

PATIENT INFORMATION

Steroid Epidural Injections, Cervical, Thoracic and Lumbar and Sacral (Caudal) (Pain Leaflet 2)

What is an epidural injection?

The epidural space lies just outside the membrane, or “dura”, that surrounds the spinal fluid. (“epi” meaning outside.) This fluid goes around and below the spinal cord. Individual nerve roots that come off the spinal cord pass through this space on the way to the arms or legs.

Nerve roots can become irritated or squeezed, often by the discs between the vertebrae. This can cause pain in the arms or legs.

A steroid epidural injection may help symptoms of pain in the legs or arms. It may not improve weakness or loss of feeling or help with back or neck pain.



Cross-section through the spine showing the epidural space

Does it work?

Epidural injections work best for arm or leg pain. This may be caused by nerve root compression or spinal stenosis. This will have been discussed with you before arranging the epidural injection. You must ask the doctor doing the injection any questions you have before signing the consent form. Your pain may return, this is more likely if you have spinal stenosis.

You may notice improvement in your leg or arm pain straight away because of the local anaesthetic in the injection. The steroid is the bit of the injection that helps the most and it may be several days before this really starts to work. Pain relief from the steroid can last many weeks. By this time your nerve root irritation should be getting better and no further treatment will be needed. This is more likely if it was a disc causing your leg pain. If the pain returns after some time you could have another injection, try different painkillers or consider surgery (such as microdiscectomy or decompression). Alternatively, you may decide not to have further treatment.

What are the risks and side effects associated with the procedure?

- Temporary difficulty taking weight on your legs. This is common if local anaesthetic is used for the epidural injection. This should fully resolve in about 30 minutes. Mostly very little local anaesthetic is injected into the epidural space.
- Increased discomfort can occur for the first few days following your injection. This is reasonably common.
- Bruising to the injected area is reasonably common.
- Side effects due to the injected steroid are reasonably common. These include facial flushing for a few days, temporary alteration to your usual menstrual cycle (females) and temporary increase in your sugar levels (diabetics). This may make your diabetes more difficult to control for a few days.
- Bad flare up of your pain for several days. This is uncommon.
- Headache. This is uncommon (about 1:100). It happens if the needle passes through the dura into the spinal fluid surrounding the nerves. It can range from mild to severe. It can last for several weeks and may require treatment.
- Permanent worsening of pain is rare.
- Allergy to injected medication is very rare.
- Blood clot in the epidural space. This occurs very rarely. This may require surgery to remove the blood clot.
- Seizures from the local anaesthetic. This occurs very rarely.
- Epidural infection is very, very rare (about 1:150 000). Infection can lead to abscess formation or meningitis.
- Permanent nerve damage, leading to weakness or paralysis. This is very, very rare
- (About 1:250, 000 but more common in cervical or thoracic epidurals).

There have been no cases of epidural infection, permanent nerve damage or epidural blood clots in patients having an epidural injection in the Pain Clinic at Torbay.

What happens on the day of my appointment?

You may eat and drink as normal. Please take all your tablets as normal, apart from anticoagulants such as Warfarin and Clopidogrel. You will not need to get undressed as long as you are wearing loose fitting clothing so that the skin of your lower back can be easily exposed. Tracksuit clothing would be ideal, for example. You will have a small drip put into the back of one of your hands in case you feel faint or unwell and need treatment.

You will be either lying on your left hand side, front or sitting up for procedure, which usually takes 10-20 minutes. Your skin will be cleaned with alcohol that will feel very cold. Local anaesthetic is injected to numb the skin. You will need to keep very still when the epidural needle is being inserted. An x-ray machine is often used to help with the correct placement of the needle. Once the needle is confirmed to be in the epidural space the injection takes place.

Occasionally the needle can bump into a nerve, causing a shooting sensation down one of your legs. If this happens the needle is moved away from the nerve. As the injection is done you may notice an increasing ache into your leg or legs, particularly if you have spinal stenosis. This is not normally very painful and usually does not last long. You may not notice anything at all.

The injection contains a small amount of local anaesthetic, salty water, steroid (Dexamethasone or Triamcinolone) and a small quantity of special dye. The dye can be seen on the x-ray and is used to show the injection is in the epidural space. Steroids are not "licenced" for Epidural injections. This means the company that make the steroids has not said they can be used for Epidural injections. Many other drugs that are prescribed by doctors are also not licenced for that particular use.

What happens after the procedure?

After the procedure you will need to stay in the department for thirty minutes or so, until you are able to walk and are fit for discharge. **You must not drive home or go home on public transport.** Please arrange for someone to collect you from the Day Surgery Unit. You are allowed to go home by taxi.

The day surgery nurses will give you a discharge letter, briefly explaining what you have had done. Usually another letter will arrive in the post from the Consultant who has done your procedure. The day surgery letter will contain contact details so that you can phone someone day or night if you have a problem related to your injection. They will also phone the day after your injection.

You will be asked to keep a pain diary (this will be supplied) and to post this back to the pain service after 3 months. **It is very important that you do this.** What to do next is based upon outcome of the pain diary.

Continue to take your pain tablets until you notice any improvement. After your injection take things easy for the rest of the day. Do not do any hard exercise or heavy work for the first few days.

Important information

Please inform the Day Surgery Unit if you are diabetic, have a cough or cold, or have any kind of infection.

*You must inform us if you are taking antibiotics, aspirin, anticoagulants (blood thinners) such as Warfarin or rivaroxaban, or Clopidogrel **before** attending.* Some of these may need to be stopped some days prior to your appointment. Warfarin is usually stopped for 5 days before the injection if you have Atrial Fibrillation. If you are taking it for any other reasons please consult your doctor or the pain clinic.

Information for females

You will be asked if there is any chance that you could be pregnant prior to having exposure to x-ray.

For Further information

More information about nerve root pain and spinal stenosis can be found on the British Association of Spinal Surgeons website at www.spinesurgeons.ac.uk (click through to "Patient Information" then "Nerve Root Pain and Some of the Treatment Options" or "spinal stenosis"). (Link last accessed 10.05.21)

For further assistance or to receive this information in a different format, please contact the department which created this leaflet.