EPIDURAL INJECTIONS

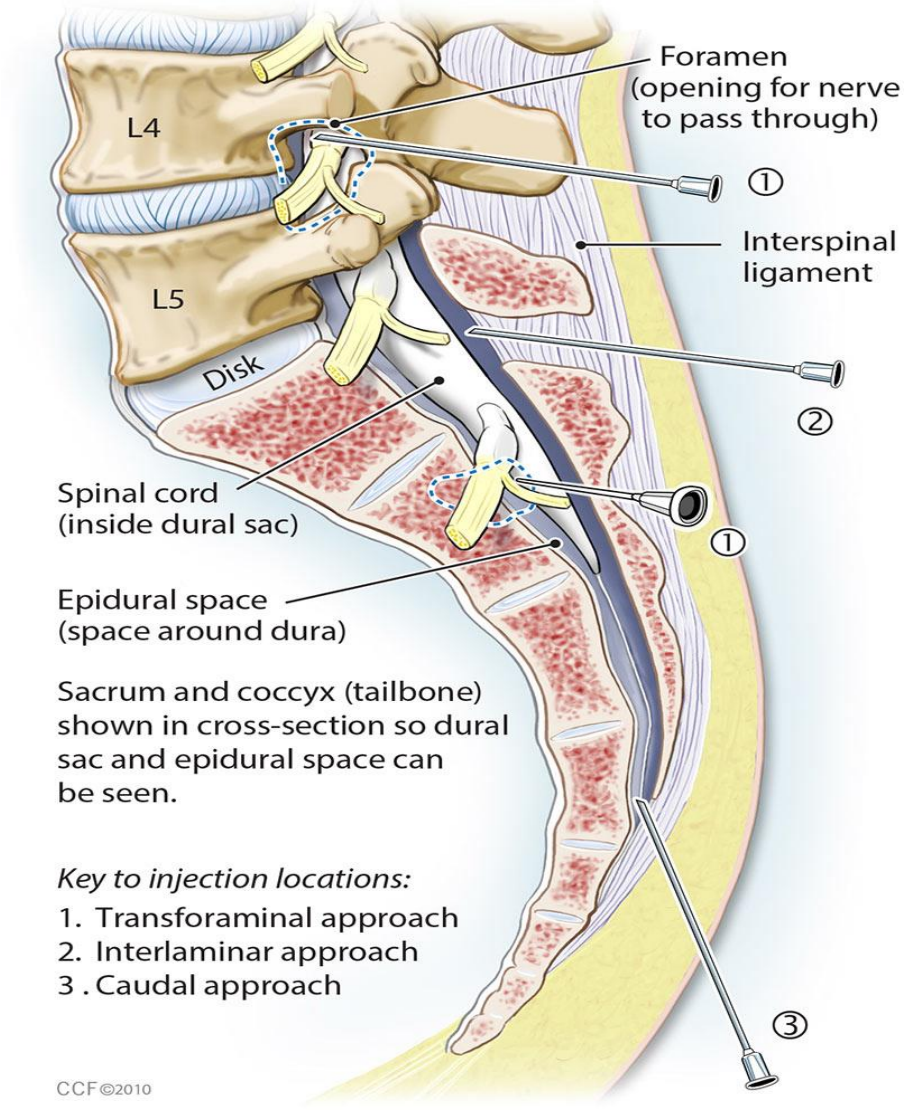
INFORMATION FOR PATIENTS

WHAT ARE EPIDURAL INJECTIONS?

All epidural steroid injections are done to try and reduce sciatic leg pain by placing a steroid, which is an anti-inflammatory, around the nerves in the lower back (lumbar spine) that are irritated or compressed. There are a number of different types of epidural injections. The type of epidural injection that your spinal specialist recommends will depend on your symptoms.

The diagram below shows the various locations of different epidural injections.

1. Transforaminal Injections, these are discussed in a different Information Leaflet.
2. **Interlaminar or lumbar epidurals** are when the needle is placed between the lamina bones at the back of your vertabra (see diagram in 'what happens during the procedure').
3. **Caudal epidural injections** are when the needle is placed just above the coccyx bone in a hole called the sacral hiatus (see diagram in 'what happens during the procedure').



WHY DO I NEED THIS INJECTION?

Pain Relief

- The steroid portion of the injection is an anti-inflammatory and reduces the inflammation and swelling around the nerves in the spinal canal which may help ease pain, predominantly in the leg, but also sometimes in the back.
- Response to the injection varies greatly from person to person. Some people get excellent pain relief, while others notice little or no benefit.
- The MRI scan does not help us understand who will respond to the injection. The length of time people notice a change in their pain varies from no response through to long term improvement.
- Symptoms may return, however the injection can provide a window of pain relief that allows you to engage with physiotherapy and exercise.

CONSENT

We must by law, obtain your written consent. Your Spinal Consultant will explain the risks and benefits to the procedure. These are also outlined in this leaflet. You will be asked to sign a Consent Form prior to the injection. If you have any questions then please feel free to ask any member of the Spinal Team.

Steroids have been used in hundreds of thousands of patients for a long time in spinal epidural injections with only small risks. Around a quarter of medicines used in pain medicine are off license. This means that the medicine has not been approved by a regulatory body for the purpose for which they are to be used. Drug companies do not feel the need to run expensive trials to licence steroids injections for the spine when they are already in constant safe and effective use in medical practice.

WHAT ARE THE RISKS?

Common

- Worsening of pain. Some people experience an initial increase in back or leg pain. This is usually short term.
- Pain and bruising at the injection site. This will improve after a few days and not everyone experiences it.
- Lack or response to the injection. It may not change any of your symptoms.
- Effects of the steroid. This can include a flushed face or insomnia. The steroid will also reduce your normal immune response for a week or so, therefore you may be more susceptible to picking up or fighting illness. Diabetics may notice an increase in blood sugar levels for a few days after the injection so it's advisable to closely monitor your blood sugar levels for the following week after the injection if you are diabetic.
- Feeling faint

Rare

- Allergic reaction to the local anaesthetic, dye, antiseptic or plasters used. You would be treated for any severe reaction if it did occur. If you any known allergies, then please advise your spinal medical team prior to the procedure.
- Infection around the needle site.
- Headache due to a small needle puncture of the membrane called the dura, that surrounds the nerves and cerebrospinal fluid in the spinal canal. If this does not improve within a few days contact the Spinal Nurse Specialist Team.

Extremely Rare

- Blood can clot in the epidural space which could put more pressure on nerve and increase leg pain.

WHAT ARE THE BENEFITS?

- The injection can greatly improve your leg and sometimes your back pain in the short to long term but may not provide a cure.
- Response to the local anaesthetic can confirm that we are treating the correct area responsible for your symptoms. This can be important if surgery needs to be considered at a later stage.
- By reducing your pain, you can engage with other beneficial activities such as exercise or manual therapy.
- You may be able to reduce or stop pain medication (under advice from your GP).
- Your sleep and day to day activities may improve if you get a reduction in pain.

HOW DO I PREPARE?

Please let us know if:

- You are diabetic.
- You have tested positive for MRSA.
- You are feeling unwell or have a temperature.
- You have been admitted to hospital since being placed on the waiting list for the injection.
- There is any possibility you might be pregnant. The injection is done using an X-Ray.
- If you have a blood clotting disorder.
- If you are taking any medication that thins your blood. This will need to be stopped prior to the procedure. It's very important that you inform the spinal medical team at least a week in advance of the injection, as they will need to advise you how long your medication needs to be stopped for, prior to the injection. Failure to stop blood thinning medication increases your risk of complications to the blood vessels as outlined in the rare risks section above. If you are taking any of the following medication, or have any concerns about whether your medication thins the blood let our spinal medical team know as this list is not exhaustive:

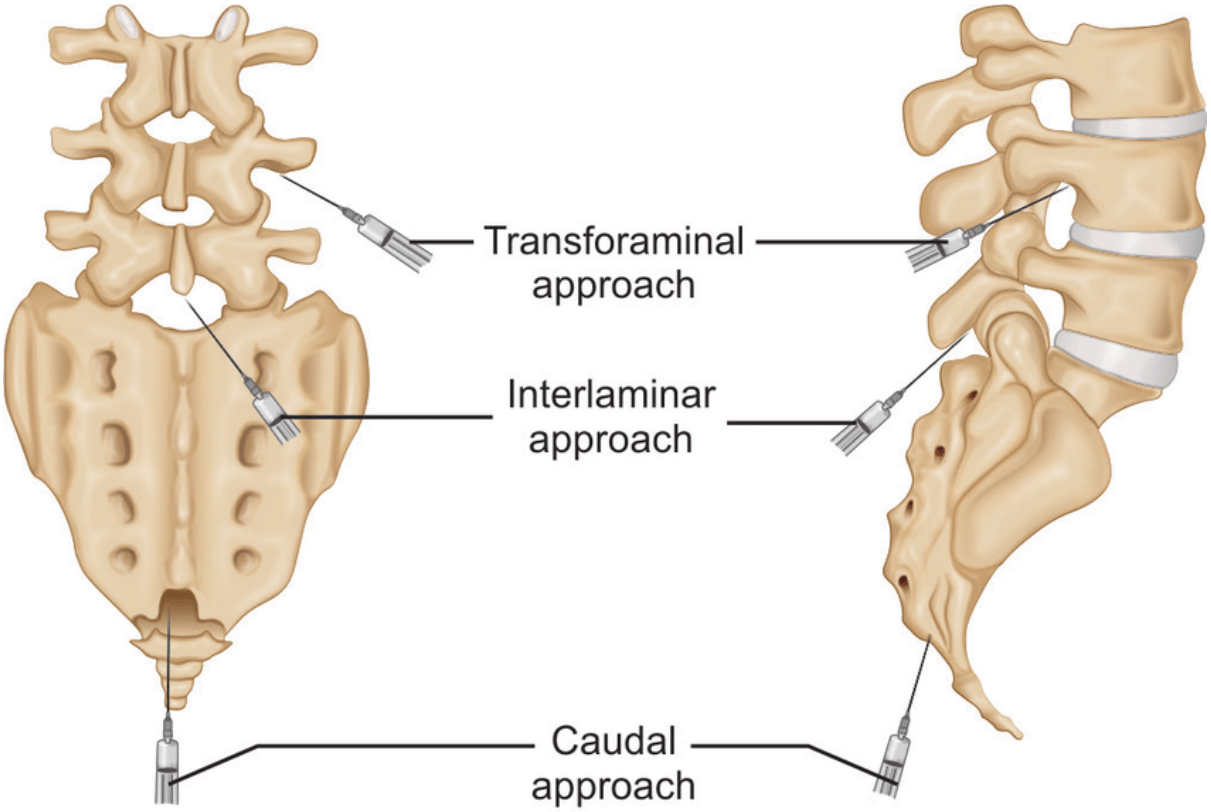
    - Non-Steroidal Anti-Inflammatory (NSAID) drugs such as Naproxen, Ibuprofen, Diclofenac
    - Aspirin
    - Anti-Coagulant drugs such as Warfarin (Marevan), Heparin injections
    - Anti-Platelet drugs such as Clopidogrel (Plavix), Dabigatran (Pradaxa), Rivaroxaban (Xarelto), Apixaban (Eliquis), Edoxaban(Lixiana), Prasugrel (Effient), Ticagrelor (Brilique) Dalteparin (Fragmin) injections, Enoxaparin (Clexane) injections, Tinzaparin (Innohep) injections, Dipyridamole (Persantin Retard) Phenindione, Acenocoumerol (Sinthrome), Asasantin Retard

You will need to be accompanied to the hospital and home again. Someone needs to drive you as you will be unsafe to drive yourself due to the potential numbing effect the local anaesthetic can have on your leg. We do not recommend that you use public transport. By the following day this should have worn off. We recommend that you have an escort who can stay with you overnight if possible. If you are having a sedation you must arrange for a friend or relative to stay with you overnight.

WHAT HAPPENS DURING THE PROCEDURE?

You will be sent an appointment to come and have your injection as a day case. Expect to be in the hospital for 3-4 hours, although often, if you've had a local anaesthetic, you will be discharged more quickly than this. You will be asked to change into a hospital gown.

Your back will be cleaned with antiseptic solution. The injection can be done with you lying on your side curled up, or sitting while leaning forward. The injection is done under X-Ray guidance. Local anaesthetic will be injected which will sting. A fine needle is then introduced.



Caudal Epidural – the needle is placed in a natural bony hole called the sacral hiatus at the base of the sacral bone. The steroid is then flushed up the epidural space behind where the lumbar discs and nerves sit (see diagram on first page). This approach is mainly used if you have symptoms coming from the lowest discs, L5/S1 and L4/5 and L3/4. It is used for people who have single (unilateral), or bilateral leg pain, meaning pain in both legs. It can also be used if the spinal specialist feels low back pain might be coming from the worn disc.

Lumbar Epidural – using the interlaminar approach. The lamina is the name of the bone at the back of the spinal vertebra. The needle is placed between the lamina bones of two segments in the lower back (lumbar spine). The steroid is then flushed into the epidural space, behind the discs and nerves (see diagram on first page). This technique is used if the upper lumbar discs are affected L1/2, L2/3 or L3/4. It is used for people who have single (unilateral), or bilateral leg pain, meaning pain in both legs. It can also be used if the spinal specialist feels low back pain might be coming from the worn disc.

Dye is often used to confirm that the needle and steroid are sited in the correct position. You will feel pressure as the steroid is injected. Sometimes the symptoms in your leg will be reproduced due to the pressure around the nerve. The needle will then be removed. By doing the injection with local anaesthetic there is an added advantage of assessing whether there is a diagnostic change in symptoms after the injection, as you will be alert and able to record this whilst the anaesthetic is active (approximately up to 6 hours).

Injections under sedation

You will be given a sedative prior to the procedure in a separate room adjacent to the theatre. Once the sedative has taken effect you will be taken on the hospital bed to the theatre where the injection will proceed as above.

WHAT HAPPENS AFTER THE PROCEDURE?

You will be transferred to a recovery area. When you feel sufficiently well enough and staff are satisfied with your observation tests, you will be discharged. Your Escort will need to drive you home. Make a note of any change in your back and leg pain for the first 6 hours after the injection. You may choose to use the pain diary at the end of this leaflet to record the change in pain levels as they occur.

It's very common for the pain to return the following day after the injection. We therefore recommend that you continue with your usual pain relief medications. The next day you can start to take any anti-inflammatories or other medications you have stopped prior to the injection as you did before the procedure.

If you have had local anaesthetic, the following day after your injection, you can gradually and gently return to normal day to day activities. We would advise you to avoid strenuous activity for 48 hours after the injection.

If you have had a sedation you should not drive or make any important decisions for 48 hours after the procedure.

As your pain improves you can gradually increase your activity and return to exercise. Remember to pace this return to function and exercise gradually as you may have good and bad days as you recover.

WILL I HAVE A FOLLOW UP APPOINTMENT?

The steroid, which is an anti-inflammatory, should start to work in the next week or two. This varies quite a bit from person to person. If you have not had a significant benefit from the steroid by one month after the injection, **contact your Spinal Consultant's Secretary to book a follow up appointment**. We leave you on an open appointment for a set time after the procedure, so if the benefit does not last, don't worry you can still contact your Spinal Consultant's Secretary to organise a review within this period.

WHO DO I CONTACT IF I HAVE CONCERNS?

If you are worried about any symptoms after your injection you can contact the Spinal Nurse Specialist Team. Remember it is common to experience temporary increase in symptoms in the back and leg after the injection and your first strategy to manage this is taking pain relief as prescribed by your GP and modifying your activities.

Contact us if:

- Your injection site shows signs of infection such as discharge or redness/swelling lasting more than the initial few days or if you have a fever or feel unwell.
- You experience unremitting severe pain, or new pain, weakness or altered sensation in a different place or limb from your symptoms prior to the injection.
- You develop new persistent headaches.

If you are unable to reach the Spinal Team or your query is out of hours contact your GP or local Out of Hours Service.

Useful Contact Numbers:

Spinal Nurse Specialists: 01722 435175 Leave a message on the answering machine. Messages will be reviewed between Monday-Friday 8:00 am - 3:30pm. Please leave your telephone number and details and we will call you back.

<u>For follow up appointments, contact your Spinal Team's Secretary:</u>

Mr Hilton 01305 257096/ 01722 435164

Version 1 Author Elaine Robinson New Hall Hospital Review Date 2022

Mr Stenning	01305 257096/ 01722 435686
Mr Chapple	NHS 01722 435183/Private 01722435167
Mr Dabke	01722 435176
Mr Davies	01722 435682
Mr Fowler	01722 435176
Dr Park	01305 257096
Elaine Robinson	01722 435168
James Beck	01305 257096
Main Switchboard	01722 422333

Pain Diary:

Pain score: 0 is no pain, 10 is very severe pain.

 0 1 2 3 4 5 6 7 8 9 10 

	Back Pain	Leg Pain
Prior to injection		
2-6 hours after injection		
24 hours after injection		
Two weeks after injection		
0ne month after injection		
Two months after injection		