

## Patient information

# Epidural injections (dorsal root ganglion blocks)

### What is an epidural or dorsal root ganglion injection?

These procedures are performed to help reduce pain, particularly where there is a strong neuropathic element. This means that the source of the pain is thought to be arising from the nervous system, particularly the nerves that carry sensation. These nerves come out of the spinal cord and branch out to the different parts of the body.

The dorsal root ganglion is a little swelling on the nerve at the place where it joins the spinal cord. It is the place where impulses from the nerves are transmitted through to the spinal cord. An epidural is an injection into the epidural space which is a specific space found in your back.

Usually a mixture of local anaesthetic and steroid is injected, although other agents may occasionally be added. Steroids have been used for this type of procedure for decades, although they are not licensed for it. Other drugs that have been injected epidurally include Clonidine, Ketamine and magnesium sulphate and if these are used the purpose will be explained to you.

Although these injections may help your pain initially the effect may wear off (although the injection can be repeated). This procedure is performed as a test to find out the exact area causing problems. If you get relief from your pain, it will help the doctor to decide which procedure to do next.

**It is very important that you inform the Pain Clinic if you are taking drugs to thin your blood, for example Warfarin, Clopidogrel, Rivaroxaban, Apixaban and Dabigatran. The doctor will then provide guidance as to whether there is a need to temporarily stop any blood thinning drug.**

## **The day of treatment**

On arrival please hand in your completed health questionnaire. **Please bring in your current medication for pain relief.** You will then be asked to put on a theatre gown and your blood pressure and pulse will be recorded. The doctor will discuss the procedure with you and you will be asked to sign a consent form.

The procedure will be carried out under X-ray screening. Once you are in the correct position on the X-ray table, the doctor will clean your back with an antiseptic fluid – this can feel cold on the skin.

Local anaesthetic is then injected into your back. This may sting initially but the area will soon go numb. The injection will then take place. You may feel a pushing sensation and some discomfort at this stage. Contrast liquid is injected to make sure that the needle tip is in the correct position as seen on the X-ray.

**Please tell the doctor if you have ever had a reaction to contrast.**

Drugs can then be injected and a feeling of tightness may be felt. A cold spray may be used over the injection site once the procedure is completed.

## **Following your injection**

After the procedure you will be taken to a recovery area. You will lay flat for approximately 30 minutes and then be sat up and offered light refreshment. Your blood pressure and pulse will be checked again before you get dressed. Before your departure a doctor may review you and a nurse will advise you on your aftercare and any medication your doctor has prescribed for you to take home.

Although this procedure does not tend to give long-term pain relief, some patients can have dramatic responses when few other therapies have helped. In some studies' use of such procedures reduces the subsequent requirement for any surgical operations on the spine or can be an alternative to it. In other patients, it may delay the need for such a procedure. In individuals in whom surgery is not an option, the procedure, if helpful, can be repeated at intervals as part or as an overall pain management strategy.

## **Risks**

Normally after this procedure there may be some odd feelings in the affected part followed by increase in pain for a day or two before beneficial effects are hopefully experienced.

The risk of minor events such as significant headaches due to a spinal tap is in the order of 1% or less. A spinal tap means that the layer beneath the epidural space becomes punctured causing a spinal fluid leak. In a small number of cases a blood patch procedure is required to seal the hole. If you experience a severe and persistent headache please contact your doctor.

More commonly, some patients may experience low blood pressure or experience numb bottoms or legs initially and occasionally difficulty in passing urine can occur. All these are a predictable effect of the local anaesthetic and will usually wear off in 24 hours. You will be reviewed by the nurses prior to leaving-just to make sure that you are not experiencing any of these problems.

Unfortunately, no procedure is risk free. Although long-term side effects and complications including increase in pain are uncommon the possibility cannot be excluded. Short-term side effects of any procedure may include commonly, pain at the site of injection, increase in pain generally and far less commonly infection, bruising, bleeding and injury of body structures with the injection procedure. The chances of any major adverse events after an epidural are in the order of 1 in 1/4 million. The risk of long lasting minor neurological event is 1 in 5,000 and the risk of infection is 1 in 2,000.

**Please ask your doctor if you are concerned about side effects**

## **What to expect afterwards**

Although some rapid relief of your pain may be noticed due to the effect of the local anaesthetic, it could be several days before the steroid becomes effective. Please remember that it is a good idea to take things easy for the rest of the day and avoid any strenuous activity.

Take your regular painkillers as normal. It is important not to stop any drugs prescribed for pain relief suddenly. You should gradually reduce your medication as you feel better.

Try to keep on the move about the house but do not do anything too strenuous. As your pain decreases you should try to gently increase your exercise. Simple activities like a daily walk, using an exercise bike or swimming will help to increase your muscle tone and strengthen your back. The best way is to increase your activity slowly.

Try not to overdo things on good days so that you end up paying for it with more pain the following day.

If a severe headache does develop following your injection it is advisable to take some paracetamol and to drink plenty of water and to lay flat. If the headache continues for more than 24 hours, please contact your GP or the Pain Clinic.

**A letter will be sent to your GP and we will make contact with a questionnaire to assess response from the injections and to make plans for follow up.**

## **Points to remember**

1. **For morning procedures:** Nothing to eat after midnight prior to treatment (no sweets or chewing gum), water only until 7.00am.
2. **For afternoon procedures:** Nothing to eat after 7.00am (no sweets or chewing gum), water only until 11.00am.
- 3 **Pre-procedure advice regarding Diabetes**
  - If you are **Type 1 Insulin controlled** diabetic or **Type 2 tablet and Insulin controlled** diabetic contact your diabetic provider (GP or diabetic nurse) for advice on how to manage your diabetic medication prior to your intervention/injection
  - If you are **Type 2 tablet controlled** diabetic please contact the Pain Service 01284 712528 for advice on how to manage your diabetic medication prior to your intervention/injection.
4. Please bring your glasses if you need them for reading.
5. Always bring a list of all current medication (tablets) and your current pain control medications on the day.
6. Continue taking all your regular medication on treatment day.
7. If there is any possibility that you may be pregnant, please inform a member of the nursing team.
8. Your stay may be between 1 - 4 hours

## **Additional Information**

The information in this leaflet is not intended to replace your doctor's advice. If you require more information or have any questions, please speak to your doctor or contact one of the following for clinical enquiries:

Pain Clinic                                  Tel: 01284 713330

Waiting list enquiries                      Tel: 01284 712980

*If you would like any information regarding access to the West Suffolk Hospital and its facilities please visit the website for AccessAble (the new name for DisabledGo) <https://www.accessable.co.uk/organisations/west-suffolk-nhs-foundation-trust>*



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