

## Caudal epidural

### What is a caudal epidural?

A caudal epidural is an injection of a mixture of local anaesthetic and hydrocortisone (steroid) at the base of the spine. This is used when nerves in the lower back are inflamed due to mechanical irritation from either spinal stenosis (a degenerative narrowing of the spinal canal) or a disc prolapse. In addition to the mechanical irritation, there can also be a chemical irritation to the nerves from chemicals that can be released from a damaged disc. The injection is not a cure but aims to alleviate your symptoms by reducing the inflammation caused by irritation of the nerves. A caudal epidural can also help with back pain.

A caudal epidural injection can either be performed on its own, or in conjunction with a foraminal injection.

### How do we do it?

A caudal epidural is carried out as a day case procedure in an operating theatre. To minimise discomfort the injection is performed under sedation, which is administered by an anaesthetist. The injection is carried out through the sacral hiatus, which is a small opening in the base of the spinal canal just above the coccyx. The position of the needle is confirmed by injecting some dye and taking an X-ray.

### What are the risks?

**Infection** – there is a risk of infection at the injection site but this is rare due to the use of sterile techniques.

**Dural puncture** – there is a small risk of a headache if the needle punctures the lining that surrounds the nerves. This is incredibly rare following a caudal epidural injection.

**Haematoma** – there is a very small risk of a haematoma forming around the nerves causing further nerve compression. This is normally only a problem in patients who are on medication to thin their blood (aspirin / warfarin / clopidogrel). You must inform us if you are on any of these drugs, as they will need to be stopped for a few days before your injection.

**If you are on any medication that has the potential to thin your blood such as aspirin, clopidogrel, warfarin, rivaroxaban or any other blood thinning medication then we do need to know about this prior to the date of your injection as this will usually need to be stopped prior to your injection.**

**If you take anti-inflammatory tablets, then you must stop taking them seven days before your injection as these drugs can also affect blood clotting.**

**Temporary numbness and bladder disturbance** – following the injection you may experience some numbness between your legs and extending into the tops of your thighs. This is due to the local anaesthetic effect on the nerves and wears off after a few hours. Occasionally, the local anaesthetic can also affect the nerves to your bladder, disturbing your bladder function for a few hours. We will make sure that you have passed urine before you go home.

**Injection site discomfort** – following the injection you may have some localised discomfort at the injection site, for which you can take some simple painkillers and it should settle over a few days.

**Side effects from the injected steroid** – there are very few side effects when steroids are administered this way. Occasionally patients may notice some facial flushing, nausea, or mild abdominal cramps for a few days following the injection. There can also be a temporary disturbance to the menstrual cycle. Diabetics may find that the steroid alters their blood sugar control for a few days, so should monitor it closely.

**Allergic reaction** – an allergic reaction to injected steroid and local anaesthetic is incredibly rare. However, you must inform us of any known allergies beforehand.

### What can I expect following the injection?

After you have had the injection you will spend a few minutes being monitored in the recovery room before being taken back to the ward. Once back on the ward, most patients will feel like having a short sleep. When you are ready to get up, you must call for one of the nursing team and only get up when they are with you as sometimes patients feel a little bit unsteady when they first get up following an injection. This will quickly pass. You will normally be able to leave hospital once you have had something to eat and drink, you are safely mobile and you have passed urine. This is normally one and a half to two hours following your injection. As you will have had sedation you will be unable to drive for 24 hours following the injection and will need to arrange for someone to collect you from hospital. We would advise that you have a restful day the day after your injection but you can return to normal activities the following day. There are no other restrictions following the injection.

After the injection we normally use a spray on dressing that requires no removal or special care. You should keep the injection site dry for six hours. Beyond this, there are no special wound care instructions. If a small dressing is used, then this can be removed after six hours.

Approximately 65% of patients have a good response following a caudal epidural. However, the benefits are not always long lasting. The hydrocortisone can take a couple of weeks to have its full effect, so you may not notice an immediate benefit. If further rehabilitation is recommended, it is important that you undertake this whilst you are pain free so that you gain maximal long-term benefit. It is important that you build up any unaccustomed activity gradually.

## What next?

You will be seen back in the clinic a few weeks after your injection. Your on-going treatment will be guided by your response to the injection.