Paediatric Pain Service

Epidural- Information for parents

Introduction
An epidural is a way of providing pain relief for your child after their operation. The anaesthetist places a small plastic tube (the epidural catheter) into the epidural space in your child’s back.

The epidural space is an area which surrounds the spinal cord and through which pain nerves pass to the spinal cord. These nerves send messages via the spinal cord to the brain when your child feels pain. An epidural infusion is when medicine is infused into this space through the epidural catheter to numb these nerves. As a result nerve messages are blocked.

An epidural is usually put in while your child is asleep from the general anaesthetic for their operation. Dressings are placed over the catheter to stop it falling out.

Two types of medicine are commonly used, either separately or together.

- A local anaesthetic
- A pain relief drug, such as fentanyl

They are given continuously through a pump.

When is an epidural infusion used?
An epidural infusion is used for pain relief after certain types of major surgery. The anaesthetist will discuss with you why this technique may help your child. Everything should be explained to you in a way that you can understand.

What are the benefits?
It has been shown that an epidural can provide pain relief with less drowsiness on the ward after the operation when compared with Patient Controlled Analgesia (PCA). Your child should experience less pain on movement after their operation.

How will your child feel?
In the first few hours after your child’s operation, they may feel that their legs are very weak, heavy or tingling. This is common and usually gets less after 12-24 hours. This happens because the anaesthetist often uses stronger local anaesthetic during the operation than the local anaesthetic that is used on the ward.
Can anyone have an epidural?

No, in some children an epidural is not possible. Your child will not be able to have an epidural if they have problems with blood clotting, an allergy to local anaesthetic or an infection in their back. The anaesthetist may not be able to place the epidural catheter into the epidural space if the shape of your child’s spine is not normal.

Are there any side-effects?

There are side effects with all methods of strong pain relief. They can be divided into common side effects (seen in lots of children ~ 1 in 10 - 1 in 100 children) and rare side effects (seen in very few children ~ 1 in 2000 children).

Common side effects with epidural infusions include:

- Numbness or tingling legs.
- Not being able to pass urine easily. Usually if your child has an epidural they will have a catheter (thin tube) placed in the bladder to allow the urine to drain away. If your child does not have a catheter placed in theatre, one may need to be put in on the ward later.
- Nausea, vomiting and itching can be a side effect if pain medication such as fentanyl is added to the epidural. It is important that you let your child’s nurse know how they are feeling so that the nurse can give your child some other medicine into their vein via their cannula to help them feel less sick or less itchy.

Rare side effects with epidural infusions include:

- Damage to the nerves in the back.
- Infection in the spine.
- Allergy to the medicine being infused.

A recent national study has shown that 1 in 2000 children who have an epidural get one of these rare side effects, but permanent damage is extremely rare (1 in 10,000). Your child’s anaesthetist can tell you more about how these serious problems are prevented or treated. These risks must be balanced against the good pain relief that epidurals usually provide.

Who looks after the epidural?

Nurses on the ward will closely monitor your child to make sure the epidural is working as expected. One of the paediatric pain nurse specialists or an anaesthetist will visit you every day to help the nurses on the ward to monitor your child’s epidural infusion and to ensure that the pain relief is working well.
What if your child is still in pain while your epidural is running?

Other pain relieving medicines may be given while the epidural infusion is running. They work together to improve your child’s level of pain relief and decrease side-effects.

Sometimes an epidural does not work very well. If so, the pain nurse specialist or anaesthetist can adjust the solution to try and get it working properly. If that does not help, then your child will be given an alternative pain relief drug. This is usually intravenous morphine, which is given straight into a vein and works quite quickly. This can be given via a pump that your child or the nurses control. The Patient Controlled Analgesia (PCA) and the Nurse Controlled Analgesia (NCA) may be used alongside your child’s epidural or the epidural infusion will be stopped and the epidural catheter removed.

How long can the epidural catheter be in place?

The time for which the epidural infusion is needed will depend on your child’s pain and the type of surgery they have had. It is usually in place for two to three days.

Does it hurt to remove the epidural?

Removing the catheter is not painful. Sometimes removing the dressings is uncomfortable. There are things we may be able to do to minimise this discomfort, such as wetting the dressings to make them easier to remove.

What happens afterwards?

When the epidural is finished, your child will still need regular pain relieving medicines. Any numbness from the epidural should disappear over the next few hours. Your child may need to continue taking some pain medicines at home.

What if you decide your child will not have an epidural?

The anaesthetist will offer for your child to have an epidural as he or she feels this is the best pain relief for the operation your child is having. However, an intravenous infusion of pain medication (usually morphine) via a Patient Controlled Analgesia (PCA) or Nurse Controlled Analgesia (NCA) pump may also be used for pain relief in children. This is effective, but does have side effects. You and the anaesthetist will decide what is best for your child.

What do I do if I am worried?

If you have any worries or questions about your child’s pain management, then please talk to your child’s nurse. You could also ask your child’s nurse to call the children’s pain team or an anaesthetist to come and talk to you.
References/ Sources of evidence

Llewellyn N, Moriarty A; The National Paediatric Epidural Audit, Paediatric Anaesthesia 2007; 17(6); 520-533

Privacy & Dignity

Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high-tech equipment and/or specialist one to one care is required.

We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

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Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

Document history

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