



York and Scarborough
Teaching Hospitals
NHS Foundation Trust

Epidural Steroid Injections for Pain Management

(Interlaminar, Transforaminal, nerve
root injections)

Information for patients, relatives and carers

Anaesthetic Department

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① For more information, please contact:

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Introduction

This leaflet is for anyone who may benefit from an epidural steroid injection for relief of their arm, leg or spine pain.

The leaflet describes what happens when you have an epidural injection, together with any side effects and complications that can occur. It aims to help you and your doctor make a choice about the best method of pain management for you.

You will be asked to sign a consent form (reference FYCON65-3 Epidural Steroid Injection) to confirm that you agree to the procedure and understand the information given to you. This form will be kept in your Patient Notes and you will also be offered a copy for your own records.

What is an epidural injection?

The nerves to your arms and legs pass through an area in your spine called the "epidural space". These spinal nerves can become inflamed due to irritation from a damaged disc or from contact with a bone spur.

There are 2 ways to undertake the epidural injection.

1. An interlaminar epidural injection delivers steroids directly into the midline of the epidural space around the spinal nerve roots.
2. A transforaminal epidural or nerve root block injection delivers steroids and local anaesthetic to the spinal nerve root that is producing symptoms as it emerges from the spine.

For convenience the rest of this leaflet uses the term epidural to refer to both types of injection as the procedures are very similar.

The steroid used in the epidural injection reduces the inflammation of those nerves, which is often the source of the pain.

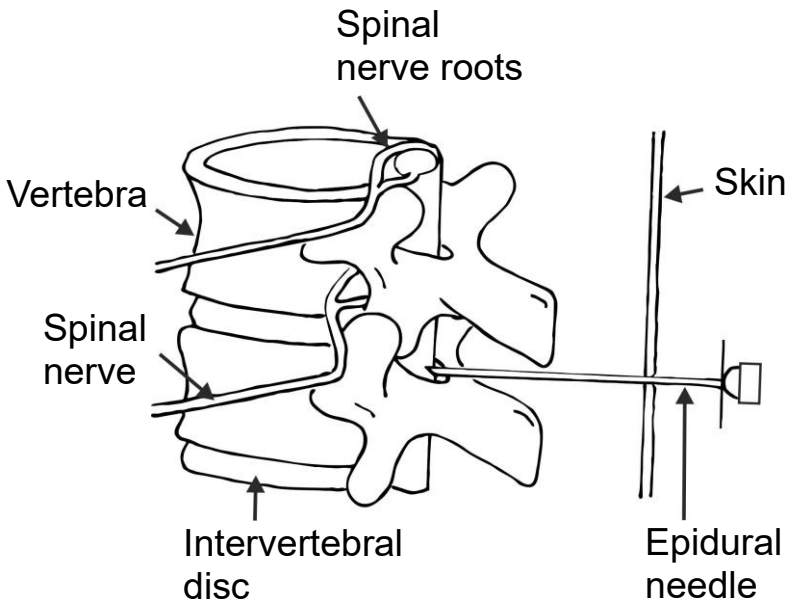
It is important to note that an epidural steroid injection should not be considered a cure for spine, arm or leg pain. The aim is to help patients get enough pain relief to be able to progress with their rehabilitation.

Epidurals can assist in the diagnosis of spinal pain as well as possibly improving symptoms.

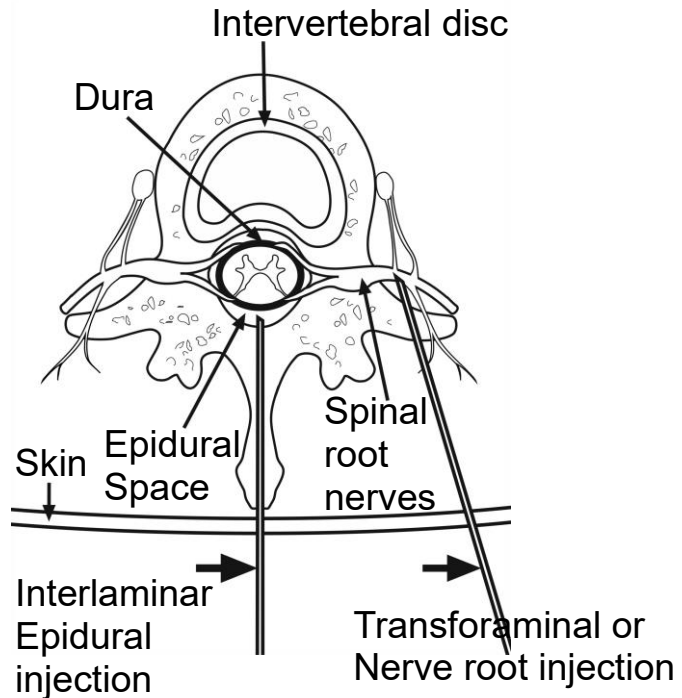
An epidural steroid injection reduces pain by a variable amount.

- It works by delivering steroids directly to the painful area to help decrease the inflammation that may be causing the pain.
- In addition to relieving pain, the process of natural healing can occur more quickly once the inflammation is reduced.
- Back and leg pain has been present less than 16 weeks?
Following an epidural, more than half the treated patients can expect to get meaningful pain relief.
- Back and leg pain for more than 6 months?
Following an epidural, fewer than a third of treated patients can expect to get meaningful pain relief.

How is an epidural done?



1. You will be asked to lie on your front on an x-ray table.
2. An X-Ray machine will be used to visualise the bones in your spine and to guide placement of the needle.
3. Local anaesthetic is injected into a small area of the skin of your back.
4. A needle is placed through this numb area into your epidural space or next to the nerve as it leaves the spine.
5. It is common to feel slight discomfort in your back as the needle is inserted.



6. Occasionally, an electric shock-like sensation or pain occurs during needle insertion. If this happens, please tell the operator or nurse immediately.
7. The steroid injection can sometimes aggravate your leg or arm pains when it is first put in. This pain will settle.
8. If local anaesthetic is mixed with the steroids then sometimes your arm or leg can be numb and weak for a few hours after the procedure.
9. You may be asked to lie down after the injection is done and the needle has been removed. The procedure takes about ten minutes.

What are the benefits?

A reduction in leg / arm pain

- The effects of an epidural steroid injection are temporary. It may have no effect on your pain. It may reduce your pain for a few weeks to several months.
- Improvement may start immediately or take a few days to take effect.

A reduction in spinal pain

- Epidurals can sometimes improve a severe episode of spinal pain.
- The injection may provide sufficient pain relief to allow the patient to progress with their own programme of rehabilitation.

Can anyone have an epidural?

No. An epidural may not always be possible if the risk of complications is too high.

The nurse or anaesthetist will ask you if;

- you are taking blood thinning drugs, such as **warfarin, clopidogrel or other anticoagulants**
- you have a blood clotting abnormality
- you have an allergy to local anaesthetics
- you have an infection in your back.

The risks and side effects

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

Very Common	Common	Uncommon	Rare	Very Rare
1 in 10	1 in 100	1 in 1000	1 in 10,000	1 in 100,000
10%	1%	0.1%	0.01%	0.001%

There are risks associated with any procedure. There are some risks from the injection procedure and there are potential side effects from the steroid.

What are the risks from the injection?

- **Failure to relieve pain**
- **Infection.** Minor infections are common. Severe infections in the epidural space are rare.
- **Nerve damage.** Whilst rare, permanent nerve damage can occur from direct trauma from the needle, or secondarily from infection or bleeding.

- **Dural puncture** (a puncture of the membrane surrounding the spinal cord). A dural puncture is common. It may cause a post-dural puncture headache (also called a spinal headache) that usually gets better within a few days. Although uncommon, a blood patch may be necessary to alleviate the headache.
- **Arachnoiditis** (inflammation of the membrane lining of the spinal cord). This is very rare but has been reported after epidural steroid injections. It may happen if a dural puncture occurs and some of the steroid is injected into the spinal fluid.
- **Adverse drug reaction.** Uncommonly, people can react adversely to the local anaesthetic or the dye that is injected to visualise the correct position of the needle on the X-Ray.
- **Bleeding.** Bleeding into soft tissue is common, but bleeding inside the spinal column is a rare complication although it is more common for patients with underlying bleeding disorders.
- **Paralysis and death.** These risks are very rare but have occurred so you should be aware of the possibility. The risk is slightly increased with injections into the neck. Bleeding into the epidural space can cause compression of the spinal cord and paralysis which may require urgent surgery on the spine. Injections into the spinal arteries or veins can cause paralysis or death.

What are the side effects from the steroid?

The side effects from an epidural steroid injection are rare as the steroid is only slowly released into your body and then excreted.

Side effects from steroids are more common when taken orally for several months. Risks and side effects of oral steroids may include:

A transient decrease in immunity, raised blood sugar, stomach ulcers, severe arthritis of the hips (avascular necrosis), osteoporosis, cataracts, transient flushing, increased appetite.

It is rare for any of these side effects to occur from the steroids given into the epidural space.

People with diabetes may find that their blood sugars are abnormal for a few days after the injection.

There is more information available on the drug data sheet that you can ask to see if you wish.

Steroids are not licensed for injection into the epidural space, but have been used safely for decades in thousands of patients.

What if I decide not to have an epidural?

It is your choice. You do not have to have an epidural.

- The aim of the epidural is to reduce your pain to enable you to get moving normally again.
- Studies have not shown any long-term benefit from epidural steroid injections.

Are there any alternatives to having an epidural?

The alternative is to continue with the current pain management strategies.

How do I ask further questions?

- Ask the nursing staff or your consultant.
- You can make a note of any questions here.

What happens afterwards?

- You can expect to be on the Day Unit for between one and four hours after the epidural. There may be some temporary numbness in your legs for a few hours after the injection.
- The ward nurse will explain and follow up arrangements for you that may be necessary.
- There may be some temporary increase in your pain after the injection, but this will settle. This is common.
- You can continue with your usual painkillers, if you need them.
- If the epidural does improve your symptoms you can increase your level of activity.
- If you develop serious problems at home and if the problem is urgent contact your GP.
- If you lose control or sensation in your legs or arms; or if you lose control of your bladder or bowels you may have developed one of the serious complications listed above. This will require urgent medical attention and you should call 111.

If your epidural was done on the Day Unit, you can call the Day Unit nurses for general advice on 01904 726010.

Further information

There is much information available on the Internet. Not all of it is useful. These are some sites with useful information:

www.backcare.org.uk

Back Care is a charity providing information on managing Back Pain

www.painconcern.org.uk

Pain Concern has more general pain management advice

www.patient.co.uk

Patient UK has an information leaflets on Back Pain

www.nhs.uk/Conditions/Back-pain

The NHS information site

www.britishpainsociety.org

The British Pain Society has a section of Information labelled People with Pain with useful information in it.

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:

Dr PA Hall, Consultant Anaesthetist,
The York Hospital, Wigginton Road, York, YO31 8HE or
telephone 01904 725395.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website:

www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

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