Primary Integrated Community Services Ltd

Patient Information
Caudal Epidural Injection

What is a caudal epidural steroid injection?

Caudal epidural injections are used mainly for radicular or claudicant leg pain, which is pain stemming from an inflamed nerve root or pain from reduced blood supply to the spinal nerves, when simpler measures have not helped. A caudal epidural steroid injection involves injecting a mixture of local anaesthetic and steroid into the epidural space of the lumbar spinal canal via the sacral hiatus, which is a small opening in the base of the spine just above the coccyx.

The local anaesthetic and steroid will bathe the nerve roots which send pain signals to the brain. This is used when nerves in the lower back are irritated due to a variety of conditions such as spinal stenosis (an age-related narrowing of the spinal canal), or a herniated disc. In addition to the mechanical irritation, there can also be a chemical irritation to the nerves from chemicals that can be released from a herniated disc. The injection is not a cure but aims to alleviate your symptoms by reducing the inflammation caused by both the mechanical and chemical irritation of the nerves. Pain relief can be short-lived, though some people can get significant and lasting pain relief from these injections.

How do we do it?

A caudal epidural is carried out as a day case procedure in an operating theatre. You will be carefully positioned and the skin around the injection site will be cleaned with an antiseptic solution or spray; this can feel very cold. You may feel a stinging sensation as local anaesthetic is injected to numb the skin and surrounding tissues. The site of the injection is located via x-ray or ultrasound imaging. The Consultant will direct the injection to the epidural space close to the source of pain and usually inject contrast dye (a solution that is visible under imaging such as X-Ray) to ensure the needle is correctly positioned. When the injection is made, you may feel pressure, tightness or a pushing sensation in your back or leg(s).

What will happen to me after the injections?

After the injection you will be taken to a recovery area where nursing staff will monitor you. You will be advised when to get dressed and be given assistance to help to ensure that you can stand safely after the procedure. Depending on how long your consultant or nurse want you to stay for recovery, you will usually be able to return home soon after your injection, if all your observations are normal. Please ensure that you have made arrangements for someone to collect you after the procedure. If you don't, your procedure may be cancelled. It is unsafe for you to drive home immediately after the procedure. If you do so your motor insurance will be invalid.

Created by Jamie Barlow, Advanced Pain Practitioner Physiotherapist
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What can I do after my procedure?

Ideally, you should arrange for someone to stay with you for 24-hours but, failing that, you should at least have access to a telephone. You should not drive, operate machinery, sign legal documents, provide childcare unsupervised or drink alcohol until fit to do so. If in doubt, please discuss these issues with your Consultant or Pain Practitioner for further advice.

Will I experience any side-effects?

As with any procedure, side-effects may occur. 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 settles over the first few days.
- The local anaesthetic may rarely spread causing some numbness and/or weakness in your legs. Should this occur, the effect is temporary and will rapidly resolve over minutes or rarely hours.
- Infection. This is rare. You should seek medical help if there is local warmth or redness over the site of injection with tenderness and/or you feel hot and unwell. This may require antibiotic treatment.
- There are very important nerves in the spine, but serious nerve injury is extremely rare (less than 1 in 10,000 cases) and can occur when there is serious bleeding or infection abscess near the spinal cord, or even physical injury from the needle or injection itself. This is why the Consultant takes such great care in performing the injection. Persistent weakness of the legs and/or incontinence require further urgent investigation. These injections have very rarely caused severe harm. Please speak to you Consultant to discuss this issue fully.
- Blood pressure may temporarily fall and rarely, people may occasionally feel faint
- Headache. On rare occasions the epidural needle may unintentionally reach spinal fluid (CSF). This is called a dural puncture and may lead to headache that requires further treatment. If a severe headache does develop following your injection, take some Paracetamol, drink plenty of water and lie flat. If the headache continues for more than 24-hours, please contact your GP or the Pain Clinic.
- Injection treatments are not always effective and may not help your pain.
- In rare circumstances, steroid use can damage your eyesight. You should report any new visual disturbance (such as blurred or distorted vision) to your doctor

What can I expect in the days afterwards?

You may experience some soreness or aching at the injection site. Please keep the area of the injection 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 relief and medications as normal and this should settle down. Steroid can take up to 2-weeks to take effect on your pain. Try to keep on the move about the house whilst avoiding anything too strenuous.

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What follow-up will be arranged?

One of the Advanced Practitioners in the pain team will call you 6-8 weeks after your injection to review your response. A member of the Pain Admin team will contact you to arrange this appointment after your injection. We will also send you a post-injection pain questionnaire via text or email to help us better understand the benefits the injection has had on your pain and quality of life.

If having read this information, and discussed any questions or concerns with your clinician, you would like to proceed with an injection, we will ask for your consent. You are free to change your mind after this at any time.

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