

# CT guided nerve root injections

## Patient leaflet

**If you need this leaflet in a different language or accessible format  
please speak to a member of staff who can arrange it for you.**

اگر به این بروشور به زبان دیگر یا در قالب دسترس پذیر نیاز دارید،  
لطفاً با یکی از کارکنان صحبت کنید تا آن را برای شما تهیه کند.

Jeśli niniejsza ulotka ma być dostępna w innym języku lub formacie,  
proszę skontaktować się z członkiem personelu, który ją dla Państwa przygotowuje.

Dacă aveți nevoie de această broșură într-o altă limbă sau într-un format accesibil,  
vă rog să discutați cu un membru al personalului să se ocupe  
de acest lucru pentru dumneavoastră

如果您需要本传单的其他语言版本或无障碍格式，请联系工作人员为您安排。

إذا احتجت إلى هذه النشرة بلغة أخرى، أو بتنسيق  
يسهل الوصول إليه، يرجى التحدث إلى أحد الموظفين لترتيب ذلك لك.

## What is a CT nerve root block?

It is an injection around the spinal nerve root, which arises from the spinal cord. This nerve root carries sensory information including pain.

These injections are used mainly for localised back pain with leg or arm pain where simpler measures have not helped enough. It may help your pain by reducing some of the pain signals. Pain relief can be short-lived although some people can get significant and lasting pain relief from these injections. It may not be a cure.

The injection contains local anaesthetic often with a small amount of steroid. The injection is usually given alongside other treatments such as physiotherapy.

## Is this the right treatment for me?

Other treatment options will be discussed with you before deciding to have the injection(s) and your consent is needed. The decision on whether or not to have the injection(s) is made together by you and your doctor. Your doctor will be able to provide you with up-to-date information about the chance of this treatment working for you and how it fits in with other care.

If you are undecided about whether or not to have an injection then more advice and information can be given. Please speak to your doctor for more information.

If your health has changed, it is important to let your doctor know:

- If you have an infection in your body or on the skin of your back, your doctor may delay the procedure until the infection is cleared before giving the treatment.
- If you have been started on anticoagulant or antiplatelet medicines that “thin the blood” such as warfarin, heparin, apixaban, rivaroxaban or clopidogrel, extra preparation may be needed before you have the treatment.
- If you suffer from diabetes, the use of steroids during injections may cause your blood sugar to change requiring monitoring and adjustment of your diabetic medication.
- If you have any allergies.
- If you are pregnant. This procedure can not be performed in pregnant individuals. To reduce the risks for individuals of child bearing age, lumbar nerve root injections are usually performed within the first ten days of the menstrual cycle.

Finally, if you are planning to travel abroad or fly within two weeks after the injection, please let your doctor know as it may be best to change the date of the injection.

## What to expect

### Does this procedure expose me to radiation?

CT scanning involves the use of radiation. Any examination using radiation is only performed when strictly necessary and it is felt the benefits of the examination outweigh any potential risks. All imaging is performed using the minimum amount of radiation necessary, and is individualised for each patient depending on the size of the patient and the condition being investigated. For more information on radiation please see the link below:

[www.ukhsa-protectionservices.org.uk/radiationandyou/](http://www.ukhsa-protectionservices.org.uk/radiationandyou/)



### What will happen to me during the treatment?

Before the injection, your doctor will discuss the risks and benefits of the procedure with you. Your doctor will ask for your consent before the injection and if you are happy to go ahead you will sign a consent form. The treatment will take place in a dedicated area with a trained person. An CT machine will be used to make sure the injection is accurate.

### Transforaminal Epidural/Dorsal Root Ganglion Block for the Treatment of Pain

- You will be carefully positioned and the skin around the injection site(s) will be cleaned with an antiseptic solution or spray; this can feel very cold.
- A CT machine will be used to make sure the needle is in the right place.
- You will feel a stinging sensation as local anaesthetic is injected to numb the skin and surrounding tissues. Your doctor will warn you of this first.
- The doctor will direct the injection to the dorsal root ganglion suspected to be a source of pain and usually inject contrast (a solution that is visible under X-ray) to ensure the needle is in the right place. When the injections are made, you may feel pressure, tightness or a pushing sensation in your back, leg or arm. If it is uncomfortable, do let the doctor know

### What will happen to me after the injections?

After the injections you will be taken to a recovery area where staff will check on you. You will be told when to get dressed and be given help to make sure that you can stand safely after the procedure.

## What to expect continued....

### When will I be able to go home from hospital after my injections?

You will usually be able to go home within an hour after the injection and in some cases much sooner, depending on how long your doctor or nurse want you to stay. Please make sure that you have someone to collect you after the procedure. It is unsafe for you to drive home straight after the procedure. If you do so your motor insurance will be invalid.

### What can I do after my procedure?

Ideally, you should arrange for someone to stay with you for 24 hours but, if you can't, you should at least have access to a telephone. You should not drive, operate machinery, sign legal documents, provide childcare without help or drink alcohol until fit to do so. If you are not sure, please ask your doctor for more advice.

### When can I return to work after the procedure?

This will be different for different people and may depend on the type of work you do. It is difficult to give general advice and so you should discuss this with your doctor.

### Will I experience any side-effects?

As with any procedure, there may be side effects. However, these are usually minor but there are risks with this procedure.

### Side-effects may include:

- Mild local tenderness and/or bruising at the site of the injection. This usually gets better over the first few days.
- The local anaesthetic may spread causing some numbness and/or weakness in your legs (lumbar injections) or arm (neck injections). If this happens, the effect is temporary and will quickly get better over minutes or hours.
- The steroids can have varied effects ranging from flushing, menstrual disturbances, weight gain, increase in blood sugar levels and worsening of mental health issues. These effects are temporary and are more likely with repeated steroid injections.
- Infection. This is rare. You should seek medical help if there is local warmth or redness where you had the injection with tenderness. Or if you feel hot and unwell. This may need antibiotic treatment.
- There are important nerves in the spine, but serious nerve injury is very rare and happens when there is serious bleeding or abscess near the spinal cord. Persistent weakness of the legs and/or incontinence needs further urgent investigation. Very rarely cervical injections have caused severe harm or even death. These complications are so rare it is difficult to say how often they happen with certainty. Please speak to your doctor to discuss this issue fully.

## Side effects & risks

Blood pressure may temporarily fall and people may sometimes feel faint

- Headache. Uncommonly, the needle may be placed too far and spinal fluid (CSF) encountered. This is called dural puncture and may lead to headache that requires further treatment. If a severe headache does start following your injection, take some Paracetamol, drink plenty of water and lie flat. If the headache continues for more than twenty-four hours please contact your GP.
- Injection treatments do not always work and may not help your pain.
- (Injections in thoracic area only) Injury or collapse of the lung (pneumothorax). This is very rare. If you get chest pain or breathlessness, you should seek immediate medical help.
- In rare circumstances, steroid use can damage your eyesight. You should report any new vision problems (such as blurred or distorted vision) to your doctor.

### What can I expect in the days afterwards?

You may feel some soreness or aching at the injection site. Please keep the area of the injections dry for 24 hours following the procedure. Do not worry if your pain feels worse for a few days as this sometimes happens. Take your regular pain killers and medications as normal and this should get better. Try to keep on the move about the house while avoiding anything too difficult.

### What should I do in the weeks after the injections?

As your pain decreases, you should try to gently increase your exercise. Simple activities like a daily walk, using an exercise bike or swimming on your back will help. It is best to increase your activities slowly. Try not to do too much as you may have more pain the next day. Your doctor will be able to give you more specific advice.

### What follow-up will be arranged?

A letter will usually be sent to your GP and your doctor will tell you what to do after the procedure. You may be asked to make a call to the pain department, be given a form to fill in, or given a telephone review or other appointment.

### Is there anything else I need to think about before the procedure?

- Please bring your glasses if you need them for reading.
- Bring any other devices you may need, such as hearing aids, mobility aids etc.
- Always bring a list of all current medication.
- Continue to take your medication as usual on the treatment day.
- Avoid vaccinations including COVID-19 jabs for 2 weeks on either side of the procedure.

## Finally

The pictures taken during the examination are studied carefully and a detailed report is produced. The results will be sent to the person who referred you for the test. They will discuss the results with you and any treatment you may need.

You may already have an appointment with the team who referred you. If not, please contact them to arrange one to discuss the results of this test. If you have any further questions, please do not hesitate to call the Radiology Department via the number given on your appointment letter.

As this is a teaching hospital there may be students and observers present during your examination as part of their ongoing training. Please let the staff know if you do not wish any students to be present during your attendance.

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