Caring at its best

University Hospitals of Leicester

Having a nerve root block injection for pain

Department of Radiology & Department of Sports Medicine Information for Patients Produced: January 2023 Review: January 2026 Leaflet number: 22 Version: 7

Introduction

If you are an outpatient please read your appointment letter carefully to check which hospital your appointment is at. Your appointment will be in either the Radiology Department or the Sports Medicine Department. Please check your appointment letter to find out where to go.

This leaflet tells you about your procedure. Please read it carefully as it contains important information and instructions.

What is a nerve root block injection?

A nerve root block is an injection of local anaesthetic and steroid medication. It is given around the nerves which come from your spine. Swelling/ inflammation around these nerve roots can cause pain in your arms and legs. A nerve root block may help this pain but it is not a cure. The procedure can be used as a diagnostic test to determine where your pain is actually coming from.

It can be done on your neck (cervical spine) or lower back (lumbar spine).

Important information we need from you

Please tell X-ray staff when you arrive if:

- You are allergic to iodine or rubber (latex), have any other allergies or have asthma.
- There is any possibility that you may be pregnant.

If you have diabetes please tell the person performing your procedure before it starts. This is important because the steroid that is injected into your joint could affect your blood sugar level.

Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk



Important information for patients on blood thinning medication

If you are taking medication that thins the blood (anticoagulants or antiplatelets) it may need to be stopped or replaced with a different one for a few days.

Please call the Radiology Department or Sports Medicine Department for advice by calling the number on your appointment letter as soon as possible. You will be asked what blood thinning medication you are taking, how much you take (the dose), and what you are taking it for.

Common examples of these drugs include:

- aspirin
- warfarin
- clopidogrel (Plavix®)
- apixiban (Eliquis)
- rivaroxaban (Xarelto)
- ticagrelor (Brilinta)
- dalteparin
- heparin

You may have already been given instructions on blood thinners by the doctor who referred you for this procedure. Please still call the Radiology Department or Sports Medicine Department so we can check this.

What arrangements must I make before my procedure?

Before your procedure please plan for the following:

- You must be collected by a responsible adult. They must take you home in a car or taxi after your procedure. Important driving after an anaesthetic is a criminal offence, and will affect your insurance cover.
- You must have a responsible adult at home with you for at least 24 hours after your procedure.
- You must **not** drive or cycle for a minimum 24 hours after your injection.

How do I get ready for the procedure?

For patients attending the Radiology Department:

- Do not have anything to eat for 2 hours before the procedure. You may have sips of water, cordial, sugary drink or another drink up to the procedure time.
- You can bring food and drink with you to have after your procedure.

For patients attending the Sports Medicine Department - you can continue to eat before your procedure.

Please call the number on your appointment letter to tell us of any of the following, as we may need to re-arrange your appointment:

- You have a high temperature (fever) and are feeling unwell.
- You are on antibiotics.
- You are within a few days of a surgical procedure.

Who will be doing the procedure?

The procedure will be carried out by a doctor who specialises in these X-ray treatments. This will either be a radiologist in the Radiology Department or a spinal surgeon in the Sports Medicine Department. There will also be a radiographer and there may also be a nurse or radiology assistant in the room.

As we are a teaching hospital a student may also be present. If you wish, you can ask that a student is not present during your procedure.

How long will it take?

The time will vary for each patient. Most procedures take about 20 and 40 minutes. After your procedure you will be asked to stay in the department for a short time before you go home. This may be up to 45 minutes.

You should expect to be in the department for up to 2 hours in total.

Asking for your permission (consent)

The doctor who referred you should have talked to you about the reasons for this procedure and any other options.

The doctor doing your procedure will confirm that you understand why the procedure is being done, the potential risks and what the chances of success are. You will then be asked to sign a consent form to confirm this. You should feel that you have had enough explanation before you sign the consent form.

If after talking to the doctor you do not want to have the procedure, then you can decide against it at any time.

If the doctor feels that your condition has changed they will talk to you about whether the procedure is still needed. They may then ask you to return to your referring doctor for review. If you feel during the procedure that you do not want it to continue we will explain the implications of not doing so to help you fully decide.

What happens during the procedure?

- When you arrive at the department where your appointment is, you will be directed to the relevant waiting area. You may be asked to change into a hospital gown and sometimes paper pants.
- You will be taken into the X-ray room where the procedure will be explained to you and you may ask any questions.
- You will then be asked to lie face down on the X-ray table. You will be asked to lie in position and to lie still for the rest of the procedure.
- If you are having a root block injection in your neck, the nurse will do routine monitoring such as checking your blood pressure and heart rate.
- Everything is kept clean (sterile). Your skin is cleaned with antiseptic and you will have some of your body covered with sterile sheets.
- The skin and deeper tissues over the joint may be numbed with local anaesthetic. When the local anaesthetic is injected it stings to start with, but this soon wears off and the skin and deeper tissues should then feel numb. If the procedure does become uncomfortable you should tell the member of staff who will be with you throughout the procedure.
- The doctor will use X-rays to see your spine and to help guide the tip of the needle close to the nerve root where the injection will go. A small amount of a colourless liquid that shows up on X-rays (contrast liquid) may be injected to check the position of the needle.
- A small amount of steroid (to reduce inflammation) and local anaesthetic will be put into the area around the nerve root. If you have any problems with this or experience any discomfort please speak to the staff that will be with you.
- At the end of the procedure the injection site will be covered with a wound dressing.

What happens after the procedure?

- We may ask you to wait in the department for a short time after your procedure.
- For a few hours after the procedure your back or legs may feel a bit stiff or numb.
- **Do not drive or cycle for 24 hours after your procedure.** You will need someone to drive you home after your procedure.
- For 3 to 4 days light activity such as sitting, standing and some walking is allowed but we ask you not to carry out heavy manual work for 3 to 4 days.

Monitoring your pain over the next few weeks:

After a few days the local anaesthetic will wear off. It is important that you monitor any changes in your pain over the next few weeks. You will be asked to keep note of whether the injection has provided you with any pain relief and if so how long for. It may take 3 to 4 weeks to see the benefit of the injection. This information will be useful next time you see your consultant.

You will have a follow-up appointment about 3 months after the procedure. If the procedure does not work then your referring doctor may discuss other options at your follow-up appointment.

Are there any risks?

As with any procedure, complications are possible. A nerve root block injection is a common procedure. We have included the most common risks and complications in this leaflet, although they are different for each person. Your risks will be discussed with you before you sign a consent form. The risk of complications is less than 1 in 100 patients.

- **Infection** there is a small risk of an infection. This affects less than 1 in 100 people. If over the next few days the injection site becomes red, hot or painful, or if you get a high temperature (fever), contact your GP or call the NHS helpline on 111.
- **Bleeding or bruising** there may be a small amount of bleeding or bruising at the injection site. This affects less than 1 in 100 people. Bleeding and bruising can cause pain for a few days
- **Increased pain** (aggravation of symptoms) your pain symptoms can get worse for a few hours or days before the injection starts to work. If you have increased pain several days after the injection it could be a sign of infection and you should call your GP or NHS 111 for help.
- **Symptoms in the arms, back or legs** (aggravation of symptoms) your arms, back or legs may feel a bit stiff, numb or weak for a few hours afterwards.
- Tingling sensation in one or both legs (paraesthesia) which gets better by itself.
- The needle could go into a small blood vessel around the nerve root during the procedure. The risk of this injury is small. This type of injury is usually minor. In most cases it does not cause any complications. There is however a very small risk of blood clots developing in the injured vessel. This may affect the blood supply to your brain or spinal cord. This could potentially lead to neurological problems including nerve damage or, very rarely, not being able to move some of your body (paralysis) due to spinal cord injury. In very rare cases this type of injury in patients having nerve root block of the neck has resulted in death.

Possible side effects from steroid injection:

- Feeling dizzy, headache, low or high blood pressure, feeling sick, being sick, diarrhoea or redness in the face (flushing) for a short time. Most patients do not get these side effects. Usually these side effects happen straight away, but can happen in the next few days.
- Irregular periods patients who have menstrual periods may notice that their menstrual cycle is slightly irregular for a few months.
- Changes to your blood sugar levels patients with diabetes should monitor their blood sugar more closely over the next few days.

Possible side effects from contrast liquid:

• Some patients may be allergic to the contrast liquid and may have symptoms such a rash. If you develop symptoms at home you should contact your GP or call NHS 111.

Possible side effects from local anaesthetic:

• Feeling dizzy, low blood pressure, allergic reaction, irregular heart rate. In most patients this is temporary and settles on its own.

What are the risks from exposure to radiation in this procedure?

The main risk from exposure to X-rays is an increase in the risk of getting a cancer in the future. This risk is thought to be very small. We are all exposed to natural background radiation every day of our lives. This comes from the sun, food we eat, and the ground. Each X-ray examination gives a dose on top of this natural background radiation. The risks of radiation are slightly higher for an unborn child so we must ask some patients aged 10 to 55 years about their last period and possibility of being pregnant.

We will take all safeguards to minimise the amount of X-rays you receive.

What if I need to talk to someone?

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If you have any questions or concerns, or cannot make your appointment, please call the department where your procedure is booked - Monday to Friday, 9am to 5pm, excluding bank holidays:

- For the Radiology Department call **0116 258 8765 (option 7)**
- For the Sports Medicine Department call 0116 258 8101

If you have any problems after your procedure please see your GP or call the NHS helpline on 111.

اگر آپ کو یہ معلومات کسـی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔ علی هذه المعلومات بلغةٍ أُخری، الرجاء الاتصال علی رقم الهاتف الذي یظهر في الأسـفل જો તમને અન્ય ભાષામાં આ માફિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ `ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ। Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk

Leicester's Hospitals is a research active trust so you may find research happening on your ward or in your clinic. To find out about the benefits of research and become involved yourself, speak to your clinician or nurse, call 0116 258 8351 or visit www.leicestersresearch.nhs.uk/ patient-and-public-involvement