



# PAINWEST

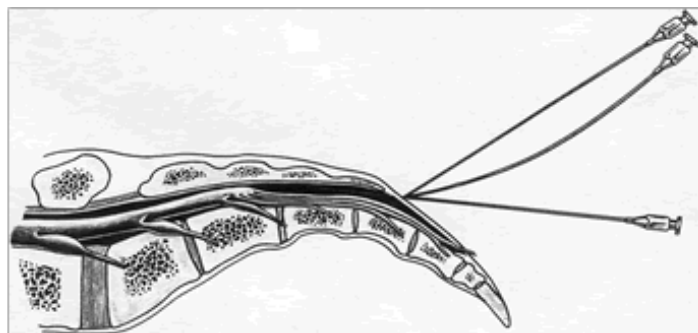
## Excellence in Pain Management

### Epidural Corticosteroid Injections

The epidural space surrounds the outer covering of the spinal cord (dura) and extends from the skull to the tailbone. It contains fat, blood vessels, and nerves that pass through the space after they leave the spinal cord.

It is possible to access this space in several different ways:

- **Caudally Directed Epidural:** a needle is inserted through the gap between the tailbone and the lowest segment of the sacrum. A thin catheter is then inserted and guided up to the desired region using x-ray (fluoroscopic) control. Only the lower part of the spine can be accessed in this way (see diagram).
- **Interlaminar Epidural:** a needle is inserted between the bones at the back of the spinal canal. Medication can be directly injected at this level or else a thin catheter can be guided up to a higher level.
- **Transforaminal Epidural:** a needle is inserted from the side of the spinal canal and medication injected into the epidural space. This is similar to a nerve root sleeve injection, but tends to be more successful.
- In all cases an x-ray dye is injected, followed by local anaesthetic and corticosteroid.



Epidural corticosteroid injections are used for the treatment of pain due to inflammation of structures in the epidural space. The beneficial effects typically last for 3 to 6 months. Conditions which are commonly treated include:

- a “trapped” nerve (nerve impingement or “sciatica”) which is causing leg or arm pain.
- a disc bulge which may cause leg/arm and/or back/neck pain
- spinal stenosis. There is more variability in response with this condition

#### **What are the risks of the procedure?**

All invasive procedures carry the risk of complications. In general, the risk is low, but potentially includes:

- Discomfort at the site of the injection
- Worsening of your pain (probably a temporary “pressure effect” from the injection).
- Infection
- Bleeding
- Allergic reaction to the medications.
- Fainting
- Headache due to accidental dural puncture (variable risk: 1 in 200 for lumbar, 1 in 50 for cervical/thoracic)
- Nerve damage (due to direct trauma, the medication, infection or bleeding).
- Steroid-related side effects such as transient flushing, mood swings, insomnia, high blood sugar levels (especially in diabetic patients). The manufacturer did not specifically design most steroid solutions for this procedure. Despite this, these medications have been widely used, over many years, for this procedure without significant complications.
- Failure to achieve the desired level of pain relief
- In rare instances, bleeding into the epidural space can cause compression of the spinal cord, leading to paralysis at the level of the injection. Damage to the spinal cord and spinal nerves by the epidural needle may very occasionally occur.
- Risks of sedation, if used

#### **What are the costs of the procedure?**

- For privately insured patients we will send a bill directly to your health fund. In general, there is no gap to pay (although you will be liable for any costs that your health fund doesn’t cover).
- For worker’s compensation and motor vehicle insurance patients, we will obtain authorisation from the insurers prior to the procedure. There should be no cost to you.
- For uninsured patients, you will be expected to pay the full amount prior to the procedure and you will then be able to claim back a portion from Medicare (MBS Item Number 39140, and 18232)

### How do I prepare for this procedure?

You will receive a call from the hospital or us a few days before the procedure to discuss an exact admission time and details with you.

### Please advise staff if you are:

- ***Taking blood thinners*** (including warfarin, clopidogrel, dabigatran, rivaroxaban and apixaban)
- ***Diabetic***
- ***Pregnant*** (or any chance of you being pregnant).
- ***Allergic*** to iodine, betadine, shellfish, local anaesthetics, or cortisone/steroids.
- ***Unwell*** (especially if you have an infection)
- ***Weigh over 120kg***

### Prior to the procedure you should:

- **Fast – No food for 6 hours. Can have water up till 2 hours before procedure.**
- **Take your usual medications (apart from those mentioned above)**
- **Arrange for someone to accompany you to and from the day surgery**

### What does the procedure involve?

After arriving and completing the necessary paperwork:

- You will be asked to change into a hospital gown and a small cannula may be inserted into one of your veins.
- You may be given a sedative. This is not a general anaesthetic but most people feel as if they were asleep.
- Your heart rate and blood pressure are usually monitored throughout the procedure.
- You will lie face down on an x-ray table, the skin over the area to be injected is cleaned with an antiseptic solution, and sterile drapes applied
- A local anaesthetic (usually lignocaine) is injected into your skin
- A needle is then inserted under x-ray guidance.
- A thin catheter may be inserted via this needle and guided to the desired region, using x-ray control.
- An x-ray dye (radio-contrast) may be injected to confirm the correct location of the injection.
- The local anaesthetic and/or steroid solution is injected.
- The procedure usually takes 15 to 20 minutes, plus recovery time.

### What happens after the procedure?

- You will be monitored in a recovery area until you are ready to go home (usually 30-60 minutes).
- You may experience numbness and/or relief from your symptoms for several hours after the injection and you may experience some light-headedness on standing. These feelings will gradually return to normal over next few hours.
- If you have received any sedation during your procedure, the effects of these medications may last for up to 24 hours:
  - You may not remember some of the information given during the procedure. This is a normal side effect of the medication.
  - You need to have someone take you home and stay with you for the next 24 hours.
  - For the next 24 hours you should not drive a vehicle, drink alcohol, operate machinery, make important decisions, sign legal documents or travel unaccompanied
- You will be given a pain relief chart to fill out. Please bring this to show the doctor at your next consultation.
- Please remove the dressing the day after the procedure, when you next wash.
- The pain may return when the local anaesthetic wears off. Some people experience an initial increase in pain and stiffness that may continue for several days. If necessary, an ice pack can be applied to the area, 20 minutes at a time, for 1-2 days following the procedure.
- If steroids are injected, then it may take several days for the benefits to be noticed. Additionally, you may feel flushed in the face, have some mild insomnia and/or notice a change in your mood for a few days. Diabetic patients may notice a rise in their blood sugar levels.
- After the procedure, care must be taken to avoid a rapid increase in your activities. Gradually increase your daily activities as tolerated. Discuss this with your doctor.
- If you notice any swelling or bleeding from the site, fever, urinary difficulties, severe headache, increasing weakness and numbness or have any other concerns, please contact us, your General Practitioner or the Emergency Department of your local hospital.