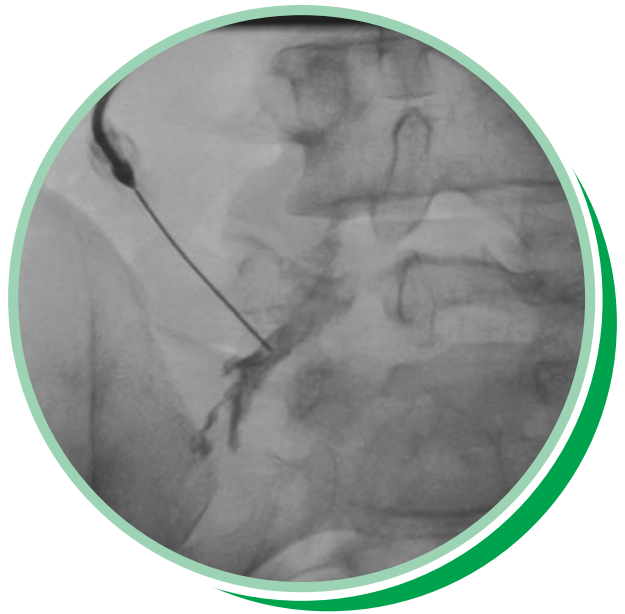


Nerve root injections



Information for patients

Radiology



In hospital and in the community

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What is a nerve root injection?

A nerve root injection is normally undertaken in order to determine the cause of pain in the leg or foot. It is a test rather than a treatment for your pain. After a small injection to give local anaesthetic, a special dye that is visible on X-ray is injected next to the nerve root via a fine needle. This is followed by another injection of local anaesthetic and a steroid.

Why do I need it?

You will probably have been suffering from back and leg pain and this may be due to nerve root compression or irritation. It is not always very easy to tell which nerve root is causing you so much pain. You may have already had an MRI or CT scan, and together with your surgeon's assessment, this has shown that one nerve root in particular is the probable cause for your pain; this test aims to confirm or exclude this.

Are there any risks?

Most side effects from the procedure are usually minor. Major complications have been reported in isolated case reports. Possible complications include:

Nerve damage: In about 1 in 25 cases the nerves at the site of the injection may be more deeply affected by the anaesthetic, causing weakness, numbness or pain in the leg. Usually this effect will only last for a few hours, and will disappear after the local anaesthetic has worn off. Very rarely the side effect may be prolonged or permanent.

Stroke: The nerve roots in your back may lie very close to the blood vessel that supplies the spinal cord. There are case reports of spasm or damage to these vessels during this procedure, and this can lead to temporary, and sometimes permanent, loss of sensation or power in part of your body (stroke). The complication is infrequent, but is something that you should be aware of before we carry out the injection.

Infection: Sterile technique and equipment are used to reduce the risk of infection, although this complication may still occur despite these precautions.

Allergic reaction: Approximately 1 in 2,500 patients will have an allergic type reaction to the dye. Please tell the doctor if you have any allergy to medicines or anything else.

Bleeding: It is quite common (approximately 1 in 20) for there to be a small amount of bruising at the site of injection; occasionally the bleeding may result in a large bruise or haematoma which can be painful, or cause pressure on adjacent structures in the back.

Radiation: The typical dose of radiation for this procedure is very low. However, this procedure cannot be done without the use of X-rays, as these help the radiologist to safely guide the needle to the correct nerve root.

We must obtain your consent for any procedure or treatment beforehand. Staff will explain all the risks, benefits and alternatives before they ask for your consent. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information

Having the procedure

Where is the procedure done and who will do it?

The procedure is done at the Radiology Department in a special screening room. This allows your Consultant Radiologist, who is a doctor that specialises in X-ray guided procedures, to see exactly where the needle is going.

This test is not carried out on pregnant women. If you suspect or know that you are pregnant please telephone **0114 271 4271**.

Women who are still having periods should have the procedure during the 10 days following the start of your menstrual period. (This includes the time that you are menstruating). If your appointment is not within the first 10 days of your menstrual cycle, please telephone the department and we will arrange a suitable date with you.

Should I continue taking my medication and can I eat and drink before?

If you are taking medications then you should still take them, including any pain medication or medication for diabetes. However, the procedure is not safe for people taking any medications to thin their blood, such as warfarin or clopidogrel.

You may eat and drink as usual before the procedure, unless you are having a cervical (neck) nerve root injection, in which case you must not eat and drink for 4 hours before the procedure.

Tell the ward staff if you are allergic to any medications. In addition, you should mention if you are taking any medication to thin your blood, such as **warfarin** or **clopidogrel**.

When do I need to come into hospital?

Mostly the procedure is done as an outpatient and you will receive an appointment letter informing you of the time of your appointment. It is useful if you can arrive 10 -15 minutes early in order to get ready for the procedure. The procedure takes approximately 40 minutes.

If you need to be admitted you will get a letter telling you when to arrive and which ward to go to.

What will happen when I arrive in the X-ray department?

When you arrive at the department, one of our nursing staff will collect you and take you into the screening room. The Consultant Radiologist will check all of your details and explain the procedure to you. He or she will then ask you to sign a consent form. Once this is done, the nurse will help you to get into the correct position on the X-ray table and will stay with you throughout the procedure so that he or she can help you and explain things as they happen.

What happens during the procedure?

After injecting local anaesthetic into your skin and muscles the Consultant Radiologist will place a fine needle into the space next to the nerve root using an X-ray machine to guide him or her. The Radiologist will then inject a special dye, known as 'contrast', next to the root and inject a small amount of local anaesthetic and steroid. When the Radiologist makes the injection he or she will ask if you feel any pain.

If you do feel pain, he or she will ask if the pain is in the same or a different place to where you usually have discomfort. We will then apply a small dressing or plaster to the wound.

What happens after the procedure?

Once the procedure is finished and we are happy that you are well, you will be able to go home. Occasionally we may need to observe you for a few hours after the procedure. If you do need to be admitted you will be discharged usually 4 hours after the procedure.

When you get home, you should rest for about 24 hours but you can eat and drink as normal. It is quite common to have some pain or discomfort in the back for a few days after the procedure.

Is there anything I should look out for when I go home?

It is extremely rare to have any problems once you have gone home. However, if you do feel unwell with symptoms such as:

- An increase in back pain or swelling
- New numbness or weakness in your legs
- Bladder or bowel problems
- Fever
- Feel generally unwell

you should consult your GP or your local Accident and Emergency department and explain that you have had this procedure.

When and how will I get my results?

After the procedure, your Consultant Radiologist will ask you to fill in a questionnaire so that you can tell them whether or not your leg pain has been made better by the injection. Please send this back to the X-ray department in the reply paid envelope provided with the questionnaire.

Once you have returned the questionnaire your Consultant Radiologist will write a report and then send it to your Surgeon within a few days. You should already have an appointment booked with your Surgeon

and they will discuss your results with you then. If you do not have an appointment to see your Surgeon, their secretary will send one to you.

Where can I find more information about nerve root injections?

More information about Radiology is available from the Royal College of Radiologists' website on:

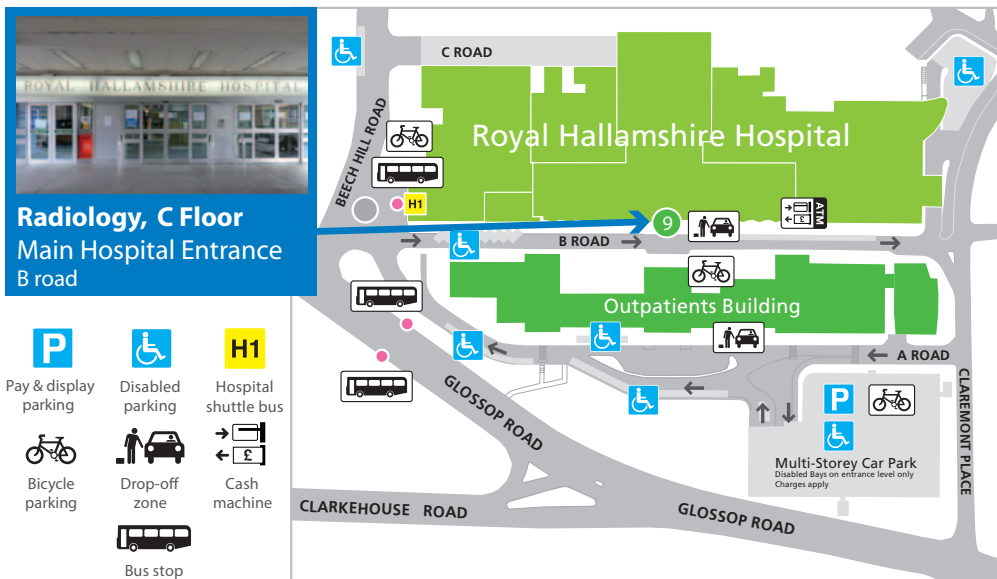
www.rcr.ac.uk/index.asp?PageID=322

Further information on nerve root injections is available at:

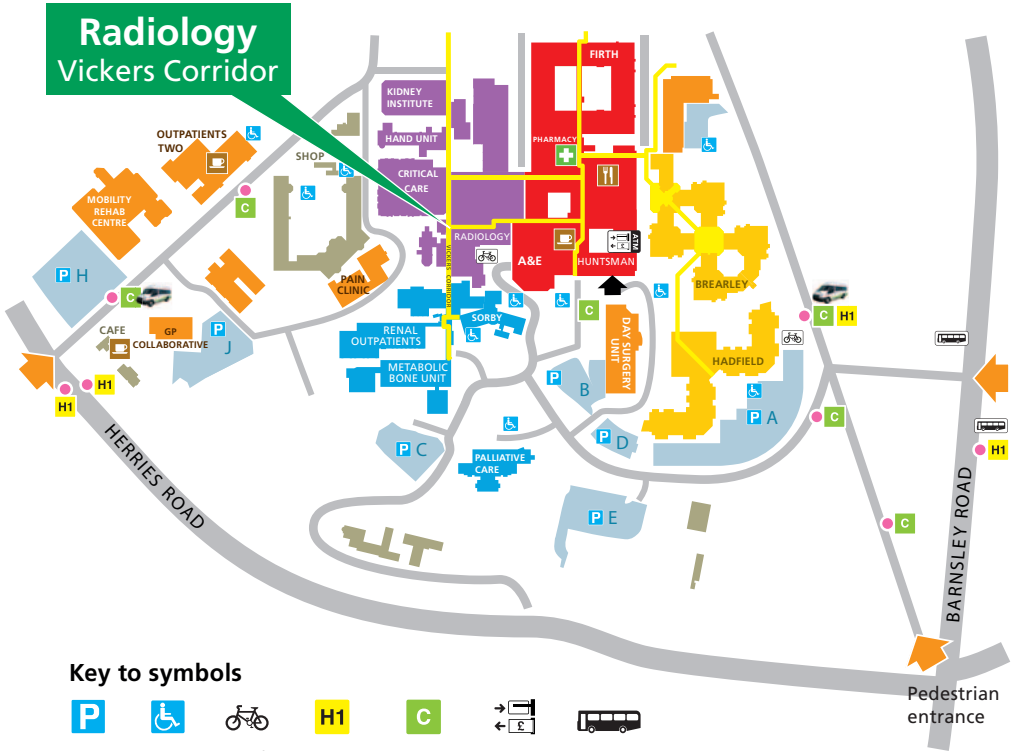
www.spineuniverse.com/

www.spine-health.com/treatment/injections/selective-nerve-root-blocks-snr-b-and-facet-joint-injections







Alternatively, you can telephone the X-ray department and speak to one of the X-ray nursing staff on: **0114 271 4726**



Northern General Hospital



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-  Pay & display parking
-  Disabled parking
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-  Hospital shuttle bus
-  NGH courtesy bus (stops on request)
-  Cash machine
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