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CRANIAL SURGERY
MICRONEUROSURGERY
SPINAL INSTRUMENTATION

CERVICAL AND LUMBAR EPIDURAL STEROID INJECTIONS

An epidural steroid injection is an injection of a medication in the spine to relieve inflammation and pain. Cortisol is a naturally occurring steroid in the body. A steroid medication, also commonly known as cortisone, is a synthetic chemical similar to cortisol, often with a greater therapeutic effect. Corticosteroids have an “anti-inflammatory” effect that can reduce pain. These are a different category of medication from the anabolic steroids that weight lifters and athletes use to enhance muscle and performance. There are numerous steroid or cortisone medications. Some can be used orally and others are injectable.

The epidural space is the area between the covering around the nerves and spinal cord and the surrounding bone in the spine. An epidural steroid injection (also known as ESI) places the steroid medication in the epidural space. If this is done in the neck, it is called a cervical epidural steroid injection. In the lower back, it is called lumbar epidural steroid injection. Rarely, an epidural steroid injection is administered in the middle part of the spine and is called a thoracic epidural steroid injection.

Translaminar epidural steroid injections are performed by placing the needle between the lamina on the backside of the spine. The patient is usually lying on his / her stomach as the needle is placed. Sometimes, the needle is guided by fluoroscopy (live x-ray).

Another technique is to inject the steroid alongside the nerve in the opening where the nerve exits on the side of the spine, transforaminal epidural steroid injection. This technique always requires fluoroscopy. There are anatomical variations to the abnormalities in the spine that may make one technique better for a given patient.

Either procedure is performed by first identifying the level of the injection based on the patient’s clinical examination and imaging findings. The starting point is planned. The skin is cleaned with an antiseptic solution to reduce the risk of infection. The starting point is infiltrated with local anesthetic. The injection needle is then guided to the epidural space and the steroid injected. After removal of the needle, a band-aid is placed. After a short observation period, the patient is discharged. Usually a follow-up is planned for two to four weeks later. Sometimes the injection is repeated at the follow-up visit. The number of injections to a single area is usually limited to three per six-month interval. Side effects are rare.

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