

Nerve root block / Foraminal injection

What is a nerve root block / foraminal injection?

A nerve root block is an injection of a mixture of local anaesthetic and hydrocortisone (steroid) around a nerve as it exits the spine. This is used when a particular nerve in the lower back is inflamed due to irritation from either a disc prolapse or narrowing of the spinal canal due to degenerative wear and tear. A nerve root block is not a cure but aims to alleviate your symptoms by reducing the inflammation caused by the mechanical irritation of the nerve. In patients who have had an MRI scan that shows problems at multiple levels a nerve root block can provide useful diagnostic information to help identify the source of your pain. It can also be called a foraminal or transforaminal injection.

How do we do it?

A nerve root block is carried out as a day case procedure in an operating theatre. To minimise discomfort, the injection is performed under sedation, which is administered by an anaesthetist. The needle is placed under X-ray guidance, and its position confirmed by injecting a small amount of dye that shows up on the X-ray image. It is often done in conjunction with a caudal epidural injection.

What are the risks?

Infection – there is a risk of infection at the injection site, but this is rare due to the use of sterile techniques. If you were to develop an infection, then this does have the potential to make you unwell. You may require prolonged antibiotics and potentially surgery to treat the infection.

Bleeding – there is a very small risk of infection at the injection site, but this is rare. If you had some bleeding around the nerves following an injection there is a very small chance that you may require an urgent operation to deal with this. To minimise bleeding, we do ask that any medication that might increase your bleeding risk be stopped prior to the injection.

If you are on any medication that has the potential to thin your blood such as aspirin, clopidogrel, warfarin, rivaroxaban or any other blood thinning medication then we do need to know about this prior to the date of your injection as this will usually need to be stopped prior to your injection.

If you take anti-inflammatory tablets, then you must stop taking them seven days before your injection as these drugs can also affect blood clotting.

Temporary ‘floppy’ leg – following a nerve root block your leg can go completely ‘floppy’ for a few hours. Once this has worn off you will be able to go home, and there should be no lasting effects. If this happens to you, it is important that you tell us when you come back for your follow-up appointment. We will also want to know if your leg pain disappeared whilst your leg was ‘floppy’.

Numbness – following the injection you may have some numbness going down your leg and potentially also between your legs. This should settle over a day or so.

Pain flare – following the injection you may have some increased pain going down your leg. This will normally settle over a few hours.

Headache – following the injection you may have a headache for a few hours. This should settle by the following day. There is a 1 in 1000 of the lining around your nerves being punctured when you have this type of procedure. This can result in a small leak of spinal fluid which is likely to cause a more problematic headache. If you have a persisting severe headache the day following your injection, then can you please contact the hospital to let me know so that we can manage this correctly. In this eventuality you may require a few days of bed rest or potentially a further injection into your back to put a patch over the area of leak.

Injection site discomfort – following the injection you may have some localised soreness at the injection site, for which you can take some simple painkillers and it should settle over a few days.

Side effects from the injected steroid – there are very few side effects when steroids are administered this way. Occasionally patients may notice some facial flushing, nausea, or mild abdominal cramps for a few days following the injection. There can also be a temporary disturbance to the menstrual cycle. Diabetics may find that the steroid alters their blood sugar control for a few days, so should monitor it closely.

Allergic reaction – an allergic reaction to injected steroid and local anaesthetic is incredibly rare. However, you must inform us of any known allergies beforehand.

What can I expect following the injection?

After you have had the injection you will spend a few minutes being monitored in the recovery room before being taken back to the ward. Once back on the ward, most patients will feel like having a short sleep. When you are ready to get up, you must call for one of the nursing team and only get up when they are with you as sometimes patients feel a little bit unsteady when they first get up following an injection. This will quickly pass. You will normally be able to leave hospital once you have had something to eat and drink, you are safely mobile and you have passed urine. This is normally one and a half to two hours following your injection. As you will have had sedation you will be unable to drive for 24 hours following the injection and will need to arrange for someone to collect you from hospital. We would advise that you have a restful day the day after your injection but can return to normal activities the following day as comfort allows. If you have been diagnosed with a disc prolapse then you should try and avoid any high impact exercise or un-necessary heavy lifting for at least two weeks following your injection.

After the injection we normally use a spray on dressing that requires no removal or special care. You should keep the injection site dry for six hours. Beyond this, there are no special wound care instructions. If a small dressing is used, then this can be removed after six hours.

For the first few weeks following your injection it is important that you keep a pain diary, documenting any relief that you have had. Please can you bring this information with you when you return to the clinic. Even a temporary reduction in pain is useful diagnostic information.

If further rehabilitation is recommended, it is important that you undertake this whilst you are pain free so that you gain maximum long-term benefit. It is important that you build up any unaccustomed activity gradually.

What next?

You will be seen back in the clinic a few weeks after your injection. Your on-going treatment will be guided by your response to the injection.