

Liverpool Heart and Chest Hospital **NHS**
NHS Foundation Trust

Information for Patients and Families

Pain Relief following Chest / Lung Surgery



*Excellent, Compassionate and Safe care for **every patient**, every day*

This leaflet has been written to provide information about pain relief following chest surgery. We hope it answers some of the questions or concerns you may have. It is not to replace talking with medical or nursing staff.

Why do we need pain relief after surgery?

We will aim to keep you as pain free and comfortable as possible following your surgery. Good pain relief is very important as this will prevent you suffering and will help you recover more quickly.

The medical and nursing staff will ask you about your pain and it is most important that you tell them if you are in pain, so you can be provided with adequate pain relieving medication.

It is normal to have some pain after your surgery and it is important to remember that everybody is different and some people need more pain relief than others. Anxiety can increase the pain people feel.

Pain relief can be changed if it is not working effectively; it can be increased, given more often or given in different combinations.

Occasionally pain is a warning sign that all is not well so tell the nursing staff if you are in pain. The nurse will regularly ask you if you are in pain and ask to describe the amount of pain you are in at rest and on movement

Mild = score 1

Moderate = score 2

Severe = score 3

This will help us to assess the effectiveness of your pain relief.

Good pain relief helps prevent complications

If you can breathe deeply and cough easily after your operation you are less likely to develop a chest infection.

If you can move around freely you are less likely to get blood clots (deep-vein thrombosis or DVT).

It is much easier to relieve pain if it is dealt with sooner rather than later before it gets a point when it is bad for you. Therefore, you should ask for help as soon as you feel pain and continue the treatment prescribed regularly.

Your anaesthetist will discuss different pain relief methods available in detail with you before your surgery, so together you can make an informed decision about which you would prefer. This information will be documented in your health records and the agreed form of pain relief will be indicated below so you have a clear record of what has been discussed and agreed.

The type of pain relief you are going to receive will then indicated by the ticked boxes below.

PCA Only

Paravertebral infusion and PCA

Epidural infusion

Paracetamol

Is the basis of your pain relief and this will be given 4 times a day, either in tablet form or via a drip.



Patient-controlled analgesia (PCA)

This is a method of using a machine that allows you to control your pain relief yourself. It has a pump which contains morphine. The pump is linked to a handset which has a button and when you press the button, you receive a small dose of the drug painlessly into your cannula (plastic tube). This may be used for the first 48hrs after your operation

What are the advantages of PCA?

The main advantage of using PCA is that you have the choice to relieve any pain when you feel you need it.

How do I know if PCA is suitable for me?

PCA is suitable for a wide range of patients following surgery. Your doctor or nurse will help you decide if PCA is appropriate for you. You will need to be able to press a hand held button attached to the PCA pump.

When will I start using PCA?

When you wake up after your surgery a member of staff will be with you. You will be given the hand held button and be informed how to use it.

How often should I press the button?

There are no set rules as to how often you should press the button. The PCA pump is programmed to deliver a measured amount of the medication each time. You should not wait for pain to build up before you press the button as this may result in the pain relieving medication not being as effective.

Can I give myself too much?

It is very unlikely that you will receive too much of the pain relieving medication. The PCA pump is programmed so that you can only receive a set amount of pain relief in a set time. The PCA pump will lock and you will not receive a further dose until the time limit has elapsed, this is usually five minutes.

How long will I need to use PCA?

This varies from patient to patient. It is usual to use the PCA for 1 – 3 days after surgery. You will then be given pain relief in another form, such as tablets or liquids

Local Anaesthetics and Regional blocks



Paravertebral Infusion

This type of pain relief can be used with a PCA for up to 4 days after lung surgery and up to 6 days after oesophageal surgery.

An infusion is a method of giving fluid or drug via a vein directly into the body.

What is a paravertebral infusion?

A small tube (catheter) is placed during your operation (while you are asleep) into the paravertebral space and attached to a pump. This continuously pumps local anaesthetic into your body at a rate that is set by your anaesthetist. The paravertebral space is a small area that lies on either side of the vertebrae (bones which make up the spine or back bone). It runs along the entire length of the back. Nerve fibres carrying pain signals to the spinal cord and the brain pass through this space. The local anaesthetic acts on the nerves and temporarily blocks their function.

What are the side effects?

You may feel that your chest feels numb on the side that you have been operated on but this is usually normal while this drug is being received.

The infusion may lower your blood pressure but this will be monitored regularly and medication or fluids may be given to ensure this does not cause you any problems.



Epidural Infusion

Can be used for up to 6 days after lung, oesophageal and gastric surgery

What is an epidural?

An epidural involves injecting local anaesthetics through a fine plastic tube called an epidural catheter into the epidural space. This space contains the nerves which carry pain signals from your chest to your brain. As a result of the epidural the nerve signals are blocked, causing numbness and pain relief.

A pump allows local anaesthetic and strong morphine like drugs to be given continuously over a number of days. The pump will be programmed by your anaesthetist to control how much of the pain relieving medication you receive. The nursing staff will be able to adjust this according the level of your pain.

How is an epidural done?

Epidurals are usually inserted whilst you are awake prior to you being put to sleep or anaesthetised before your operation. We will ask you to sit up or lie on your side, bending forwards to curve your back and to keep very still. Local anaesthetic is injected into a small area of the skin of your back to numb it before the epidural catheter is put in. The anaesthetist will put a fine plastic tube into the epidural space in your back. The local anaesthetic may sting briefly, but usually allows an almost

painless procedure. There are no needles left in your back, only the fine plastic tube, which you can lie on.

Occasionally, a sensation like an “electric shock” occurs during catheter insertion. If this happens, tell your anaesthetist ***immediately and TRY NOT TO MOVE.***

The epidural should ***NOT*** affect your legs and you will be allowed to walk with assistance within the first or second day after your surgery.

If you do have numbness in your legs or difficulty moving them you should tell the medical or nursing staff immediately

What are the benefits?

Good pain relief particularly when you move and allow you to comply with chest physiotherapy. The benefits also include that you are less likely to develop complications of major surgery, and these include nausea/vomiting, chest infections, leg and lung blood clots,

Side effects and complications

Side effects are common, are often minor and are usually easy to treat. Serious complications are fortunately rare and will be explained in more detail by your anaesthetist during the consent process.

Common side effects and complications

Passing Urine

The epidural infusion will affect your ability to passing urine so while you are asleep the doctor will insert a catheter into your bladder to drain the urine, so you do not need to worry about going to the toilet. This will be removed when the epidural is stopped.

Low blood pressure

The local anaesthetic affects the nerves going to your blood vessels, so blood pressure can be affected. Fluids and/or drugs can be put into your drip to treat this.

Itching

This can occur as a side effect of morphine-like drugs used in combination with local anaesthetic. This is easily treated with anti-allergy drugs.

Pain relief is not adequate

It may not be possible to place the epidural catheter, or the local anaesthetic may not spread adequately to cover the whole surgical area, or the catheter can fall out. For most patients, epidurals usually provide better pain relief than other techniques. Other methods of pain relief are available if the epidural fails.

Rare Complications include:

- Breathing difficulty
- Headache
- Epidural abscess (infection in the epidural space),
- Epidural haematoma (blood clot in the epidural space)
- Temporary or permanent nerve damage
- Paraplegia (loss of feeling and use of legs)

Can anyone have an epidural?

No, an epidural may not always be possible if the risks of complications are too high. Your anaesthetist will discuss if this is the right option for you.

Other Pain Relief Options

When your PCA, paravertebral or epidural are stopped other pain relieving drugs will be added to your regime, such as ***Dihydrocodeine or codeine phosphate***. For the majority of patients these will be prescribed on an as needed basis. This means the nursing staff will offer them when they carry out their drug rounds, however you can ask for them at any time. If these are not strong enough to control your pain there are other drugs available and you should let us know if your pain relief is not effective.

Ibuprofen is an anti-inflammatory drug and is used with some patients. If you are given this it is important that you have eaten or take this drug with food or milk.

All strong pain killers can make you constipated, so it is important that you have a high fibre diet and mobilize. Laxatives are usually prescribed if you are taking strong pain killers regularly.

How do the nurses look after me on the ward?

If you have a PCA, paravertebral or epidural after your surgery the nursing staff will monitor your blood pressure, breathing and heart rate regularly. They will also ask you if you are experiencing pain and your pain levels. They will adjust the pain relief infusions and give you other pain relief to help control the pain. You will also have regular visits from the acute pain team who will adjust and assist your surgical team to provide you with effective pain relief.

After a few days the stronger pain relieving drugs will be replaced and there are number of different types of pain relief available in different forms. The nursing staff will continue to monitor your pain levels, how effective your pain killers are and ensure they are increased or changed if they are ineffective.

It is important to remember that it is reasonable to expect some pain after surgery and it is not always possible to be pain free all the time even if you are given strong pain relieving drugs..

What happens on Discharge?

Some pain following surgery is to be expected surgical wound pain usually settles in time as the wound heals. You will be given pain relief medicines to take home and a leaflet explaining how to take and reduce this medication as the pain improves. If you have any queries or worries regarding your pain or pain management you can discuss this with the pain nurse specialist or nursing staff while you are still in hospital or contact your GP when you have been discharged.

For further information call:www.lhch.nhs.uk

If you require a copy of this leaflet in any other format or language please contact us quoting the leaflet code and the language or format you require.

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<p>如果您想索取一份以其他語文或形式 (如大字體) 編印成的資料傳單，請致電 0151 600 1257 向我們查詢，並說明您所需要的形式和語文。</p>
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<p>W celu uzyskania niniejszej informacji w innym języku lub formacie (np. dużym drukiem), prosimy o kontakt z nami pod numerem 0151 600 1257 podając wymagany format lub język.</p>
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