

Information for adult patients undergoing

Peripheral Nerve Injections: Intercostal nerve block for the Treatment of Pain

The aim of this leaflet is to give you information about peripheral nerve injections and to answer some questions that you may have. Please note that different places may do things differently. Your doctor will be able to explain fully what to expect.

What is an intercostal nerve block?

An intercostal nerve block is an injection around an intercostal nerve. All the ribs have nerves that closely travel underneath them from the spine, at the back to the sternum and breast bone at the front. These are called intercostal nerves. An intercostal nerve block is usually given if someone has chest wall pain over a localised area of the chest wall. This can happen after an attack of shingles or when there is a scar after an operation on the chest. The injection contains local anaesthetic often with a small amount of steroid. The injection is usually given alongside other treatments such as physiotherapy.

Is this the right treatment for me?

Other treatment options will be discussed with you before deciding to have the injections and your consent is needed. The decision on whether or not to have the injection(s) is made together by you and your doctor. Your doctor will be able to give you up-to-date information about the chance of this treatment working for you and how it fits in with other care. If you are undecided about whether or not to have the injection then more advice and information can be given. Please speak to your doctor for more information.

If your health has changed, it is important to let your doctor know.

- If you have an infection in your body, your doctor may until the infection is cleared before giving the treatment.
- If you have been started on anticoagulant or antiplatelet medicines that "thin the blood" such as warfarin, heparin, apixaban, rivaroxaban or clopidogrel, extra preparation may be needed before you have the treatment.
- If you suffer from diabetes, the use of steroids during injections may cause your blood sugar to change requiring monitoring and adjustment of your diabetic medication.
- If you have any allergies.

You must also tell the doctor if there is any chance that you could be pregnant.

Finally, if you are planning to travel abroad or fly within 5 to 7 days after the procedure, please let your doctor know as it may be best to change the date of the procedure.

I have heard that steroids are being used unlicensed/off-label, what does this mean?

Steroids (corticosteroids) are commonly used in managing chronic pain but are only licensed to be given in specific ways. Some methods of giving steroids to treat pain are not on license. This is referred to as off-label use. The manufacturer of the medicine may not have applied for a specific licence for it to be used more widely. MANY medicines used in pain medicine are used off-label. Your doctor will be able to discuss this with you further.

What will happen to me during the treatment?

Before the injection, your doctor will discuss the procedure with you. Your doctor will either ask for your consent before the injection or ask you to confirm that you have already given consent and are still happy to have the injection. The treatment will take place in a dedicated area with a trained person. Ultrasound, x-ray or alternate ways such as electrical stimulation of the nerve will be used to make sure the injection is accurate. Not all doctors do these injections in exactly the same way but this is what usually happens:

- A medical professional will get you ready for the procedure Your blood pressure and pulse rate may be checked.
- A small needle (cannula) may be placed in the back of your hand.
- You will be carefully positioned and the skin around the injection site(s) will be cleaned with an antiseptic solution or spray; this can feel very cold.
- You will feel a stinging sensation as local anaesthetic is injected to numb the skin and surrounding tissues. Your doctor will warn you of this first.
- The doctor will direct the injection(s) to the nerves carrying sensation from the area(s) suspected to be a source of pain. When the injections are made, you may feel pressure, tightness or a pushing sensation. If there it is uncomfortable, do let the doctor know.

What will happen to me after the injections?

After the injections you will be taken to a recovery or ward area where nursing staff will check on you. Sometimes you will be asked to lie flat for about 30 minutes or longer. You may be helped to sit up and your blood pressure and pulse may be checked. You will be told when to get dressed and be given help to make sure that you can stand safely after the procedure. You will be given more advice when you are ready to go home.

When will I be able to go home from hospital after my injections?

You will usually be able to go home within a few hours after the injection and in some cases much sooner, depending on how many injections are needed and how long your doctor or nurse want you to stay. Please make sure that you have someone to collect you after the procedure. It is unsafe for you to drive home straight after the procedure. If you do so your motor insurance will be invalid.

What can I do after my procedure?

Ideally, you should arrange for someone to stay with you for 24 hours but, if you can't, you should at least have access to a telephone. You should not drive, operate machinery, sign legal documents, provide childcare without help or drink alcohol until fit to do so.

If you are not sure, please ask your doctor for more advice.

When can I return to work after the procedure?

This will be different for different people and may depend on the type of work you do. It is difficult to give general advice and so you should discuss this with your doctor.

Will I experience any side-effects?

As with any procedure, there may be side effects. However, these are usually minor and there is little risk of serious harm.

Side-effects may include:

- Mild local tenderness and/or bruising at the site of the injection, that usually gets better over the first few days.
- Pneumothorax. There is a small chance of puncturing the lung (pneumothorax). This can lead to pain and breathlessness. The pain is often a severe pain, which is sharp and worse on taking a large breath in. If this happens or you feel breathless then you must seek medical help straight away since this may need treatment and a stay in hospital.
- Intravascular injection. During the injection, you may experience signs of local anaesthetic toxicity if the injection is passing into a blood vessel. You should tell your doctor immediately if you develop tingling around your mouth or a metallic taste, ringing in your ears, feeling drunk, dizzy, blurred vision, muscle twitches or difficulty in breathing.
- ▶ The local anaesthetic may spread causing some numbness. If this happens, the effect is temporary and will quickly get better over minutes or hours.
- Infection. This is rare. You should seek medical help if there is local warmth or redness over where you had the injection with tenderness. Or if you feel hot and unwell. This may need antibiotic treatment.
- ▶ The steroids can have varied effects ranging from flushing, menstrual disturbances, weight gain, increase in blood sugar levels and worsening of mental health issues. These effects are temporary and are more likely with repeated steroid injections.
- Nerve injury is very rare.
- Injection treatments do not always work and may not help your pain.



People vary in how they interpret words and numbers. This scale is provided to help.



What can I expect in the days afterwards?

You may feel some soreness or aching at the injection site. Please keep the area of the injections dry for 24 hours following the procedure. Do not worry if your pain feels worse for a few days as this sometimes happens. Take your regular pain killers and medications as normal and this should get better. Try to keep on the move about the house while avoiding anything too difficult.

What should I do in the weeks after the injections?

As your pain decreases, you should try to gently increase your exercise. It is best to increase your activities slowly. Try not to do too much as you may have more pain the next day. Your doctor can provide more specific advice.

What follow-up will be arranged?

A letter will usually be sent to your GP and your doctor will tell you what to do after the procedure. You may be asked to make a call to the pain department, be given a form to fill in, or given a telephone review or other appointment.

Is there anything else I need to think about before the procedure?

- Please bring your glasses if you need them for reading.
- Bring any other devices you may need, such as hearing aids, mobility aids etc.
- Always bring a list of all current medication.
- Continue to take your medication as usual on the treatment day.
- Avoid vaccinations including COVID-19 jabs for 2 weeks on either side of the procedure.

Finally...

The information in this leaflet is not intended to replace your doctor's or health care team's advice. If you need more information or have any questions or concerns please speak to your GP or contact your Pain Clinic.

Name	
Pain Service	
Address	
Contact Numbers	

Updated Sept 2022 to be reviewed in Sept 2025

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Acknowledgements:

Members of the Professional Standards Committee.