



Epidural steroid injection

What is an epidural steroid injection?

An epidural steroid injection (ESI) is an injection into the epidural space provided by your pain doctor in order to provide relief for certain chronic pain conditions. Examples of conditions treated with this injection are pain secondary to a "pinched nerve" or irritated nerve root in the cervical (neck), thoracic, or lumbar spine. This pain often times will travel into the shoulders and arms (if the irritated nerve is in the neck) or into the legs (if the irritated nerve is located in the lumbar spine). Other indications are spinal stenosis (narrowing of the spinal canal) secondary to enlarged facet joints, "bulging" disks, enlarged ligaments, or a combination of the above with resultant squeezing of the spinal nerves causing back and leg pain. There will be two medications that will be placed around the irritated nerve. One is a local anesthetic that works to numb the area for several hours. The other medication is a steroid that will start working in 7-10 days and is important for the longer term relief. The route that the medication is delivered is determined by your doctor and is based on your anatomy and your symptoms. Options are transforaminal (just outside the nerve foramen/opening in the spinal canal where the nerve exits), interlaminar, and caudal. All three deliver the medications to the epidural space but some with better specificity as to the location of the medication. These should all be done under fluoroscopy (x-ray) in order to identify the exact location where the medicine should be placed.

Preparing for the injection

Refer to the pre-procedural paperwork that was given out during your office visit prior to leaving. This packet will cover the important aspects of preparation for the injection. You may be offered sedation for the procedure but often this is not necessary as the procedure is very quick.

What to expect

When you arrive at the ASC (surgery center) for your injection you will be "checked in" by the nurses at the center. You will be asked about your past medical history, medications you are taking, and vital signs will be taken. If you were on a blood thinner called Coumadin (warfarin) a sample will be obtained in



order to ensure that your levels are appropriate for the injection as this medication should have been stopped 5 days prior to the injection date. This portion takes time so it is important that you show up early for this to be completed.

You will then be taken back to the operating room where you will lay on your stomach for the procedure. The fluoroscopy unit (x-ray) will be positioned over you in order to identify the important anatomical landmarks for the procedure. When the correct position is identified your skin will be "numbed" with a very small needle and local anesthetic. This usual is very short lived. When the skin is anesthetized the doctor will advance a very small needle to the area that is affected depending on your imaging studies and signs/symptoms with the help of the x-ray for guidance. You may notice some discomfort as the needle traverses the deep muscles next to the spine (depending on the route of delivery chosen) but again this is short lived. At this point a small amount of contrast dye will be utilized to ensure proper location of the needle. After this testing is complete a small amount of local anesthetic will be delivered as a test to ensure the needle is in the right place. The procedure itself could take anywhere from 15-30 minutes. You will be asked how your pain is doing after the procedure. The local anesthetic will make the area feel good for several hours but eventually "wears off". The steroid injected takes **7-10 days** before it starts to provide significant pain relief but some patients notice relief sooner.

After your injection

Apply ice as needed to the area for the first 24-48 hours as this may help with some of the pain from the needle entry. You are welcome to resume PT immediately unless instructed not to do so by another provider. You will be given a sheet of paper discussing the procedure and the medications used. Most of the time you will be asked to be seen in the clinic within a few weeks to see the improvement you received with the injection.