



Tameside and Glossop  
Integrated Care  
NHS Foundation Trust

# Epidural Continuous Infusion

Patient information Leaflet

February 2018

## **Introduction**

You may already know that epidural's are often used to treat pain during childbirth. This same technique can also be used as an effective method of pain relief following some accidents and before and after certain operations for both men and women. They can also be used for total pain relief during surgery; this allows you to remain awake throughout your operation.

## **What Is An Epidural Infusion?**

The epidural space is an area which lies close to your spinal cord through which the nerves in-charge of your body's sensations pass.

The insertion of an epidural involves a fine plastic tube called an epidural catheter being placed into the epidural space. Local anaesthetics are then injected/infused into it reducing the number of pain messages and other sensations from reaching your brain. This can cause numbness, which varies in extent depending on the amount of local anaesthetic given. The epidural catheter is then connected to an epidural infusion pump which enables a mixture of local anaesthetic and other pain relieving drugs to be given continuously over a period of days to keep your pain well controlled.

When the epidural is stopped, full feeling will gradually return.

## **How Is An Epidural Put In?**

Epidurals can be put in:

- ◆ When you are awake.
- ◆ When you have been given a drug, which will make you drowsy and relaxed (sedation).
- ◆ During a general anaesthetic (when you have been put to sleep).

These choices can be discussed further with your anaesthetist.

If you are awake, you will be asked to sit up and bend forward or lie on your side, and bring your knees up, to curve your back.

Local anaesthetic is then injected into a small area of the skin and deep tissue in your back, to make the area numb. A special epidural needle is then pushed through this numb area until it reaches your epidural space and then a fine catheter is passed through the needle. When the anaesthetist is happy with the epidural catheter's position, the needle is removed leaving only the epidural catheter in your back, this is then secured to help prevent it from moving or falling out.

## **What Will I Feel?**

The local anaesthetic stings briefly, but usually allows an almost painless procedure. It is common to feel slight discomfort in your back as the catheter is inserted.

Occasionally, an electric shock-like sensation or pain occurs during needle or catheter insertion. If this happens tell the anaesthetist immediately.

A sensation of warmth and numbness may gradually develop. You may still be able to feel touch, pressure or movement and your legs may feel heavy and become

increasingly more difficult to move do not worry this is normal. The degree of numbness and weakness gradually decreases over the first day following your operation.

## **Nursing Observations**

Throughout the duration of your epidural, nurses will regularly assess how effective the epidural is in controlling your pain. This also enables them to identify any problems, which may occur.

You may also be visited by the acute pain team, who are a group of experienced senior nurses and consultants. They will:

- Assess your pain
- Review your pain relieving medication
- Offer advice regarding your pain management.
- Sort out any problems regarding your pain management

## **What Medication Can I Take Whilst On An Epidural Infusion?**

It is important that you continue to take your usual medication, however if you take sleeping tablets or sedatives they may be stopped whilst you are on the epidural. This is because the combination of the tablets and the epidural may make you too sleepy.

It may also be necessary for you to have other pain relieving medicines such as Paracetamol, Codeine and anti inflammatory drugs whilst you are on the epidural. By giving different types of medicines your pain will be better controlled, as they all work in different areas of your body, making you feel more comfortable. Once these medicines have been taken regularly for at least 24 hours, they should start to control your pain and the rate of the epidural may be reduced without any increase in pain being felt.

## **What Are The Alternatives To An Epidural Infusion?**

**Oral Tablets and Medicines:** These are used for all types of pain and take at least 20-30 minutes to have some effect. However dependant on your condition and the severity of pain, these may not be as effective as an epidural.

**Injections:** can be given directly into your vein for immediate effect or into a muscle within your leg/buttock. This method usually takes 20 minutes to start working.

**Suppositories:** for pain relief are inserted into your back passage by yourself or the nurse, the drug then dissolves and enters your bloodstream. Suppositories work over a long period and may be given if you are vomiting or are nil by mouth. They will not make you open your bowels.

**Patient Controlled Analgesia:** This system relies on a special pump, which contains strong pain relieving medication. The pump is connected to a hand held button, which when pressed by yourself gives a small amount of pain relieving medicine straight into a vein usually in your arm or hand.

**Spinal Analgesia:** A needle is placed close to the spinal cord, through which a single dose of pain relieving medication is administered, to numb the nerves at and around the site of the operation. This medication continues to work for a number of hours after the surgery. Once the medication has been given the needle is removed.

**Nerve Block:** Local anaesthetic is injected into tissues surrounding nerves in and around the site of operation. This helps to numb the area. These drugs continue to work for a number of hours after surgery.

### **What Are The Benefits of Epidural Infusions?**

- ◆ Epidurals can provide better pain relief than other methods.
- ◆ There is evidence that there are reduced complications of major surgery, e.g. nausea/vomiting, blood clots, chest infections, delayed return of bowel function.
- ◆ There is a quicker return to eating, drinking and full movement, possibly a shorter stay in hospital.

### **What If The Epidural Infusion Does Not Work?**

Again it is important to tell your nurse, who may increase the rate at which you are receiving the drugs via the epidural pump. Your nurse may also review your other pain relieving medication with the acute pain team. If your epidural does not work there are other methods of pain relief available, which can be used instead.

### **When Will The Epidural Infusion Be Stopped?**

The epidural will be stopped when you no longer require it for pain relief.

The rate of the epidural pump will be gradually reduced over a number of hours. This allows us to assess how well the oral pain killing tablets are controlling your pain. Only when the epidural rate is at the required level will it be stopped. A few hours after the pump is stopped, the epidural catheter will be removed, once it is clear that you no longer need this type of pain relief to control your pain.

### **Side Effects And Complications Of An Epidural Infusion**

#### ***Very Common or Common Side Effects and Complications – Affects 1 in 10 people***

**Inability to pass urine** - The epidural may affect the nerves that supply sensation to the bladder, so a catheter (tube) maybe put into your bladder to drain it. This is often necessary for major operations to monitor kidney function. With an epidural it is a painless procedure and bladder function returns to normal when the epidural wears off.

**Low Blood Pressure** - The local anaesthetic affects the nerves going to your blood vessels, so blood pressure may drop a little. Fluids and/or drugs can be administered to treat this.

**Itching** - This can occur as a side effect of the morphine like drugs used with the local anaesthetic and is easily treated with medication.

**Feeling Sick and Vomiting** - This problem is less common with epidurals and can be treated with anti-sickness drugs.

**Headaches** - Minor headaches are common after surgery, with or without an epidural. Occasionally a severe headache occurs after an epidural because the lining of the fluid filled space surrounding the spinal cord has been accidentally punctured. The fluid leaks out and causes low pressure in the brain, especially when

you sit up. If this happens it may be necessary to inject a small amount of your own blood into the epidural space to seal the leak (a blood patch). This usually works immediately.

### ***Uncommon Complications – Affecting 1 in 1000 people***

**Catheter infection** - The epidural catheter can become infected and may have to be removed, and antibiotics may be necessary. It is very rare for the infection to spread any further than the insertion site in the skin.

**Slow Breathing.** Some drugs used in the epidural can cause slow breathing and/or drowsiness, which can be easily treated with drugs.

**Backache** - This is common after surgery, with or without an epidural and is often caused by lying flat on the operating table.

### ***Rare Complications***

Other complications, such as convulsions (fits), breathing difficulties and temporary nerve damage are rare (affecting 1 in 10,000 people) whilst permanent nerve damage, epidural abscess, epidural haematoma (blood clot) and cardiac arrest (the heart stopping) are very rare indeed (affecting 1 in 100,000 people).

### ***Post Epidural Infusion Patient Discharge Instructions***

Serious Complications from epidural analgesia are rare. Because the epidural space is close to the spinal cord an infection causing a collection of pus, or a blood clot can cause pressure on the spinal cord. In this **very rare event** that there is pressure on the spinal cord it is crucial to diagnose and treat it as quickly as possible; this must be done by expert hospital doctors to prevent delays in treatment and long lasting damage. This information tells you what to look for and what action to take if you think that you have a problem.

Throughout the duration of your epidural infusion the nurses caring for you will regularly check that you do not have any abnormal weakness or numbness in your legs other than that which is normally caused by the epidural. You must tell them if you feel any difference in the sensation of your legs or have difficulty moving them. It is important to remember that some operations can cause altered sensation in the legs therefore any changes experienced may be as a result of the surgery and not the epidural. If you do have any altered sensation when the epidural has been removed you must inform a member of staff immediately and they will contact someone from the anaesthetic department to assess you.

### ***Signs and Symptoms***

- Redness, pus, tenderness, or pain at the epidural site.
- Feeling generally unwell despite the fact that all seems well with your surgical wound.
- High temperature, neck stiffness.
- Numbness and or weakness in your legs/ inability to weight bear.
- Difficulty passing water/incontinence of faeces.

If you are still recovering in hospital and your epidural has been stopped it is important that you inform a doctor or nurse **immediately**, if you experience any of these signs and symptoms especially if they are **NEW** symptoms.

If you experience any of these symptoms and have been **discharged** it is important that you **contact the on call anaesthetist** at the hospital **immediately via switchboard on 0161 922 6000**. After speaking to the on call Anaesthetist they may arrange to see you in the Accident and Emergency Department in order to examine you.

### ***Further Information***

For further information on this subject please contact:  
Pain Nurse Specialists on 0161-922-6759 or via the hospital switchboard on 0161-922-6000.

### **Other Useful Contacts Or Information**

NHS 111  
Patient Information Centre  
Royal College of Anaesthetists

### **Source Of Good Practice**

In compiling this information leaflet, a number of recognised professional bodies including the Royal College of Anaesthetists and the British Pain Society have been used.

If you have any questions you want to ask, you can use this space below to remind you

If you have a visual impairment this leaflet can be made available in bigger print or on audiotape. If you require either of these options please contact the Patient Information Centre on 0161 331 5332

آپنی یفئی ایہ تہی پڈتے وای بربآتے نآ پآرےن، تآہلے آنوغربھ کرے آهانبک ہلےتھ ٹلمےر سآهے ٹےلمفونے  
بوغآبوغ کرےن 0161 331 5149/5150 آہے نآہآرے، تہن تآرآ آپنآکے سآہآب کرےتے پآرےبے ۛ

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## DOCUMENT CONTROL INFORMATION

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