Spire Edinburgh Hospitals Murrayfield and Shawfair Park

Patient information CT Department

CT nerve root injections

The treatment described here may be adapted to meet your individual medical needs, so it's important to follow your consultant's advice. Please raise any concerns or questions with your consultant. It is natural to feel anxious before hospital treatment but knowing what to expect can help.

About nerve root injections

The nerve roots in your back are part of the body's nervous system, which transports messages from the brain and spinal cord to your legs and receives messages from the limbs about pain and temperature.

There are two goals of nerve root injections. Firstly, the injection helps to provide more information about your health to your consultant: if your symptoms are significantly improved then it is most likely that the injected nerve root is the cause of your symptoms. Secondly, the injection is given to treat the pain, inflammation and ease any restriction of movement caused by compression or irritation of the nerve.

Anti-inflammatory steroids, or a combination of a steroid and a local anaesthetic is injected adjacent to the nerve root.

It can take up to one week for the full benefit of a steroid injection to be felt. The effects of a successful injection can last anything from a few weeks to several months. However, the benefits have been known to last longer than six months only in a minority of people. Repeat injections (usually up to a maximum of three) are possible. Although an injection can help in the short term to ease symptoms of nerve root disturbance, many people find that their back pain and mobility does not improve in the longer term.

CT guided nerve root injections are performed by a consultant radiologist within the CT department as an out-patient procedure. Your consultant will explain the potential benefits and risks of having nerve root injections, and will also discuss the alternatives to the procedure.



Preparing for your procedure

If you normally take medication, such as tablets for blood pressure, continue to take them as usual, unless your consultant specifically tells you not to. If you are unsure about taking your medication or are on any blood thinning medicines, please contact your referring consultant or the CT department for advice.

Please arrive at the CT department 15 minutes prior to your appointment to complete any necessary paperwork.

What to expect at the hospital

The procedure will be performed by a consultant radiologist who will be assisted by a radiographer.

Prior to your procedure your consultant radiologist will explain what is going to happen and will go through the possible sideeffects and complications of this procedure. If you are happy to proceed with the treatment you will be asked to sign a consent form for the treatment to go ahead. Your radiologist will also answer any questions about the procedure you might have. Your radiologist will also ask you about any medication you are taking or any allergies you have.

You will be shown to a private cubicle where you will be asked to change into a hospital gown.

Once changed, you will then be shown to the CT scanner. The CT scanner is a large machine with a hole in the centre. The radiographer will help you lie on the table face down so that your nerve root injection can be administered.

A CT scan of the affected area is then performed. This allows the

radiologist to accurately identify the site for your injection.

The radiologist will mark this position on your back. The area is then cleaned and local anaesthetic injected. A thin needle is then passed through the skin on your back until the tip lies adjacent to the nerve root in question. The steroid and anaesthetic mixture is injected. The treatment usually only takes a few minutes and more than one joint can be injected during the same session.

During the procedure your consultant will take several CT pictures to ensure the needle is correctly placed. The injection can be uncomfortable because they are given in an area that may already be painful.

It is normal to experience a change of feeling in your leg after a nerve root injection. This effect is temporary and may give marked pain relief. When the local anaesthetic component of the injection wears off it is usual for some of your normal leg symptoms to recur. The steroid component of the injection is much slower to act, taking several days to reach maximum effect.

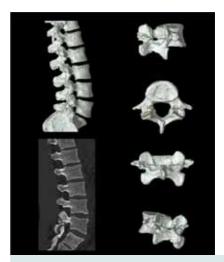
After the procedure

You will not be able to drive for the rest of the day so you should arrange for someone to drive you home from hospital. You should rest your back for 48 hours to allow the steroid to take effect. This means that you should take it easy, but you should not stay in bed. Gently moving the joints through the normal range of motion is good for you, but avoid strenuous exercise. After the first couple of days you should move your back as usual.

You must follow your consultant's advice about returning to work. Expect to take one day off work, or longer if you do manual work or are on your feet all day.

During the first few days, if you feel unwell or develop any of the following symptoms, please contact the hospital immediately:

- pain that does not settle or gets worse
- a fever or high temperature
- swelling or redness around the injection site that does not go away.



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