



**AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS**  
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## FACULTY OF PAIN MEDICINE

### Patient Information

#### Caudal Epidural Injections

This document aims to give you a better understanding of this procedure. There are differences in the way that this procedure is performed depending on the individual patient, the institution and the doctor. Therefore, not all of this information may apply to you. Please discuss your individual circumstances and concerns with your doctor.

#### Why am I having this procedure?

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 block the nerves from the lower part of the spinal cord (the lumbar and sacral nerves) by inserting a needle through the gap between the tailbone and the lowest segment of the sacrum. When local anaesthetic and steroid is injected via this route, it is called a caudal epidural injection.

Caudal epidural injections are used to provide anaesthesia during surgery, analgesia following surgery or are used for the diagnosis and/or treatment of pain due to inflammation of structures in the epidural space.

#### How do I prepare for the procedure?

Please advise staff if you are:

- *Taking blood thinners* (especially warfarin, clopidogrel, aspirin or anti-inflammatories)
- *Diabetic*
- *Pregnant* (or any chance of you being pregnant).
- *Allergic* to iodine, betadine, shellfish, local anaesthetics, or steroids.
- *Unwell* (especially if you have an infection)

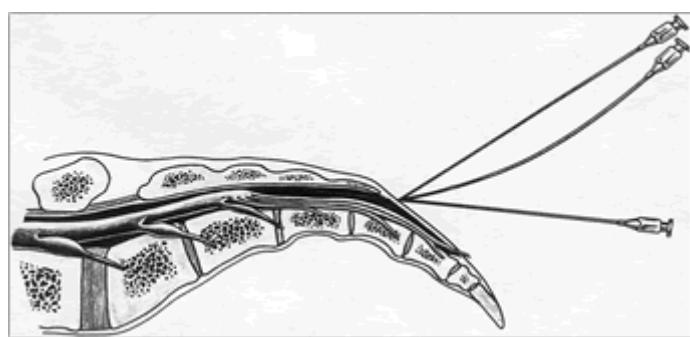
Staff may advise you to:

- Fast
- Take your usual medications (apart from those mentioned above)
- Arrange for someone to accompany you home

**What does the procedure involve?**

After arriving and completing the necessary paperwork:

- You will be asked to change into a hospital gown
- A small cannula will be inserted into one of your veins. A bolus of saline fluid may be administered through the cannula.
- You may be given a mild sedative, but you will usually be awake throughout the procedure.
- Your heart rate and blood pressure are usually monitored throughout the procedure.
- You will be asked either lie comfortably face down with a pillow under your pelvis, or on your side with your upper leg bent. It may also be necessary for an assistant to support the upper buttock.
- The skin over the area to be injected is cleaned with an antiseptic solution, and sterile drapes applied
- A local anaesthetic is injected into your skin
- A needle is then inserted through the gap between the tailbone and the lowest segment of the sacrum.
- An x-ray machine may be used to guide a small needle into the caudal epidural space. An X-ray (radio-contrast) dye may be injected to confirm the correct location of the needle.
- The local anaesthetic and/or steroid solution is injected.
- The procedure usually takes 10 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).
- In some cases, an epidural catheter will be left in the epidural space for continuous administration of local anaesthetic and/or other pain relieving agents. In such cases, patients will not be discharged the same day.
- 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.
- It is preferable to have someone take you home and stay with you for the next 24 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. 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 may 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 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, experience any fever, urinary retention, severe headache, increasing weakness and numbness or have any other concerns, please contact your General Practitioner, the Pain Management Unit, or the Emergency Department of your local hospital.

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

All invasive procedures carry the risk of complications. In general the risk is low, but 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.
- Difficulty in voiding may persist for 12-24 hours after the injection.

- Headache.
- Nerve damage (due to direct trauma, the medication, infection or bleeding).
- Steroid-related side effects such as transient flushing, mood swings, 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.
- 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 (ask your doctor)