pain relief in order to be able to progress with their rehabilitation program. An epidural steroid injection significantly reduces pain for approximately 50% of patients. It works by delivering steroids directly to the painful area to help decrease the inflammation that may be causing the pain. In addition to relieving pain, the process of natural healing can occur more quickly once the inflammation is reduced.

Prior to your procedure

- DO NOT take any type of blood thinning medication Non-Steroidal Anti-inflammatory (NSAID), Aspirin, Motrin, or Celebrex 3 days prior to injection
- If taking Coumadin (Warfarin) or an anti - platelet drug (Plavix, Ticlid) you must be off this medication long enough for your blood to normalize. Please let us know if you are using Coumadin or Plavix or Ticlid.
- You will need someone to drive you home after the injection, please make plans to have someone with you.
- Please bring with you a list of your medications and the dosing.
- Take your medications, EXCEPT NSAIDS, Coumadin and other Anti-platelet drugs, normally.
- You may have a light meal prior to the procedure.

Epidural steroid injection procedure

The injection procedure for an epidural includes the following steps:

- The patient lies face down on an x-ray table and the skin is well cleaned with an antiseptic.
- The area where the epidural needle will be inserted is numbed with a local anesthetic.
- Fluoroscopy (a guided X-ray procedure where the doctor can watch the placement and movement of the needle) will be used to direct a small needle into the epidural space. The patient will feel some pressure during this part. Fluoroscopy is important in this procedure to help ensure correct placement of the medications.
- A contrast dye is injected to confirm that the medicine spreads to the affected nerve(s) in the epidural space.
- A combination of numbing medicine (an anesthetic) and time released anti - inflammatory medicine (a steroid) is injected.

The procedure usually takes approximately 30 minutes, followed by about 30 minutes of recovery time. On the day of the epidural steroid injection the patient should not drive. Rest is needed and strenuous activities must be avoided on the day of the epidural steroid injection.

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Epidural injection results and follow-up

Following the epidural injection, some partial numbness from the anesthetic may occur in the patient's arms or legs. Any partial numbness usually subsides after a few hours. Any remaining pain needs to be reported to the physician.

There may be an increase in the patient's pain that may last for up to several days. This may occur after the numbing medicine wears off but before the steroid has had a chance to work. Ice packs may help reduce the inflammation and will typically be more helpful than he at during this time. Improvements in pain will generally occur within 10 days after the epidural injection and may be noticed as soon as one to five days after the injection.

Regular medicines may be taken after an epidural steroid injection. On the day following the procedure, the patient may return to his or her regular activities. When the pain has improved, regular exercise may be resumed in moderation. Even if improvement is significant, activities should be increased slowly over one to two weeks to a void recurrence of pain.

Epidural results and precautions

As with any medical procedure, there are certain drawbacks and potential risks associated with an epidural steroid injection for back pain, leg pain or arm pain. One of the most important issues to consider is that the procedure only tends to significantly lessen the patient's pain about half of the time.

Effectiveness of epidural injections

Unfortunately, epidural steroid injections are not always effective — it is estimated that they help relieve the patient's pain only about 50% of the time. In some cases, the pain relief will be permanent. In others, the pain will be lessened enough to allow the patient to progress with rehabilitation and exercise, which helps the patient heal and find pain relief on a long-term basis.

If excellent pain relief is obtained from the first epidural injection, there will be no need to repeat it. If there is a partial benefit (greater than 30% relief from pain) the epidural injection can be repeated for possible addition al benefit, or it may be necessary to conduct additional tests to more accurately determine what is causing the patient's pain. Up to three epidural steroid injections may be performed, spaced at least two to four weeks apart. If the initial injection prov ides minimal benefit (less than 30% pain relief) the physician may either repeat the injection or try a different type of injection or treatment.

Potential risks and complications include, but are not limited to:

As with all invasive medical procedures, there are potential risks associated with epidural steroid injections. However, in general the risk is low, and complications are rare. Potential risks include:

- Infection. Minor infections occur in 1% to 2% of all injections. Severe infections are rare, occurring in 0.1% to 0.01% of injections.

- Bleeding. A rare complication, bleeding is more common for patients with underlying bleeding disorders.
- Nerve damage. While extremely rare, nerve damage can occur from direct trauma from the needle, or secondarily from infection or bleeding.
- Dural puncture ("wet tap"). A dural puncture occurs in 0.5% of injections. It may cause a post - dural puncture headache (also called a spinal headache) that usually gets better within a few
- days. Although rare, a blood patch may be necessary to alleviate the headache from a dural puncture.

In addition to risks from the injection, approximately 2% of patients will experience side effects from the steroid medication, such as:

- Transient flushing with a feeling of warmth ('hot flashes') for several days
- Fluid retention, weight gain, or increased appetite
- Elevated blood pressure
- Mood swings, irritability, anxiety, insomnia
- High blood sugar — diabetic patients should inform their primary care physicians about the injection prior to their appointment
- Transient decrease in immunity
- Cataracts — a rare result of excessive and/or prolonged steroid usage
- Severe arthritis of the hips or shoulders (avascular necrosis) — a rare result of excessive and/or prolonged steroid usage

Lumbar epidural steroid injections should not be performed on patients who have a local or systemic bacterial infection, are pregnant (if fluoroscopy is used) or have bleeding problems. Epidural injections should also not be performed for patients whose pain is from a tumor or infection, and if suspected, an MRI scan should be done prior to the injection to rule out these conditions.

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