

# Understanding Epidural Steroid Injections for Pain Relief

Epidural steroid injections are a commonly performed intervention for managing nerve pain that is moderate to severe and functionally limiting when conservative measures alone fail to control symptoms adequately.

What exactly is the epidural space? It is the space outside the membrane covering the spinal cord and nerve roots. The nerve roots in the cervical spine travel from the spinal cord into the arm; thoracic spinal nerves in the mid back innervate the trunk; and lumbar nerve roots supply sensation and strength to the leg.

Radiculopathy occurs when problems like herniated discs, arthritis, or bone spurs compress or irritate the nerve root, causing inflammation and pain in these areas. With an epidural injection, a corticosteroid medication is placed into the epidural space to deliver anti-inflammatory effects directly to the impinged spinal nerve to help relieve pain and improve function.

# **Benefits of Epidural Steroid Injections**

- Direct delivery of medication to inflamed spinal nerve roots provides localized anti-inflammatory effects
- Shown to significantly reduce radicular pain and neuropathic symptoms caused by impingement of nerves from herniated discs, bone spurs, and arthritis
- Allows patients to progress through physical therapy and rehabilitative exercises with reduced pain
- Provides significant pain relief, potentially delaying or avoiding spinal surgery

## **Epidural Steroid Injection Procedure**

Epidural steroid injections can provide significant pain relief. Here's what to expect on the day of your procedure:

- You will enter a special procedure room where a doctor, nurse, and x-ray technician will care for you.
- You will lie on a special table that allows the physician to use a fluoroscopic (x-ray) machine that rotates around you to perform the procedure.
- If you are receiving IV sedation, the nurse will administer it after you lie on the table.
- The physician will scrub your skin with sterile soap and place a drape over the area to maintain a clean space. The physician will then numb a small area of skin with anesthetic medication.
- After the anesthetic has been given time to be effective, the physician will then direct a spinal needle using fluoroscopic guidance into the epidural space around the nerve root.

• The physician will inject a small amount of contrast (dye) to ensure accurate needle position and then a small mixture of anesthetic and steroid around the nerve root(s).

Epidural steroid injections can provide meaningful improvements in function and quality of life. Have more questions about the procedure? Explore our in-depth FAQs by visiting <a href="https://www.desertspineandsports.com/spine-injections/epidural-steroid-injections/">https://www.desertspineandsports.com/spine-injections/epidural-steroid-injections/</a>

### **Pre-Op and Post-Op Instructions**

### **Pre-Op Instructions**

- You will be at the facility for approximately 1-1.5 hours total.
- You will be required to have a responsible adult drive you home. If you received IV sedation, you will not be allowed to take an Uber/Lyft.
- You should take your routine medications (i.e. blood pressure and diabetic medications) on the day of your procedure. Please notify the office immediately if you are taking blood thinners.
- You must not eat any food six hours before your appointment.
- You may have sips of clear liquids up to two hours before your appointment.
- Wear loose, comfortable clothing to your appointment.

### **Post-Op Instructions**

- Immediately after the procedure, you will go to a recovery area, where you will be monitored for approximately 15 minutes.
- Your arm(s) or leg(s) may feel numb or weak for several minutes to a few hours after the procedure.
- It is important to take it easy the day of the epidural, but light activities such as walking or even working (if it is not too strenuous) are allowed.
- Driving should be avoided after an epidural if there is any numbness or weakness in the arm or leg or until the next day if you received IV sedation.

Desert Spine and Sports

Physicians - Phoenix Office

3700 N. 24th Street

Suite 210

Phoenix, AZ 85016

Desert Spine and Sports
Physicians - Mesa Office
6634 E. Baseline Rd.
Suite 101
Mesa, AZ 85206

Desert Spine and Sports

Physicians - Scottsdale Office

8670 E. Shea Blvd.

Suite 102

Scottsdale, AZ 85260

Desert Spine and Sports
Physicians - Peoria Office
13128 N. 94th Drive
Suite 200
Peoria, AZ 85381

<u>Desert Spine and Sports</u> <u>Physicians - Gilbert Office</u> 3615 S. Rome St. Gilbert, AZ 85297

### Cervical, Thoracic, and Lumbar Epidural Steroid Injections – Frequently Asked Questions

#### 1. What is an epidural?

An epidural is a highly specialized injection of lidocaine (numbing medicine) and steroid into the epidural space of the spine. This space is immediately outside the sac that holds the spinal cord and nerves. An x-ray (fluoroscopy) machine is used to help guide the needle into the correct space, at which time dye is injected to ensure it is in the correct place. Subsequently, the lidocaine and steroid mixture is injected.

#### 2. Why are epidurals done?

Epidurals are done to reduce pain and inflammation. The most common situation is when a nerve is being impinged, which can cause it to become inflamed. This inflammation causes pain in the spine and the nerve distribution in the arm or leg, so the goal of the epidural is to reduce inflammation and thus reduce pain.

#### 3. Are epidurals guaranteed to reduce pain?

Unfortunately, there is no guarantee that pain will be reduced with epidurals. However, about 70% of patients (with acute pinched nerves) receive at least 50% relief from epidurals.

#### 4. How many epidurals can I have?

Generally, a patient may have up to three to four epidurals in a year, no earlier than two weeks apart (but it is advisable to have as few epidurals as possible). Epidurals may be repeated when necessary if pain recurs. Too many epidurals can have significant side effects.

5. What are the side effects of the steroids used in epidurals?

Generally, epidurals are well-tolerated; however, sometimes side effects are experienced, which include but are not limited to insomnia, low-grade fever, steroid flare (increase in pain), facial flushing, mood changes, fluid retention, elevated blood pressure, and elevated blood sugars. These side effects are temporary. Prolonged use of high-dose steroids can cause an increased risk of infection, osteoporosis, and weight gain. People with diabetes should keep a close eye on their blood sugars after epidurals.

#### 6. Are epidurals painful?

Everyone will feel a "pinch and burn" when the local numbing medicine is injected. Beyond that, feeling pressure as the needle travels to the target is normal. As the medicine is injected, it can sometimes increase the pain into the arm or leg when it flows around an inflamed nerve root. This increase in pain is temporary. Usually, patients only feel mild discomfort during these procedures. IV "conscious" sedation with Versed (Midazolam) can be used to help you relax during the procedure. This may or may not help with the pain during the procedure.

#### 7. What are the risks of epidurals?

Risks include but are not limited to bleeding, infection, nerve damage, paralysis, and reaction to the medications used. Catastrophic outcomes to epidurals are exceptionally rare and have not happened at all in our clinic.

8. I had an epidural, and now I have increased numbness. Why?

Sometimes, there is both pain and numbness in an arm or leg due to a pinched nerve. The epidural may make the pain better, thereby unmasking the numbness.

#### 9. What if epidurals do not work?

Alternatives to epidurals are determined on a case-by-case basis. Sometimes, if a nerve is impinged and epidurals and other conservative treatment options do not relieve the pain, a decompressive surgery (to relieve pressure on a nerve) may be an option.

10. When can I have an epidural? Why can't I have it today?

Epidurals are highly specialized procedures that require an X-ray (fluoroscopy) machine, a physician trained to do these procedures, an X-ray technician, and a nurse. In many cases, they require insurance authorization as well. Before an epidural, you cannot eat anything for six hours or drink anything for two hours. Because of these reasons, epidurals are done on certain days when procedures are scheduled together for optimum efficiency. A clinic visit is generally done prior to this to review imaging, discuss the epidural in-depth, review risks and benefits, and give the patient a chance to ask any questions. This helps the procedure run smoothly.

11. Why do I need to not eat or drink anything before the epidural?

Because of the position you will be in during the epidural (face down), there is a small risk of aspiration. This occurs when the stomach contents go up the esophagus and back down the windpipe. The risk of this is greater if IV sedation with Versed (Midazolam) is used.

#### 12. Why do I need to stop my blood thinner before an epidural?

Because an epidural involves using a spinal needle, there is an inherent risk of bleeding. If there is significant bleeding in the epidural space, this can cause paralysis. This risk increases when a patient is on a blood thinner. Therefore, we ask patients to hold their blood thinners for a certain number of days (depending on which blood thinner it is) prior to the epidural. It is the patient's responsibility to obtain permission from the prescribing doctor (usually a cardiologist) to temporarily stop the blood thinner. We ask that this permission be written and faxed to our office, where it becomes part of your chart.

#### 13. How long does it take for an epidural to take effect?

It can take up to 5-7 days for you to notice pain relief after the epidural is administered; however, many patients report pain relief much sooner.

#### 14. How long do epidurals last?

Unfortunately, this cannot be predicted. Some patients get no relief from epidurals, whereas others get months or even years of relief from epidurals. Factors that influence this include but are not limited to the type and extent of pathology, length of diagnosis, past response to steroids, age, and health status.

#### 15. Why do I need a driver?

Epidurals use lidocaine, which can temporarily cause the leg or arm to feel numb, making it dangerous to drive after the epidural. We recommend asking a friend or family member to drive you and not a taxi or Uber/Lyft, as a driver will not be able to help you get into your home if needed. If you arrive without a driver, you may be asked to reschedule.

#### 16. How long will it take to do the epidural?

You will be in our office for about one to one and a half hours. This includes checking in, reviewing risks, signing a consent form, performing the epidural, and recovering. The actual epidural takes less than 15 minutes in most cases.

# 17. My first epidural provided some relief; should I keep my next epidural appointment?

If you are still having pain or functional limitation that is significant, an epidural can be repeated and may further reduce inflammation and pain. Remember that epidurals are not done to prevent pain, only to treat it, so you should not do another injection if your pain is resolved.

#### 18. What should I do after the epidural?

It is important to take it easy on the day of the epidural. Light activities such as walking, light housework, and even working (if it is not too strenuous) are OK. Also, it is OK to travel the day of the epidural, including plane travel (however, avoid driving for at least two hours after the epidural unless you received IV sedation, in which case avoid driving until the next day). Avoid soaking or submerging the injection area for 48 hours – this includes baths, hot tubs, and pools. Regular showers are OK. The band-aid placed at the injection site may be removed the same day as the epidural.

#### 19. Under what circumstances should I call your office?

Call our office immediately if you experience a severe headache, severe pain in the arm or leg, redness or drainage at the injection site, fevers, chills, or weakness that is worse from when you leave the clinic. These symptoms are very rare. If you feel you require immediate medical care, call 911.

#### 20. Under what circumstances should I cancel my epidural?

The most common reasons for canceling your epidural are if you forgot to stop your blood thinner or if you have an infection (such as a urinary tract infection), regardless of whether or not you are on antibiotics. An epidural can be performed when you have completely recovered from your infection and have had no symptoms (including fever) for 24 hours and your course of antibiotics is finished.

#### 21. Why do I need to arrive 30 minutes prior to my scheduled epidural?

Epidurals involve a thorough check-in procedure, which includes verifying the exact procedure and reviewing the risks and benefits of the injection. Also, if IV sedation is desired (which is optional), the nurse will need to place an IV prior to the procedure. Therefore, to help ensure our procedures run as smoothly as possible, we ask patients to arrive 30 minutes prior to their scheduled epidural. If you arrive late, you may be asked to reschedule. Please let us know at least 24 hours in advance if you need to reschedule or cancel your procedure. A "no-show" may result in a \$100 fee.