

# Cervical Nerve Root Block / Transforaminal Epidural Injection

Information for patients

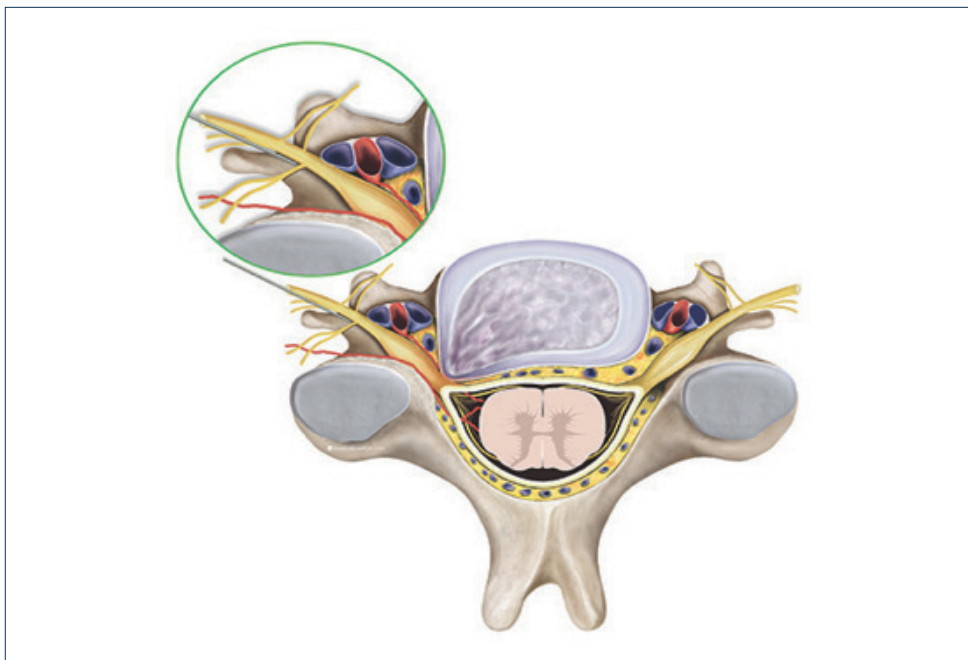


**New Hall  
Hospital**

Part of Ramsay Health Care

# What are **Nerve Root Blocks / Transforaminal Epidural Injections?**

A mixture of local anaesthetic and steroid are injected around the nerve root as it exits the spinal canal in the cervical spine (neck).



## **Why do I need** these injections?

The injection will help to diagnosis which nerve is causing your arm pain.

- By injecting a local anaesthetic around it, this can temporarily numb the nerve root. It is useful to know whether you then notice any change in your symptoms in your arm or neck while the anaesthetic is working for the first 6 hours after the injection.
- While the local anaesthetic is active, you may notice some numbness and/or weakness in the arm.

The injection will potentially give you pain relief.

- The steroid portion of the injection is an anti-inflammatory and reduces the inflammation and swelling around your nerve which may help ease pain, predominantly in your arm.
- Response to the injection varies greatly from person to person. Some people get excellent pain relief, while others notice little or no benefit. Most people notice an improvement in pain within a week or two, but it can take longer.
- The MRI scan does not help us understand who will respond to the injection. The length of time people notice a change in their pain varies from no response, through to long term improvement.
- Symptoms may return, however the injection can provide a window of pain relief that allows you to engage with Physiotherapy and exercise while the disc naturally recovers.

## Consent

Your Spinal Consultant will explain the risks and benefits of the procedure. These are also outlined in this leaflet. You will be asked to sign a consent form prior to the injection. If you have any questions, then please feel free to ask any member of the Spinal Team. There is also a patient information leaflet on consent, that you can read for more information - please ask if you would like a copy.

Hundreds of thousands of patients have had spinal epidural injections with steroids, with only a small number of risks reported. We use a certain type of steroid in our cervical injections which cause fewer complications. Around a quarter of medicines used in pain medicine are 'off license'. This means that the medicine has not been approved by a regulatory body for the purpose for which they are to be used. Drug companies do not feel the need to run expensive trials to licence steroid injections for the spine, when they are already in constant safe and effective use in medical practice.

# What are **the risks?**

## **Common**

- Worsening of pain. Some people experience an initial increase in neck or arm pain. This is usually short term.
- Pain and bruising at the injection site. This will improve after a few days and not everyone experiences it.
- Effects of the steroid. This can include a flushed face or insomnia. Diabetics may notice an increase in blood sugar levels for a few days after the injection, so it's advisable to closely monitor your blood sugar levels for the following week after the injection if you are diabetic.
- Feeling faint as you may experience a temporary reduction in blood pressure.

## **Rare**

- Allergic reaction to the local anaesthetic, dye, antiseptic or plasters used. If you have known allergic reactions, then please advise your spinal medical team prior to the procedure.
- Temporary weakness or numbness in your arm due to the local anaesthetic around the nerve. Full recovery usually follows.
- Headache. If this does not improve within a few days contact the Spinal Nurse Specialist Team.

## **Very Rare**

- Permanent damage to your nerve root via trauma from the needle or a bleed around the nerve, or infection. Any of these complications could put more pressure on your nerve. This could lead to an increase in your arm symptoms. It is very rare for permanent damage to occur to a nerve outside the spinal column and the injection is done under X-Ray guidance so the Consultant can accurately place the needle
- Blood can clot in the epidural space which could put more pressure on the spinal cord causing paralysis.

- Injury to the blood vessels sitting around the nerve. This may be caused by trauma from the needle or if a blood clot forms blocking or compressing the blood vessel. In extremely rare circumstances this could cause a stroke or even death.

## What are **the benefits?**

- The injection can greatly improve your arm and sometimes your neck pain in the short to long term, but may not provide a cure.
- Response to the local anaesthetic can confirm that we are treating the correct structure responsible for your symptoms. This can be important if surgery needs to be considered at a later stage.
- By reducing your pain, you can engage with other beneficial activities such as exercise or Physiotherapy.
- You may be able to reduce or stop pain medication (under advice from your GP).
- Your sleep and day to day activities may improve, if you get a reduction in pain.

## How do I **prepare?**

### **Please let us know if:**

- You are diabetic.
- You have tested positive for MRSA.
- You are feeling unwell or have a temperature.
- You have been admitted to hospital since being placed on the waiting list for the injection.
- There is any possibility you might be pregnant as the injection is done using an X-Ray.
- If you have a blood clotting disorder.
- If you are taking any medication that thins your blood. This will need to be stopped prior to the procedure. It's very important that you inform the spinal medical team, as they will need to advise you how

long your medication needs to be stopped for, prior to the injection. Failure to stop blood thinning medication increases your risk of complications to the blood vessels as outlined in the rare risks section. If you are taking any of the following medication, or have any concerns about whether your medication thins the blood, let our spinal medical team know, as this list is not exhaustive:

- Non-Steroidal Anti-Inflammatory (NSAID) drugs such as Naproxen, Ibuprofen, Diclofenac, Meloxicam.
- Aspirin.
- Anti-Coagulant drugs such as Warfarin (Marevan), Heparin injections.
- Anti-Platelet drugs such as Clopidogrel (Plavix), Dabigatran (Pradaxa), Rivaroxaban (Xarelto), Apixaban (Eliquis), Edoxaban(Lixiana), Prasugrel (Effient), Ticagrelor (Brilique) Dalteparin (Fragmin) injections, Enoxaparin (Clexane) injections, Tinzaparin (Innohep) injections, Dipyridamole (Persantin Retard) Phenindione, Acenocoumerol (Sinthrome), Asasantin Retard.

Please ensure that a responsible adult accompanies you to the hospital and is able to drive you home afterward. This is because you will be unsafe to drive after the procedure, due to the potential numbing effect of the local anaesthetic on your arm. We do not recommend that you use public transport. By the following day the numbness should have worn off.

## What happens **during the procedure?**

You will be sent an appointment to come to the hospital to have your injection. Expect to be in the hospital for 3-4 hours, although you may be able to go home more quickly than this. You will be asked to change into a hospital gown. Your neck will be cleaned with antiseptic solution. The injection is done under X-Ray guidance. You will be lying face up, as the Consultant accesses the nerve from the front of your neck on the same side that you have symptoms. Local anaesthetic will be injected which can sting. A fine needle is then introduced into your neck down to the nerve. Dye is then often used to confirm that

the needle is placed in the correct position. You will then feel pressure as the local anaesthetic and steroid are injected. Sometimes the symptoms in your arm will be temporarily worse due to the pressure around the nerve. The needle will then be removed.

This injection is not normally done under sedation, as it is important that you are awake to advise us of any symptoms you may be experiencing. We also want you to remember and be aware of, any change in symptoms after the injection.

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

You will be transferred to a recovery area. When you are feeling well enough and the nurses are happy that your vital signs are normal, the person accompanying you can drive you home.

Make a note of any change in your neck and arm pain for the first 6 hours after the injection. You may choose to use the pain diary at the end of this leaflet, to record the change in pain levels as they occur.

It's very common for the pain to return the following day after the injection. Continue to take your usual pain killers. The day after the injection, you can start to take any anti-inflammatories or other blood thinning medications you stopped prior to the injection as you did before. The following day you can gradually and gently return to normal day to day activities. We would advise you to avoid strenuous activity for 48 hours after the injection.

As your pain improves, you can gradually increase your activity and return to exercise. You can also gradually reduce your pain relief under supervision from your GP, as the pain reduces. Remember to pace this return to function and exercise gradually, as you may have good and bad days as you recover.

## Will I have a **follow up appointment?**

The steroid, which is an anti-inflammatory, should start to work in the next week or two. This varies quite a bit from person to person. If you have not had a significant benefit from the steroid by one month after the injection, **contact your Spinal Consultant's Secretary to book a follow up appointment.** We leave you on an open appointment for a set time after the injection, so if the benefit does not last, don't worry, you can still contact your Spinal Consultant's Secretary to organise a review within this period. Their telephone numbers are at the end of this leaflet.

## Who do I contact **if I have concerns?**

**If you are worried about any symptoms after your injection you can contact the Spinal Nurse Specialist Team for advice.**

Remember it is common to experience temporary increase in symptoms in the neck and arm after the injection and you should manage this by taking pain relief as prescribed by your GP and adjusting your activities.

### **Contact us if:**

- Your injection site shows signs of infection such as discharge or redness/swelling lasting more than the initial few days or if you have a fever or feel unwell.
- Unremitting severe pain, or new pain, weakness or altered sensation in a different place or limb from your symptoms prior to the injection.
- Persistent headaches.

If you are unable to reach the Spinal Nurses or you have an urgent query outside of the hours the Spinal Nurses are available, contact your GP or local Out of Hours Service.



## Useful Contact Numbers:

Spinal Nurse Specialists: 01722 435 175. Leave a message on the answering machine. Messages will be reviewed between **Monday - Friday 8:00am - 3:30pm**. Please leave your telephone number and details and we will call you back.

## For follow up appointments, contact your Spinal Team's Secretary:

Mr Hilton	01305 257 096 / 01722 435 164
Mr Stenning	01305 257 096 / 01722 435 686
Mr Chapple	NHS 01722 435 183 / Private 01722 435 167
Mr Dabke	01722 435 176
Mr Davies	01722 435 682
Mr Fowler	01722 435 176
Mr Evans	01722 435 697
Dr Park	01305 257 096
Elaine Robinson	01722 435 168
James Beck	01305 257 096
Main Switchboard	01722 422 333

## Pain **Diary:**

Pain score: 0 is no pain, 10 is very severe pain.



0 1 2 3 4 5 6 7 8 9 10



	Neck Pain	Arm Pain
Prior to injection		
First 6 hours after injection		
24 hours after injection		
Two weeks after injection		
One month after injection		
Two months after injection		

## References:

1. Royal College of Anaesthetists Anaesthesia Explained: Side Effects and Complications 2019. <https://www.rcoa.ac.uk/documents/anaesthesia-explained/side-effects-complications>
  2. <https://www.nhs.uk/conditions/steroid-injections/>
  3. <https://www.bnf.nice.org/treatment-summary/oral-anticoagulants/html>
- Medical Illustrations by [www.medical-artist.com](http://www.medical-artist.com)

# Notes

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