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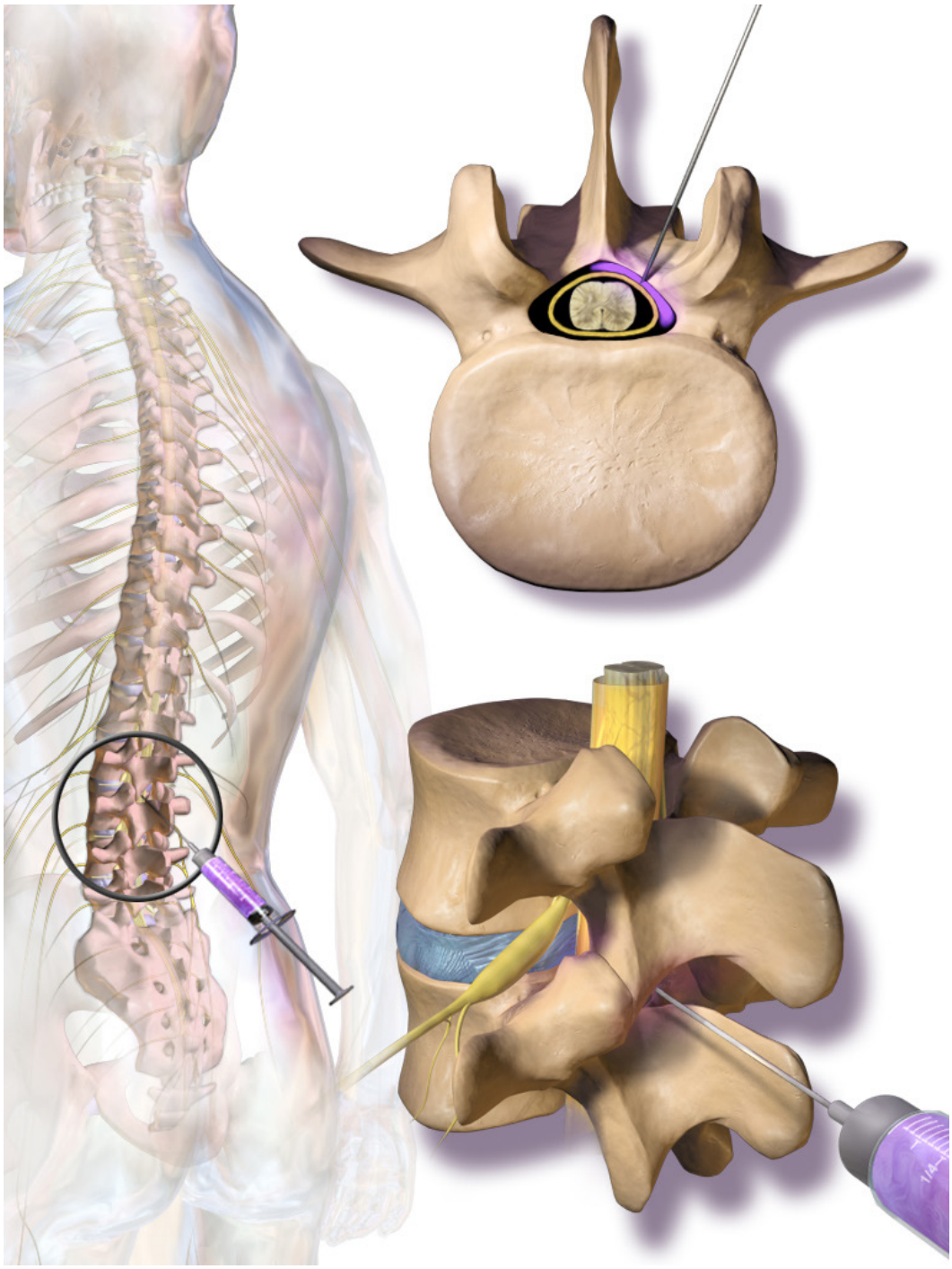
EPIDURAL STEROID INJECTIONS



Epidural Steroid Injections

For patients where over the counter medications have proven less than effective at managing pain, epidural steroid injections (ESIs) could be the solution. Epidural steroid injections are just one of the many non-surgical pain management options.

What are Epidural Steroid Injections (ESIs)?

An epidural steroid injection is a minimally invasive procedure that delivers a mixture of corticosteroid and anesthetic numbing agent directly to the source of pain. The injection is delivered into the epidural space of the spine, encircling the dural sac. The dural sac is a protective layer of fat and small blood vessels that surrounds the spinal cord, nerve roots, and cerebrospinal fluid.

How do Epidural Steroid Injections Work?

The corticosteroid acts as an inflammatory agent. Because the majority of pain conditions are caused by chemical inflammation, the corticosteroid helps to control inflammation in the surrounding area, thereby reducing pain. The anesthetic acts locally for fast-acting pain relief, while flushing out any proteins that could be causing swelling and nerve pressure. The pain relief effects of an injection can last for days to years, depending on each individual patient's condition.

Epidural injections are often coupled with physical therapy, as the temporary pain relief allows patients to complete rehabilitative exercises that were previously hindered by excessive pain symptoms. While prescription pain medications or non-steroidal anti-inflammatory drugs (NSAIDs) provide a dispersed pain relief effect, they are often only intended for short term use.

Conditions and Symptoms Treated by Epidural Steroid Injections

Injections are recommended for patients suffering from chronic back, neck, arm, or leg pain. Pain that radiates from the site of a pinched nerve, is promoted by inflammatory chemicals and immunological mediators. An ESI reduces the inflammatory response and the corresponding immunological response that typically causes pain. Epidural steroid injections are often recommended after exhausting non-invasive therapies options for the following conditions:

- **Lower Back Pain** - Pain in the lumbar region of the spine is often caused by inflammation or damage to the nerve. Lumbar ESIs are delivered to the midline of the back on the affected side, into the nerve canal.
- **Sciatica** - This condition is characterized by radicular pain in the sciatic nerve. The nerve runs from the lower back, through the buttocks, and into each leg. Pain is caused by herniated discs or bone spurs that put pressure on the nerve, causing lumbar pain, leg pain, and even numbness and tingling in the feet.
- **Spinal Stenosis** - The narrowing of space in the spinal column causes increased pressure on nerves, resulting in pain. Spinal stenosis is often the result of osteoarthritis, natural degeneration, herniated discs, or trauma to the spinal cord.
- **Disc Herniation** - Spinal discs are composed of an outer, protective case and a soft core of protein filled fluid. Herniated discs occur when the soft inner material leaks through cracks in the outer case. The leaked proteins and fluid exert pressure on the surrounding spinal nerves and contact causes irritation, swelling, and pain. Epidural steroid injections don't fix a herniated disc, but they help to control the nerve inflammation and flush out proteins to provide temporary pain relief.
- **Degenerative Disc Disease** - This condition occurs from normal wear and tear to the spine as the natural aging process causes spinal discs to flatten out. Daily activity and minor injuries result in the gradual collapse of disc space, leading to irritation and pain symptoms.

What to Expect

We want each patient to feel comfortable and informed at every step of the treatment process. Before treatment, your doctor will review your medical history, diagnostic results, and current medications. This minimally invasive outpatient procedure generally takes between 15-45 minutes. We do recommend that patients make arrangements for transportation, as recovery time may be needed.

Patients are required to lie on an x-ray table to allow the physician to clean the area of injection and administer a local anesthetic. Little to no pain is felt, but patients often feel slight pressure upon needle insertion. Using live x-ray fluoroscopy allows the doctor to view the needle insertion on a monitor. Contrast dye is injected to confirm medication delivery flow location, followed by the injection of the epidural steroid solution.

Depending on the condition and symptoms being treated, the epidural steroid injections may be inserted at different locations. The most common ESIs are cervical and lumbar. Cervical injections are administered just above the nerve root to relieve pain in the neck or arms. Lumbar injections are administered a nerve canal in the back to relieve lower back and leg pain.

Pain relief effects last for 3 months on average. It's important to schedule follow-up appointments with your spine specialist to discuss efficacy of treatment and whether or not to schedule additional injections.