



QUEEN SQUARE
PRIVATE HEALTHCARE

Having a CT-guided nerve block injection

At the Queen Square Imaging Centre

Patient Information

This leaflet aims to answer your questions about having a CT-guided nerve block injection. It explains the benefits, risks and alternatives, as well as what you can expect when you come to the Queen Square Imaging Centre. If you have any further questions, please speak to the Radiographer caring for you.

What is a CT scan?

CT stands for Computed Tomography. A CT scan is a series of pictures of your body, taken using x-rays. The pictures show cross-sections or 'slices' of your body. When these slices are put together by a powerful computer, the scan shows a very detailed image of the inside of your body.

What is a facet joint or nerve block injection?

Facet joint injections or nerve block injections are performed to treat pain – most commonly in the neck, back and legs. The effect of these injections is different for each individual. The procedure involves an injection either directly into the joint or to the small nerve, which supplies sensation to the joint. The injection consists of a mixture of local anaesthetic (to numb the area) and a corticosteroid. The corticosteroid reduces inflammation at the site, and therefore reduces pain and other symptoms caused by the inflammation. The procedure takes place in the CT suite because a CT scan is used to guide a radiologist precisely to the area that needs to be treated.

What are the benefits of having a CT-guided nerve block injection?

A CT-guided nerve block injection can help alleviate the pain that your doctor feels is related to the nerves in your neck, lower back or legs.

What if I no longer have pain?

This procedure may no longer be necessary or of benefit to you if your pain has disappeared or has become more manageable. Please discuss this further with the doctor who referred you.

What happens during the procedure?

A CT scanner looks like a large doughnut. You will be asked to lie down on a motorised bed which then moves slowly into the opening and out the other side. As you pass through the scanner, x-rays are being taken. The x-ray machine sends thin beams of x-rays through your body, which are detected by sensors on the other side. The information then goes to a computer which produces a picture of the structures of the inside of your body.

If we are doing a nerve block injection on your lower back (lumbar spine) we will ask you to lay on your front. If we are doing a nerve block injection on your neck (cervical spine), we will ask you to lie on your back. A marker grid may be placed on the skin prior to a planning scan to find the correct position for the injection. The injection site is then marked with a pen, and the area cleaned. It is very important that you do not move until the end of your procedure. The radiologist will then inject a small amount of local anaesthetic to numb the area. Once this has taken effect, he/she will place a longer needle into the site, and another planning scan is taken. The needle may then need to be repositioned and another scan may need to be taken. Once the radiologist is happy that the tip of the needle is in the correct place, the injection will be given. This may cause a strange and uncomfortable stretching sensation which soon passes.

How long will it take?

The procedure usually takes between 30 and 40 minutes. We will ask you to stay in the CT department for about 30 minutes after your injection as well so that we can make sure you feel comfortable enough to go home.

What happens afterwards?

Immediately after the nerve block injection, you may feel that your pain has gone or is significantly reduced. This is due to the local anaesthetic and will last for a few hours. You may resume regular activity as soon as you feel able. However, you may feel numbness and tingling on the affected side for up to 12 hours after the procedure. For this reason, you must not drive for 24 hours after your procedure.

After the local anaesthetic has worn off, you may experience a worsening of your usual symptoms. This is due to possible bruising caused by the insertion of the needle, as well as an initial irritation caused by the steroid itself. It may last for a couple of days. Most people start noticing pain relief three to five days after the procedure when the steroid begins to take effect. If the temporary flare-up caused by the injection persists beyond this time, an anti-inflammatory drug such as ibuprofen can help relieve this pain.

The response to having a CT-guided nerve block injection is variable and ranges from no benefit to improvement in symptoms for over six months. It is estimated that approximately 75% of people will benefit from having a CT-guided nerve block injection. If the injection does not alleviate your pain, please speak to the doctor who referred you. Your referring doctor will decide on further management depending on clinical assessment and your response to the injection.

What are the risks of having a CT-guided nerve block injection?

As with conventional x-ray pictures, CT scans use radiation. The level of radiation used is very small and the benefits of the procedure are thought to outweigh any risks. If you are or think you could be pregnant, or if you have had an allergic reaction to corticosteroids or local anaesthetic in the past, then you must tell your referring doctor or the radiologist before your procedure.

This procedure is well-established and safe when performed in a controlled setting. However, with any interventional procedure there are risks, side effects and a possibility of complications. Risks include infection, worsening of symptoms and bleeding. The most common side effect is temporary discomfort and numbness in the area injected. Please note that 1 in 10 patients undergoing lumbar (lower back) nerve root blocks may experience temporary leg weakness due to the long-acting anaesthetic, which will require hospital admission until symptoms have resolved. Side effects related to the steroid include fluid retention, weight gain, increased blood sugar (mainly in people with diabetes), raised blood pressure and mood swings. Fortunately, these serious side effects are very

rare and mainly seen in patients who take corticosteroids daily for a long period of time. Please bear in mind that your doctor or consultant has recommended you for this procedure because he/she believes that the potential benefits of an injection outweigh any potential complications. If you have any questions or concerns, please do not hesitate to speak with your doctor.

Please note that we do not offer sedation or general anaesthetic for this procedure.

Are there any alternatives?

Your doctor feels that a CT-guided nerve block injection is the best option for you. A fluoroscopy (x-ray) -guided nerve block injection will not provide the same level of detail as a CT-guided procedure.

Consent - asking for your consent

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

How can I prepare for the scan?

Please contact your referring doctor or GP if you are taking any antiplatelet medicines (such as aspirin or clopidogrel) or any medicines that thin the blood (such as warfarin or rivaroxaban), as these may need to be stopped temporarily before the procedure. The procedure may have to be cancelled if these medications have not been stopped within the appropriate time frame. Please contact us if you are on antibiotics, or have been on antibiotics within two weeks of your appointment date, as the procedure will need to be rescheduled.

If you are taking any other medicines, please continue to take these as usual unless you have been told otherwise by your doctor.

If you need to bring your children with you, please bring along an adult who can supervise them while your scan is underway. We are unable to offer childcare facilities.

What do I need to wear?

Metal fastenings like zips, poppers and hooks and eyes will show up on the scan, so we may ask you to change into a hospital gown.

Contact Us

If you have any questions or concerns about having a CT scan, please contact the CT department at the Queen Square Imaging Centre on **020 7833 2513**, Monday to Friday between 9 am and 5 pm.

If you need an interpreter or information about your care in a different language or format, please get in touch