

## PATIENT INFORMATION AND CONSENTING DOCUMENT

# Lumbar Nerve Root Injections

**PLEASE BE AWARE THAT IF YOU HAVE NOT READ AND SIGNED THIS DOCUMENT  
YOUR CLINICIAN MAY NOT BE ABLE TO PROCEED WITH YOUR INJECTION**

### **What is a nerve root injection**

Between each bone (vertebra) of the lower part of your back (lumbar spine) a spinal nerve root comes out. These join up to make the nerves that go to your legs so that you can move them and feel them being touched. Each nerve root goes to a particular bit of your leg. For example, the nerve root that comes out between the bottom of your back and the beginning of your pelvis goes to your calf and the top of your foot. Nerve roots can become irritated or squeezed, often by the discs between the vertebrae. This can cause pain, loss of feeling and weakness in your leg. A steroid injection around the nerve root may help your symptoms, particularly the pain in your leg. It may not improve weakness or loss of feeling or help with any back pain you have.

Nerve root injections are done for pain coming from a nerve, usually in your lower back. Typically, the pain is felt in the back, buttock and affected leg. The individual nerve is located using an MRI scan. Most nerve pains will settle of their own accord. Some pains are helped with medication.

A few patients may eventually need surgery, either for continuing pain or worsening symptoms. For some patients who have not had an adequate response to oral medication, an injection of local anaesthetic and steroid around the nerve can be tried. This type of injection is similar to an Epidural but specific to one particular nerve and done using an x-ray machine. The evidence is that these injections can be helpful for patients, at least in the short term. Usually, this option is suggested before considering surgery as it is less invasive and has fewer complications. Nerve root injections are approved by NICE for sciatica (NRG 30th November 2016, 1.3.5) and are a recognized treatment for this condition.

### **What are the risks and side effects associated with the procedure?**

The risks from a nerve root injection are normally quoted as: no benefit; worse pain; headache; temporary nerve damage resulting in patches of numbness or weakness; permanent lasting nerve damage; bleeding into the epidural space; epidural infection (the last two could require a surgical procedure to treat). The likelihood of these risks happening with nerve root injections are unknown but are felt to be broadly similar having an epidural (either for labour or surgery) and this was the subject of very large national audit. Here the risk of permanent injury was calculated to be between 1: 24 000 and 1: 54 000 and the risk of leg paralysis or death between 1:50 000 and 1:140 000<sup>1</sup>.

### **What happens on the day of my appointment?**

You may eat and drink as normal. Please take all your tablets as normal, apart from anticoagulants such as warfarin, clopidogrel, apixaban, rivaroxaban etc.

You will not need to get undressed as long as you are wearing loose fitting clothing so that the skin of your lower back can be easily exposed. Tracksuit clothing would be ideal, for example. You will have a small drip put into the back of one of your hands in case you feel faint or unwell and need treatment.

You will be asked to lie on your front for the procedure which usually takes about 20 minutes. Your skin will be washed with antiseptic which feels cold and an injection of local anaesthetic will be given to numb the area. This will sting temporarily. You will need to keep very still when the needle is being positioned. An x-ray machine is used to help with the correct placement of the needle. Once the needle is correctly positioned the injection takes place.

Occasionally the needle can bump into the nerve root, causing a shooting sensation down your leg. If this happens the needle is moved away from the nerve. As the injection is done you may notice an increasing ache into your leg. This is not normally very painful and it usually does not last long. You may not notice anything at all. The injection contains a small amount of local anaesthetic, steroid (dexamethasone) and a small quantity of special dye. The dye can be seen on the x-ray and is used to show the position of the injection.

### **What happens after the procedure?**

After the procedure you will need to stay in the department for thirty minutes or so, until you are able to walk and are fit for discharge. You must not drive home or go home on public transport. Please arrange for someone to collect you from the Day Surgery Unit. You are allowed to go home by taxi.

After your injection take things easy for the rest of the day. Do not do any hard exercise or heavy work for the first few days.

Continue to take your pain tablets until you notice any improvement.

You will be asked to keep a pain diary (this will be supplied) and you should give this to the clinician or physiotherapist who referred you for this procedure. They will also arrange follow up for you, usually within one month.

## **Important Information**

You will not be able to have this procedure if you have not stopped your blood thinners. We also need to know of any allergies or if you are taking antibiotics at the moment.

## **Information for females**

You will be asked if there is any chance that you could be pregnant prior to having exposure to x-ray.

For further information regarding nerve root injections, please go to the British Association of Spinal Surgeons website at [www.spinesurgeons.ac.uk](http://www.spinesurgeons.ac.uk) (click through to "Patient Information" then "Nerve Root Pain and Some of the Treatment Options").

## **Who to contact**

You will be allowed to go home once you can safely mobilise and have had something to drink. If you have a problem after your discharge please either contact your GP during hours or A and E out of hours. The Torbay Hospital Pain service has limited telephone hours during the day but may also be able to help. 01803 654310. In the unlikely event you have increased weakness in your leg or legs that gets worse after discharge you must seek medical advice urgently (A and E).

## ***Additional Update in light of COVID***

### **Nerve Root Injections and the risk of catching COVID**

There have been concerns that taking steroids increases the risk of catching COVID because steroids can reduce the effect of immune system. In other words, the worry is you are would be more likely to catch COVID after having steroids, with the associated risks of serious illness and even death. It is not known whether this risk is theoretical or real for a single dose.

Interestingly intravenous dexamethasone, has been shown to improve outcome in patients who have already caught COVID and been admitted to hospital and then needed oxygen (but not in others)<sup>2</sup>.

Reduced immune system response is very unlikely with a course of steroids of less than 2 weeks. Being in pain, not sleeping and taking opioids (strong painkillers) are also known to reduce immune function, so there is a balance that has be struck.

There are several risk factors that certainly do worsen outcomes with COVID infection. They are age, sex (male), ethnicity and additional medical conditions, particularly diabetes, hypertension and obesity.

For more information on numbers of people who have COVID please check <https://coronavirus.data.gov.uk/>.

National guidance on the use of steroid injections has been issued<sup>3</sup>. This gives advice to doctors on deciding when it is appropriate to give a nerve block during this time and limiting injections where possible. Overall, we still don't know what the level of risk is but it is likely to be very small.

Following this guidance also means that your case has been discussed by the South Devon Spinal specialist group and a nerve root injection considered a reasonable treatment option for your condition.

However, you must understand and agree to these risks on consenting for this injection, including the risk of serious illness with COVID including death.

### **Immunisation and COVID**

There is a theoretical risk of a vaccination being less effective if you have your nerve root injection at the same time. This is because steroids could reduce the immune response that your body makes to the vaccine. The risk again is not known and likely to be small. Taking steroids is not a contra-indication to having the vaccine.

The vaccine also causes a few patients to have high temperature for a couple of days, particularly after the second dose. It is possible this could be confused with an infection caused by the nerve root injection if the two injections are given close together.

Due to these reasons, we are now recommending that you avoid having a steroid injection for 2 weeks before and 2 weeks after your vaccination.

### **COVID swab, social distancing and isolation**

In order to reduce risk, you need to socially distance for 1 week prior to your swab and **isolate** until your injection. After your injection you should socially distance for a further 48 hours.

**Please sign below**

I understand I am having a Nerve Root Injection, as described above.

Level

Other	
L4	
L5	
S1	

Side

Right	
Left	

I have read the above and understand the contents. I give consent to proceed to the above procedure.

Patient name:

Patient signature:

Date:

Consenting doctor, signature:

Name:

Signature:

Date:

1. <https://www.rcoa.ac.uk/sites/default/files/documents/2019-09/NAP3%20report.pdf>
2. <https://www.recoverytrial.net/>
3. [https://www.rheumatology.org.uk/Portals/0/Documents/COVID-19/MSK\\_rheumatology\\_corticosteroid\\_guidance.pdf](https://www.rheumatology.org.uk/Portals/0/Documents/COVID-19/MSK_rheumatology_corticosteroid_guidance.pdf)
4. Joint Corticosteroid Injection Associated With Increased Influenza Risk.  
<https://doi.org/10.1016/j.mayocpiqo.2018.01.005>

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For further assistance or to receive this information in a different format, please contact the department which created this leaflet.