

CT guided nerve block injection

This leaflet explains more about having a CT guided nerve block injection. It includes the benefits, risks, any alternatives and provides information on what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is a CT scan?

CT stands for computerised tomography. A CT scanner takes a series of pictures of your body using x-rays. The pictures show cross-sections or slices of your body. They are put together by a computer and can be viewed on a screen. The scan shows a very detailed image of the inside of your body.

What is a facet joint or nerve block injection?

Facet joint 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 path of the small nerve which supplies sensation to the joint. The injection consists of a mixture of local anaesthetic (to numb the area) and corticosteroids. The corticosteroid injected reduces inflammation at the site and thus reduces pain and other symptoms caused by inflammation.

The procedure takes place in the CT suite because CT scan is used to guide a radiologist precisely to the right 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 further with the referring clinical doctors or bookings department before your appointment on 0207 188 5542.

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

As with x-rays, 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 have had an allergic reaction to corticosteroids or local anaesthetic in the past, then you must tell your referring doctor or the x-ray team.**

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.

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 that 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.

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.

Giving my consent (permission)

We will ask your permission to have a CT guided nerve block injection. 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?

Please contact your referring doctor or GP, if you are taking any antiplatelet medicines (for example, aspirin, clopidogrel) or any medicines that thin the blood (for example, warfarin, rivaroxaban), as these may need to be withheld temporarily before the procedure. The procedure may be cancelled if these medications have not been stopped within the appropriate time frame.

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.

What happens when I arrive?

When you arrive in the CT department (located within the X-ray Department) you will be asked to fill out a CT safety checklist in the waiting room. This is so we can determine if there are any allergies or other medical reasons why you can't have the nerve injections. When we are ready to take you in for your procedure we will ask you to change into a hospital gown.

Once in the scanning room, the radiologist (a doctor who uses x-rays to diagnose and treat illnesses) carrying out the procedure will talk to you about your symptoms and use your MRI

scans to identify exactly where the injection will go. The radiologist will explain the procedure and ask you to sign the consent form.

What happens during the procedure?

The scanning machine is like a large hoop. You will need to lie on a motorised bed. This moves slowly through the 'ring' of the machine as the scan is taken. Unlike some other scanning machines, the CT scanner is not enclosed.

- 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.

An external marker will then be placed over the affected area and a limited scan will be taken of that area to find the correct position for the injection. The skin is then marked and the area cleaned. It 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 will place a longer needle into the site and another limited scan is taken. The needle may then need repositioning and another scan is 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 the procedure 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 leave the department.

We will try to keep to your appointment time but occasionally we have to scan patients urgently at short notice. This means that your appointment could be delayed. We will let you know if this is the case.

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 normal 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 12 hours after the procedure**.

After the local anaesthetic has worn off you may experience a worsening of your usual symptoms. This is due to the mechanical process of needle insertion, as well as an initial irritation of the steroid itself. It may last for a couple of days.

You should start noticing pain relief on the third or fourth day after your procedure when the steroid begins to take effect. If pain persists beyond this time, an anti-inflammatory drug such as ibuprofen is very effective at relieving the pain.

Contact us

If you have any questions or concerns about your CT scan, please contact the CT reception at Guy's Hospital on **020 7188 5574** or St Thomas' Hospital on **020 7188 5464** (Monday to Friday, 9am to 5pm).

If you have a significant medical problem out of hours, contact your GP in the first instance. If it is an emergency, call 999 for an ambulance.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and accessible support services

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

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk/membership

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