



Information for adult patients undergoing **Transforaminal Epidural / Nerve Root Block / Dorsal Root Ganglion Block for the Treatment of Pain**

The aim of this leaflet is to give you information about transforaminal epidural/dorsal root ganglion block and to answer some questions that you may have. Please note that places may do things differently. Your doctor will be able to explain fully what to expect.

What is a transforaminal epidural/ dorsal root ganglion block?

It is an injection around the spinal nerve, and its dorsal root ganglion. The ganglion looks like a small swelling on the nerve that joins the spinal cord. This ganglion contains nerves that carry sensation. The sensory nerves enter through a hole called the intervertebral foramen. The procedure is sometimes called a transforaminal epidural because the injection may spread to the epidural space. It may also be called nerve root injection.

These injections are used mainly for localised radicular pain (sciatic leg or arm pain) pain where simpler measures have not helped enough. They are usually used in the lumbar region. It may help your pain by reducing some of the pain signals. Pain relief can be short-lived although some people can get significant and lasting pain relief from these injections. It may not be a cure.

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 injection(s) 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 provide you with 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 an 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 or on the skin of your back, your doctor may wait 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 two weeks after the injection, please let your doctor know as it may be best to change the date of the injection.

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. An X-ray machine, ultrasound (or other forms of image guidance) will be used to make sure the injection is accurate. Not all doctors give 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) will usually be placed in the back of your hand.

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- ▶ 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.
- ▶ X-ray, Ultrasound or an alternative way will be used to make sure the needle is in the right place.
- ▶ 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 to the dorsal root ganglion suspected to be a source of pain and usually inject contrast (a solution that is visible under X-ray) to ensure the needle is in the right place. When the injections are made, you may feel pressure, tightness or a pushing sensation in your back, leg or arm. If 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. 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.

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 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 but there are risks with this procedure.

Side-effects may include:

- ▶ Mild local tenderness and/or bruising at the site of the injection. This usually gets better over the first few days.

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- ▶ The local anaesthetic may spread causing some numbness and/or weakness in your legs (lumbar injections) or arm (neck injections). If this happens, the effect is temporary and will quickly get better over minutes or hours.
- ▶ 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.
- ▶ Infection. This is rare. You should seek medical help if there is local warmth or redness where you had the injection with tenderness. Or if you feel hot and unwell. This may need antibiotic treatment.
- ▶ There are important nerves in the spine, but serious nerve injury is very rare and happens when there is serious bleeding or abscess near the spinal cord. Persistent weakness of the legs and/or incontinence needs further urgent investigation. Very rarely cervical injections have caused severe harm or even death. These complications are so rare it is difficult to say how often they happen with certainty. Please speak to your doctor to discuss this issue fully.
- ▶ Blood pressure may temporarily fall and people may sometimes feel faint
- ▶ Headache. Uncommonly, the needle may be placed too far and spinal fluid (CSF) encountered. This is called dural puncture and may lead to headache that requires further treatment. If a severe headache does start following your injection, take some Paracetamol, drink plenty of water and lie flat. If the headache continues for more than twenty-four hours please contact your GP or Pain Clinic.
- ▶ Injection treatments do not always work and may not help your pain.
- ▶ (Injections in thoracic area only) Injury or collapse of the lung (pneumothorax). This is very rare. If you get chest pain or breathlessness, you should seek immediate medical help.
- ▶ In rare circumstances, steroid use can damage your eyesight. You should report any new vision problems (such as blurred or distorted vision) to your doctor.



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. Simple activities like a daily walk, using an exercise bike or swimming on your back will help. 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 will be able to give you 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.

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Name	
Pain Service	
Address	
Contact Numbers	

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Acknowledgements:

Members of the Professional Standards Committee.