

Other information

Northampton General Hospital operates a smoke-free policy. This means that smoking is not allowed anywhere on the trust site, this includes all buildings, grounds and car parks.

Leaflets, information, friendly advice and support on giving up smoking and on nicotine replacement therapy are available from the local Stop Smoking helpline on 0845 601 3116, the free national helpline on 0800 1690169, e-mail: smokefree@npct.northants.nhs.uk and local pharmacies.

Car parking at Northampton General Hospital is extremely limited and it is essential to arrive early, allowing ample time for parking. Alternatively, you may find it more convenient to arrange to be dropped off and collected.

This information can be provided in other languages and formats upon request including Braille, audio cassette and CD. Please contact (01604) 544516 or the Patient Advice & Liaison Service (PALS) on (01604) 545784, e-mail: Pals@ngh.nhs.uk

Useful websites

www.nhs.uk

www.northamptongeneral.nhs.uk

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The Royal College
of Anaesthetists



The Association of
Anaesthetists of Great
Britain and Ireland

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Epidurals for pain relief after surgery

This booklet is for anyone who may benefit from an epidural for pain relief after surgery. We hope it will help you to ask questions and direct you to sources of further information.

Northampton 
General Hospital
NHS Trust

Introduction

This booklet describes what happens when you have an epidural, together with any side effects and complications that can occur. It aims to help you and your anaesthetist make a choice about the best method of pain relief for you after your surgery.

It is part of a series about anaesthetics and related topics written by a partnership of patient representatives, patients and anaesthetists. You can find more information in other leaflets in the series. You can get these leaflets, and large print copies, from www.youranaesthetic.info

The series will include the following:

- Anaesthesia explained
- You and your anaesthetic (a summary of the above)
- Your child's general anaesthetic
- Your spinal anaesthetic
- Headache after an epidural or spinal anaesthetic
- Your child's general anaesthetic for dental treatment
- Local anaesthesia for your eye operation
- Your tonsillectomy as day surgery
- Your anaesthetic for aortic surgery
- Anaesthetic choices for hip and knee replacement

Throughout this booklet and the leaflets included in the series, we use the following symbols



To highlight your options or choices



To highlight where you may want to take particular action



To point you to more information

Other organisations

Royal College of Anaesthetists

Churchill House

35 Red Lion Square

London WC1R 4SG

Telephone: 020 70921500

Fax: 020 70921730

E-mail: info@rcoa.ac.uk

Website: www.rcoa.ac.uk

We welcome suggestions to improve this booklet. You should send these to the address above.

Association of Anaesthetists of Great Britain and Ireland

21 Portland Place

London WC1B 1PY

Phone: + 44 20 7631 1650

Fax: + 44 20 7631 4352

E-mail: info@aagb.org

Website: www.aagbi.org

This organisation works to promote the development of anaesthesia and the welfare of anaesthetists and their patients in Great Britain and Ireland.

Questions you may like to ask the anaesthetist

- Q *Who will give my anaesthetic?*
- Q *Do I have to have this type of pain relief?*
- Q *Have you often used this type of pain relief?*
- Q *What are the risks of this type of pain relief?*
- Q *Do I have any special risks?*
- Q *How will I feel afterwards?*

Signs and symptoms

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

What if I decide not to have an epidural?



It is your choice. You do not have to have an epidural.

- There are several alternative methods of pain relief with morphine that work well; injections given by the nurses or by a pump into a vein which you control by pressing a button (Patient Controlled Analgesia, 'PCA').
- There are other ways in which local anaesthetics can be given.
- You may be able to take pain relieving drugs by mouth.
- Every effort will always be made to ensure your comfort.

How do I ask further questions?



- Ask the nursing staff or your anaesthetist.
- Future sources of information about epidural anaesthesia are available from the website www.youranaesthetic.info
- Most hospitals have a team of nurses and anaesthetists who specialise in pain relief after surgery. You can ask to see a member of the pain team at any time. They may have leaflets available about pain relief.

What is an epidural?

The nerves from your spine to your lower body pass through an area in your back close to your spine, called the 'epidural space'.

- An epidural is done by injecting local anaesthetics through a fine plastic tube called an epidural catheter into this epidural space. As a result, the nerve messages are blocked. This causes numbness, which varies in extent according to the amount of local anaesthetic injected.
- An epidural pump allows local anaesthetic to be given continuously.
- Other pain relieving drugs can also be added in small quantities.
- The amounts of drugs given are carefully controlled.
- You may be able to press a button to give a small extra dose from the pump. Your anaesthetist will set the pump to limit the dose which you can give, so overdose is extremely rare.
- When the epidural is stopped, full feeling will return.
- Epidurals may be used during and/or after surgery for pain relief.

How is an epidural done?

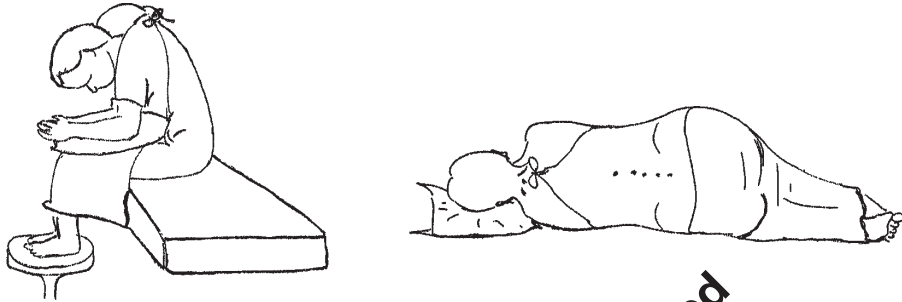


Epidurals can be put in:

- When you are conscious.
- When you are under sedation (when you have been given a drug which will make you drowsy and relaxed, but still conscious).
- Or during a general anaesthetic.

These choices can be discussed further with your anaesthetist.

1. A needle will be used to put a thin plastic tube (a 'cannula') into a vein in your hand or arm for giving fluids (a 'drip').
2. If you are conscious, you will be asked to sit up or lie on your side, bending forwards to curve your back.



3. Local anaesthetic is injected into a small area of the skin of your back.
4. A special epidural needle is pushed through this numb area and a thin plastic catheter is passed through the needle into your epidural space. The needle is then removed, leaving only the catheter in your back.

Your epidural

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, you must tell your anaesthetist immediately



These risks can be discussed further with your anaesthetist and more detailed information is available.

(All risks quoted are approximate and assume best practice).

Serious complications from epidural analgesia are rare (1 in 10,000). Because the epidural space is close to the spinal cord a collection of pus or a blood clot can cause pressure on the spinal cord. In the unlikely 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.

Assessment before the removal of epidural catheter

At the end of treatment with your epidural infusion the team of doctors and nurses caring for you will examine you to ensure that you do not have any residual numbness or weakness of your legs from the action of the drugs in your epidural infusion. They will ask you to move your legs and examine you to make sure that the sensation in your legs is as it was before the operation. 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 altered sensation when the epidural is removed the attending team can discuss this with you.

If you experience any of the listed signs and symptoms (see list below) as a new problem, after your epidural infusion has been stopped and you are an inpatient, ask the nurse in charge of the ward to contact the Pain Team or on-call anaesthetist immediately.

If you have been discharged it is important that you contact the on-call anaesthetist at the hospital **immediately**, telephone (01604) 634700 and ask the switchboard operator to bleep the on-call consultant anaesthetist. After speaking to the on-call anaesthetist they will arrange to see you in the Accident and Emergency department in order to examine you.

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

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 inadvertently punctured (a 'dural tap'). The fluid leaks out and causes low pressure in the brain, particularly when you sit up. Occasionally it may be necessary to inject a small amount of your own blood into your epidural space. This is called an 'epidural blood patch'. The blood clots and plugs the hole in the epidural lining. It is almost always immediately effective. The procedure is otherwise the same as for a normal epidural.



For more information, please see '*Headache after an epidural or spinal anaesthetic*' on the website: www.youranaesthetic.info

Uncommon complications

Slow breathing. Some drugs used in the epidural can cause slow breathing and/or drowsiness requiring treatment.

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

Rare or very rare complications

Other complications, such as convulsions (fits), breathing difficulty and temporary nerve damage are rare whilst permanent nerve damage, epidural abscess, epidural haematoma (blood clot) and cardiac arrest (stopping of the heart) are very rare indeed.

- A sensation of warmth and numbness gradually develops, like the sensation after a dental anaesthetic injection. You may still be able to feel touch, pressure and movement.
- Your legs feel heavy and become increasingly difficult to move.
- You may only notice these effects for the first time when you recover consciousness after the operation, particularly if your epidural was put in when you were anaesthetised.
- Overall, most people do not find these sensations to be unpleasant, just a bit strange.
- The degree of numbness and weakness gradually decreases over the first day after the operation.

What are the benefits?

- Better pain relief than other methods, particularly when you move.
- Reduced complications of major surgery, e.g. nausea/vomiting, leg/lung blood clots, chest infection, blood transfusions, delayed bowel function.
- Quicker return to eating, drinking and full movement, possibly with a shorter stay in hospital compared to other methods of pain relief.

How do the nurses look after me on the ward with an epidural?

- At regular intervals, the nurses will take your pulse and blood pressure and ask you about your pain and how you are feeling.
- They may adjust the epidural pump and treat side effects.
- They will check that the pump is functioning correctly. They will encourage you to move, eat and drink, according to the surgeon's instructions.
- The Pain Relief team doctors and nurses may also visit you, to check your epidural is working properly.

When will the epidural be stopped?

- The epidural will be stopped when you no longer require it for pain relief.
- The amount of pain relieving drug being given by the epidural pump will be gradually reduced.
- A few hours after the pump is stopped, the epidural tubing will be removed, as long as you are still comfortable.
- The epidural catheter will be removed if it is not working properly. Another epidural catheter can be re-inserted if necessary.

Can anyone have an epidural?

No. An epidural may not always be possible if the risk of complications is too high.



The anaesthetist will ask you if:

- You are taking blood thinning drugs, such as **warfarin**
- You have a blood clotting abnormality
- You have an allergy to local anaesthetics
- You have severe arthritis or deformity of the spine
- You have an infection in your back
- You are taking recreational drugs

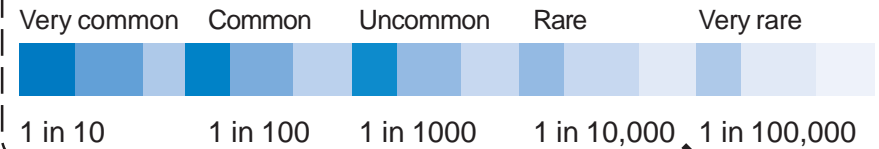
Side effects and complications

- All the side effects and complications described can occur without an epidural.
- Side effects are common, are often minor and are usually easy to treat. Serious complications are fortunately rare.
- For major surgery, the risk of permanent nerve damage is about the same, with or without an epidural.

- The risk of complications should be balanced against the benefits and compared with alternative methods of pain relief. Your anaesthetist can help you do this.

People vary in how they interpret words and numbers

This scale is provided to help



Very common or common side effects and complications

Inability to pass urine. The epidural affects the nerves that supply the bladder, so a catheter ('tube') will usually have to be inserted to drain it. This is often necessary anyway after major surgery to check kidney function. With an epidural, it is a painless procedure.

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 always drops a little. Fluids and/or drugs can be put into your drip to treat this. Low blood pressure is common after surgery, even without an epidural.

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

Feeling sick and vomiting. These can be treated with anti-sickness drugs. These problems are less frequent with an epidural than with most other methods of pain relief.

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