

Epidural Steroid Injections

You have been asked to consider the use of an epidural steroid injection as part of the conservative management of your sciatic pain. Please read the following information carefully before giving your consent.

Although there is still some controversy over the place of epidural steroid injection in the management of patients with chronic back pain, there is a considerable body of evidence to suggest that it can improve the pain in 40% to 60% of patients presenting with acute sciatica (leg pain which can radiate from the buttock and hamstring to the calf, ankle and foot).

The most common cause of acute sciatic pain is an inflammatory response to nerve root irritation. This irritation is most commonly caused by either a prolapsed intervertebral disc, or by trapping of the nerve as it passes through one of the bony canals in the spinal column on its way to the lower limb.

Steroids are anti-inflammatory drugs, and it is thought that they act to decrease this local inflammatory response, thus decreasing the pain.

The technique consists of inserting a needle into the epidural space. This space lies within the bony ring of the spinal column, outside the fluid filled sac that surrounds the spinal cord. The nerves that supply power and sensation to the lower limb pass through the fluid filled sac, across the epidural space and then exit the spinal column via bony canals. The needle is inserted by the caudal route, which is a relatively safe way of entering the epidural space.

A solution containing the steroid drug, together with saline is then injected slowly and the needle is then withdrawn.

The procedure is brief and only causes minor discomfort, lying down for a period of between ½ to 1 hour to allow the steroid to sit close to the irritated nerve root.

Side effects are very rare, however these fall into two main categories: those associated with the injection itself and those associated with the steroid drug.

1. Side effects due to the Epidural Injection

a. Increase in Sciatic Pain

This is usually transient and occurs in only a small number of cases. It is thought to be a "pressure effect" from injecting a volume of solution into a small epidural space.

b. Headache

This side effect is very rare with caudal epidurals. It is due to the needle making a small hole in the fluid filled sac that surround the spinal cord. For the few days that it takes for the hole to heal, the patient may experience a headache that occurs when they sit or stand, but which goes away when they lie down.

c. Nerve Damage

There is no risk of injury to the spinal cord at the level that the epidural is performed. However, a number of nerves pass through the epidural sac, and it is possible that the needle could cause injury to one of them. The chances of this occurring are very small (1:20,000 to 1:50,000 epidurals).

d. Haematoma and Infection

There are veins in the epidural space that could be damaged by the injection, and bleed, causing a collection of blood (or haematoma) to form in the epidural space. This could cause pressure on the nerves and occasionally require an operation. The procedure should not be performed on patients who are taking blood thinners (with the exception of low-dose Aspirin).

Similarly, there is a risk of introducing infection into the epidural space in the course of the injection. Both of these complications are very rare (1:50,000 to 1:100,000).

2. Complications Associated with the Steroid.

It is common to have some minor flushing in the face for 1-2 days after the injection. In addition, Diabetics may notice raised blood glucose levels and may have to adjust their insulin dosages accordingly.

There are two types of steroid preparations that are used in the epidural injections. The first, the "Depot" form contains the steroid plus a preparation to slow its absorption into the body, thus retaining the drug at the site of injection for a long time. The second, the "soluble" form, contains the steroid alone – that is with no "Depot" preparation.

Injections of both "Depot" and "Soluble" forms of the drug have been performed for many years in countries throughout the World without problems.

However in 1992, a group of patients in Western Australia claimed that epidural injections of one of the "Depot" forms – "Depo-Medrol" – had caused them to develop a syndrome of arachnoiditis characterised by severe pain and the development of weakness in the legs.

It was claimed that these symptoms were caused by the "Depot" material, not by the steroid itself.

The evidence supporting their claims was not strong, but despite this fact, and despite the long history of uneventful use, the manufacturers of Depot-Medrol recommended that it be no longer used in the epidural space.

Over the next two years, all other manufacturers of steroid preparations, even the non-Depot preparations, recommended that their drugs not be used in the epidural space, again, despite the total lack of any evidence to support their recommendation.

In the face of the lack of scientific evidence to support the drug companies' stand, most doctors continue to recommend epidural steroids in the conservative treatment of sciatica.

We use epidural steroid injections because we feel that it is a safe, relatively uncomplicated and effective way of improving the symptoms of sciatica in 40% to 60% of patients, without subjecting them to surgery.

If, after reading this information sheet, you have any questions, please ask your doctor before signing the consent form.

Dr Tim March

MBBS, DRCOG, DA, Dip Sports Med (London)

Patient Consent

I have read and understood the information given to me regarding epidural injections and hereby give consent for this procedure. I confirm that I am not taking blood thinning medications.

Name:
Signed:
Date: