Epidural Steroid Injections as an outpatient

Research studies have shown the benefit of epidural steroid injections for sciatica and back pain caused by spinal disc lesions.

The purpose of the injection is to carry the medicine to the inner part of the back where some of the types of more serious strain affecting the discs, can cause pressure on, or irritation of, the nerves. The solution bathes these structures with anti-inflammatory steroid to reduce swelling and pain.

The solution contains a mixture of local anaesthetic or normal saline and corticosteroid. It may be injected just above the tail-bone (the caudal route) or between the bones in the small of the back (the lumbar route). The injection can be performed safely without the need for overnight stay or general anaesthetic. The procedure takes 30 minutes and you leave the clinic 30 minutes later.

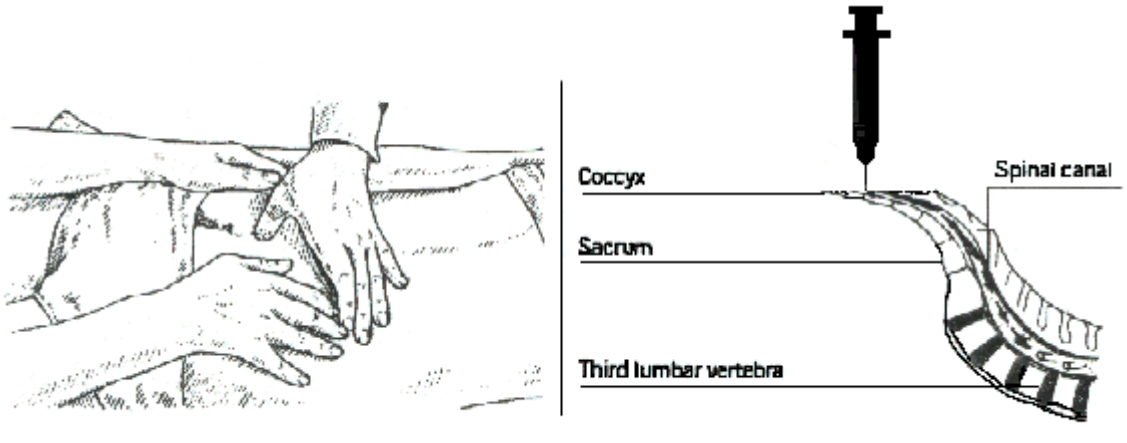
In the majority of cases it is not a particularly painful procedure although you may experience some feeling of pressure as the volume of fluid is injected, or your sciatic pain may worsen temporarily. After the procedure you will be expected to rest for a while (20 minutes or longer) before going home.

You may experience some numbness around the pelvis or buttocks, temporary light headedness and slight unsteadiness in the legs if local anaesthetic has been used. For this reason you should not drive a vehicle or operate machinery until the next day. The benefit may appear almost immediately or build up gradually over the next few weeks. It is extremely unlikely that you will experience any other significant side effects.

Because of the corticosteroid component some women develop a facial flush the next day, which lasts 12-24 hours and more rarely some disruption of the menstrual cycle for one or two cycles. Other possible complications are similar to those of any injection and are very rare, namely infection and allergic reaction which can occur in approximately 1 in 7,000 cases and can be dealt with promptly. There is no clear evidence of any long term complication from epidural steroids.

Caudal Epidural Injection

The doctor identifies the lower entrance to the spinal canal at the base of the sacrum with the use of the X-ray machine (image intensifier or C-arm). The needle enters the spinal canal through a ligament (see figure below). After confirming correct positioning of the needle tip in the epidural space with the injection of a small amount of contrast (image 1), the anaesthetic and steroid solution is then injected slowly over a period of some minutes. The solution spreads up the canal to reach the level of the third lumbar vertebra or higher.



Lumbar Epidural Injection

Your doctor may decide to use the lumbar route to carry the medicine to the inner back. The doctor once again identifies the needle entrance site with the aid of X-ray. After injecting a small amount of anaesthetic solution to numb the skin, the needle is then slowly moved towards the final position. Injection of contrast confirms the final position (image 2) and the doctor then injections the drug into the epidural space.

The Facts

A large number of people have received epidural steroid injections over the years, most of whom have obtained undoubted benefit. On reviewing the medical literature the number of patients in whom arachnoiditis or other chronic spinal condition has occurred in connection with injection of any substance epidurally is very small indeed, probably less than 1 in 20,000 injections. Putting this into perspective: Each year any individual has a risk of dying in a road accident of 1 in 8000,dying in a plane crash of 1 in 20,000 and death on the soccer field of 1 in 25,000.The use of intradural steroids has been stopped since this deeper injection into the spinal fluid has been shown to cause arachnoiditis in some rare cases. Myodil, the oil based dye formerly used for myelograms, (the old method of showing 'slipped discs' with X-rays) was banned in 1975 after some decades of use since it was clearly implicated in the production of arachnoiditis.

Image 1

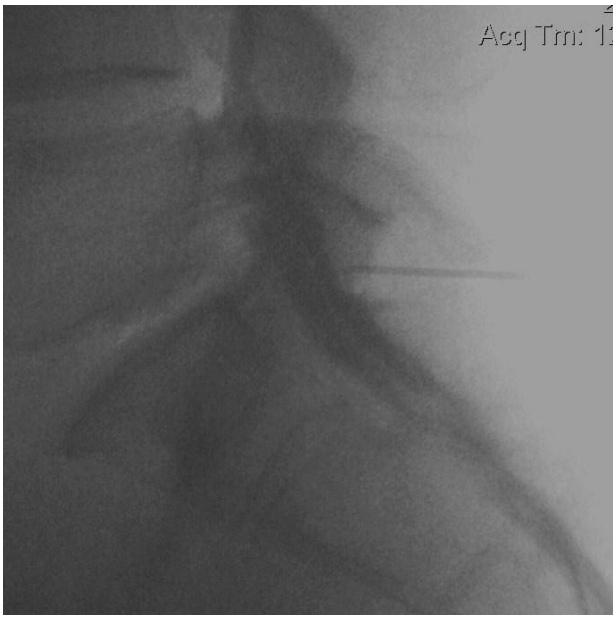


Image2