

# Epidural infusion for children:

Information leaflet for patients, parents and carers

## What is an epidural?

An epidural is a way of giving pain relief following surgery. When you are asleep, the doctor responsible for managing your pain (called an anaesthetist) passes a very small plastic tube (catheter) into the space around the spinal cord in your back. This is called the epidural space.

Medicine is given continuously through this tube using a pump. The tube is then secured in place with a clear sticky plastic dressing.

## How does the epidural work?

Nerves that transmit pain signals to the brain lie in the epidural space. Medicine is infused into this space to temporarily block these signals and therefore reduce pain. Two types of medicine are commonly used, either together or separately:

- a local anaesthetic (such as Bupivacaine which is a numbing agent)
- an analgesic (such as Fentanyl – an opiate – which is a pain medicine).

## When is an epidural used?

An epidural can be a very effective way to provide pain relief. There are fewer side effects associated with the use of local anaesthetic in epidurals, compared to opiate infusions and therefore reduces the risk of post operative complications, and ultimately speed up recovery. It enables medicine to be given if you are feeling sick or vomiting. It also enables you to move sooner post surgery, without it hurting as much.

## Can everyone have an epidural?

Epidurals are not suitable for every patient and every type of surgery. An epidural may not be suitable if the risks outweigh the benefits. It may be not suitable if:

- you are taking blood thinning products (such as warfarin or aspirin)
- you have a blood clotting abnormality
- you have an allergy to the medications used in the epidurals
- you have anatomy of the spine which isn't compatible to epidural insertion
- you have broken or infected skin on the back
- you have a reduced immune system.

## What if I decide not to have an epidural or can't have an epidural?

Having an epidural is a decision to be made following discussion with the anaesthetist. There are alternative methods used, such as local anaesthetic infiltrations, morphine infusions and patient-controlled analgesia. These provide as effective pain relief post surgery as the epidurals, but can also have associated side effects. The anaesthetist can discuss these options with you if you are undecided.

## Who looks after the epidural?

Nurses on the wards will closely monitor you and the epidural to ensure it is working safely and effectively. Ward staff have access to the children's pain team and/or anaesthetists, who are always on hand for advice and support.

## Are there any side effects?

Side effects are the secondary effects of a treatment. These can commonly occur with the use of epidurals, but can usually be managed well.

### Itching, feeling sick or vomiting

- This usually occurs if an opiate is used in the epidural, e.g. Fentanyl.
- These can be treated with other medicines or by removing the opioid from the epidural.

### Inability to pass urine

- The epidural can also have an effect on the nerves that supply the bladder, so a catheter (a thin tube) may need to be passed into the bladder to allow urine to drain away.
- Sometimes this catheter will be placed during surgery while you are asleep. Occasionally, however, it may need to be put in on the ward following surgery.
- Your ability to pass urine normally should return once the epidural is removed.

### Sedation

- This usually occurs if an opiate is used in the epidural, e.g. Fentanyl.
- You will be monitored closely and the epidural adjusted appropriately to reduce this effect.

### Heavy/numb/wobbly legs

- This is a common side effect of having an epidural and gradually wears off by the time the epidural is removed.
- Regular position changes and encouragement to move can help to minimise these feelings.
- If possible, the amount of epidural used can be reduced, while still ensuring that you are comfortable.

## Inadequate pain relief

### This can occur for several reasons:

- the epidural was unable to be placed effectively/safely
- the local anaesthetic may not spread adequately to cover the exact area

- the epidural catheter can leak, become dislodged or fall out.

Other methods of pain relief are available to manage your pain if the epidural does not work adequately.

## Could there be any complications?

Complications are unwanted events that occasionally occur, but fortunately these are extremely rare. They can include:

- infections at the epidural site and closer to the spinal nerves and cord
- damage to the nerves in the back
- spinal bleeding (collection of blood which presses on the spinal cord)
- severe headaches.

Your anaesthetist can inform you further on these complications and about how they can be treated if necessary.

## When will the epidural be stopped?

Most patients have their epidural running for 24-72 hours. After this time, the infusion will be stopped and your pain assessed over the next few hours. If you are comfortable then the epidural will be removed by nursing staff. If the epidural becomes ineffective or your side effects are not managed appropriately, the epidural may be stopped sooner and an alternative method of pain relief considered.

Once the epidural has been stopped and removed, you will continue to receive other methods of pain relief; such as paracetamol, ibuprofen and oral morphine.

## Does it hurt to remove the epidural?

Removing the actual epidural line does not hurt and is often not felt at all. However, removing the dressings that are securing the line in place may be a little uncomfortable. The nurse removing the line can use other types of pain relief and adhesive remover to help with this to minimise the discomfort.

If you need a translation of this document, an interpreter or a version in large print, Braille or on audio tape, please telephone **023 8120 4688** for help.

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