

## Epidural/Caudal Steroid Injection

An **Epidural Steroid Injection (ESI)** is an injection procedure utilized in traditional medical care to address painful issues of the spine. Typically, these procedures are utilized to deliver the steroid medication as close as possible to the actual source of your pain. Some examples of various pain-generators of the spine are; Herniated Inter-Vertebral Discs (“herniated or slipped disc”), Arthritis, Facet Joint problems and/or Spondylolisthesis (“slippage” of spinal segments) – just to name a few. The most common reason for an ESI to be performed is a herniated disc. These disc herniations can cause irritation, inflammation, or even impingement in the immediate area of the spinal cord and/or exiting nerves – thus, producing the well-known symptoms of radiculopathy or when it occurs in the lower lumbar spine- “sciatica.” The ESI attempts to place the steroid medication at the site of the irritation/inflammation in hopes of reducing the painful symptoms and dysfunction associated with the patient’s condition. The medicines typically used are a mixture of a long-lasting corticosteroid (“cortisone” such as, Dexamethasone or Kenalog) and a shorter acting local anesthetic (Lidocaine or Procaine). This mixture works to reduce the inflammation and/or swelling of tissue. The ESIs are typically, but not always, done in a series of three “rounds” of injections – each done two weeks apart. The reason for this approach comes from medical literature which shows that those patients who choose to undergo all three injection rounds have better long-term outcomes.

**Purpose:** The purpose of an Epidural Steroid Injection (ESI) is *to increase the patient’s ability to function* by treating the suspected source of the dysfunction or pain (as described above). We use ESIs “as a bridge to therapy”, thus, assisting them in decreasing their pain and discomfort enough to tolerate the physical or manual therapy, weight-loss, smoking cessation, core/abdominal strengthening, and muscular flexibility exercises required for them to get better. Thus, the outcome of the procedure (whether it “works or not”) will be measured by your level of functioning, not necessarily in a reduction of your pain level.

Before the **Procedure**, it is very important that you do not eat anything at all at least 12 hours (or do not drink anything at least three hours) before your procedure. The procedure involves inserting a needle through skin and muscle tissue of the back in order to reach the epidural space. There is some discomfort involved anytime a needle enters tissue; however, we numb the skin and deeper tissues with a local anesthetic using a very thin needle prior to inserting the needle into the epidural space. Some patients who are particularly anxious or pain sensitive may require additional pre-procedure anesthesia such as an oral medication, or even intravenous sedation and analgesia, which makes the procedure more tolerable. Immediately after the injection procedure, you may feel your pain completely resolve or lessen significantly. This immediate relief is due to the actions of the local anesthetic injected. For select patients, this effect can have long-lasting action, but in most patients will last only for a few hours. You can expect your back or neck area to be “sore” for a few days. The anti-inflammatory actions of the steroid should begin to “kick in” around day three, and you should start noticing significant pain relief starting around the fourth day. The effects of the steroid are variable from patient to patient, but can last up to many months or years in some cases. You may be given a prescription for pain medication or a muscle relaxer to help with this short-term four day “transition period,” but this is rarely necessary. Typically, light activity, Tylenol, mild massage, and ice application are sufficient in the majority of cases. You may perform your normal activities of daily living (housework, showering, driving, etc.) as tolerated. Unless there are complications, you should be able to return to work the next day. In a six-month period, we generally do not perform more than three injections because the medication injected lasts for about six months.

Because people experience pain differently, it is difficult to predict if the injections will be successful. *Patients who do not smoke, are at their ideal body weight, have good nutritional and sleep habits tend to respond MUCH better than those with chronic illness.* Those who practice a healthy lifestyle (proper diet and exercise, lower stress, adequate sleep, etc.) and also participate in integrative or team approach, utilizing multiple modalities – like Physical Therapy, Chiropractic/Osteopathic manipulation, Massage Therapy, and Acupuncture also benefit more with the injections. Also, generally speaking, the patients who have recent onset of pain may respond better than the ones with long standing or chronic (>12months) pain.