Frequently Asked Questions: Pain Relief During Labour

Q: What will labour feel like?

While you are pregnant, you may feel your uterus (womb) tightening from time to time. These are called Braxton Hicks contractions. When you go into labour, this tightening feeling becomes regular and much stronger.

The tightening may cause pain that feels like period pain, and usually becomes more painful the further you get into labour. Different women experience labour pains in different ways.

Usually, your first labour will be the longest.

If medication is used to start off (induce) labour or speed up your labour, your contractions may be more painful.

Most women use a range of ways to cope with labour pain.[1] It is a good idea to have an open mind and be flexible.

1. Intrapartum care. Care of healthy women and their babies during childbirth. National Collaborating Centre for Women's and Children's Health. Commissionato dal National Institute for Health and Clinical Excellence. 2007 RCOG Press, London.

Q: How do I prepare for labour?

Antenatal parenting classes help you prepare for the birth. These classes are run by midwives and by other organisations that support people in being parents and giving birth. The classes will help you understand what will happen in labour and may help you to feel less anxious.

At antenatal classes, the midwife will tell you what is available to reduce labour pain. If you need more information about epidurals (an injection into your back to numb the lower half of your body), the midwife can arrange for you to meet an anaesthetist to talk about this. If you cannot go to antenatal classes, you should still ask your midwife about what is available to help you manage the pain. You can then discuss this with the midwife who cares for you while you are in labour.

Where you choose to give birth can affect how painful it is. If you feel at ease in the place you give birth, you may be more relaxed and less anxious about labour.[2] For some women this means giving birth at home, but other women feel reassured by the support offered at a hospital or birth centre. Many hospitals try to make the labour rooms look homely and encourage you to play music you like to help you feel more relaxed.

If you are planning to give birth in a hospital or birth centre, it may be helpful to look round to find out what facilities they have.

Having a friend or birth partner with you while you are in labour can be helpful for you.[3] It is important to talk to your birth partner about your concerns and what you want, and they can help you to focus during the birth.

2. Waldenstrom U, Nilsson CA. Experience of childbirth in birth center care. A randomised controlled study. Acta Obstetricia et Gynecologica Scandinavica 1994; 73: 547-554.

3. Hodnett ED, Gates S, Hofmeyr GJ, Sakala C. Continuous support for women during childbirth. Cochrane Database of Systematic Reviews 2003, Issue 3. Article number: CD003766. Date of issue: 10.1002/14651858.CD003766.

Q: What simple methods can I use to help me cope with contractions?

Breathing calmly may increase the amount of oxygen that is supplied to your muscles, and so make the pain less intense. Also, focusing on your breathing can make you less aware of the contractions.

It can be difficult to relax when you are in pain, so it can be helpful to practise before you actually go into labour. There are a number of different ways you can learn to relax.

You may find that having a massage while you are in labour can be very comforting and reassuring.

Q: How could using a birthing pool during labour help?

Research has shown that if you have your labour in water you will find it less painful and you will be less likely to need an epidural to reduce the pain.[4] There are some concerns that if the water is too warm your baby may show signs of distress during labour, but studies have shown that there is no more risk to you or your baby if you have your labour in water than if you have it out of water. The midwife will continue to monitor your progress and your baby's wellbeing.

Many maternity units have birthing pools, but these may not be available when you need them. It is worth checking with your midwife if there is a pool and whether you would be able to use it.

4. Cluett ER, Burns E. Immersion in water in labour and birth. Cochrane Database of Systematic Reviews 2009, Issue 2. [DOI:10.1002/14651858.CD000111.pub3]

Q: What complementary therapies are these (these do not use medications) and how could they help?

Some studies suggest that complementary therapies help women feel in control of their labour and use less medication to reduce pain.[5] If you are thinking about using these, it is important that you get advice from a person trained in that therapy. Very few maternity units provide these services on the NHS, so you would need to find a qualified therapist before you go into labour.

Hypnotherapy helps you give birth in a relaxing, calm environment free from stress, anxiety or fear. Being anxious, tense and stressed during labour can prevent the birthing muscles of your body from working as they should, hypnobirthing classes teach techniques to foster a sense of calm and tranquillity.

The hypnotherapy directory has been set up by a team of experts who are passionate about the benefits hypnotherapy can offer. This confidential service allows you to contact over 2000 qualified hypnotherapists in the UK to ensure you have all the information you need www.hypnotherapy-directory.org.uk/articles/childbirth.html

Aromatherapy is the use of concentrated essential oils to reduce fear, improve well being and give you encouragement. You can use this technique in combination with other methods of pain relief. The current research shows that aromatherapy is unlikely to have an effect on labour.

Massage and reflexology are based on the idea that certain points on your body, hands and feet relate to points on the rest of your body. We do not know how it works, but it may work in a similar way to acupuncture (see below). A reflexologist usually massages points on your feet that relate to the parts of your body that are painful in labour. The studies in this area are difficult to compare due to their wide variations of techniques but they generally reduce anxiety in labour and may reduce the intensity of labour pains.

Hypnosis uses the power of positive suggestion to bring about subconscious change to thoughts, feelings and behaviour. This technique of distraction is becoming more commonplace for labour pain. You'll have antenatal practice sessions to prepare for labour. This is usually with a midwife trained in hypno-birthing or an audio recording of a hypnotherapist.

Acupuncture is the use of fine sterile needles into specific points on your body to help reduce the pain. These are usually inserted in your arms and legs and can be left there for anything from 20 minutes up to the entire labour, depending on your wishes. In some units, the midwives have been trained to perform acupuncture in labour for pain relief. There are also private therapists that provide this service who would need to be with you during the labour. The studies in these areas show that women who use these techniques need less pain relief and use less epidural anesthesia. There are other beliefs with acupuncture, including shorter labours, reduced need for oxygen augmentation ('hormone drip'), reduce risk of caesarean section deliveries or instrumental (use of a ventouse cup or forceps) deliveries,

Other therapies included homeopathy (using very dilute ingredients to reduce pain) and herbal remedies (produced from plants).

5. Smith CA, Collins CT, Cyna AM, Crowther CA. Complementary and alternative therapies for pain management in labour. Cochrane Database of Systematic Reviews 2006, Issue 4. Article number: CD003521. Date of issue: 10.1002/14651858.CD003521.pub2.

Q: What is TENS (Transcutaneous electrical nerve stimulation)?

A gentle electrical current is passed through four flat pads stuck to your back. This creates a tingling feeling. You can control the strength of the current yourself.

It is sometimes helpful at the beginning of labour, particularly for backache. If you hire a TENS machine, you can start to use it at home. Some hospitals will also lend you one.

TENS machines have no known harmful effects on your baby.

While you may manage your labour with only the help of TENS, it is more likely that you will need some other sort of pain relief later on in labour.

Q: Whats is entonox (gas and air) and how could I use it?

Entonox is a gas made up of 50% nitrous oxide and 50% oxygen. It is sometimes known as gas and air.

- You breathe Entonox through a mask or mouthpiece.
- It is simple and quick to act, and wears off in minutes.
- It sometimes makes you feel light-headed or a little sick for a short time.
- It does not harm your baby and it gives you extra oxygen, which may be good for you and your baby.
- It will not take the pain away completely, but it may help.
- You can use it at any time during labour.

You control the amount of Entonox you use, but to get the best effect it is important to get the timing right. You should start breathing Entonox as soon as you feel a contraction coming on, so you will get the full effect when the pain is at its worst. You should not use it between contractions or for long periods as this can make you feel dizzy and tingly. In some hospitals, other substances may be added to Entonox to make it more effective, but these may make you sleepier.

Q: What are opioids (morphine/pethidine/diamorphine etc)?

Opioids are painkillers and they all work in a similar way. Opioids commonly used on labour ward include morphine, pethidine, and diamorphine (which is being used more and more in the United Kingdom).[7] Research has shown that women who receive an injection of diamorphine into a muscle are more likely to be satisfied with their analgesia (pain relief) when compared with pethidine.[8]

Examples of other opioids include meptazinol, fentanyl and remifentanil.

- A midwife usually gives opioids by injecting them into a large muscle in your arm or leg.
- The pain relief is often limited. You will start to feel the effects after about half an hour and they may last a few hours.
- Opioids are less effective at easing pain in labour than Entonox.
- Although pain relief may be limited, some women say it makes them feel more relaxed and less worried about the pain.[6]
- Other women are disappointed with the effect of opioids on their pain and say they feel less in control.

6. Olofsson C, Ekblom A, Ekman-Ordeberg G, Hjelm A, Irestedt L. Lack of analgesic effect of systemically administered morphine or pethidine on labour pain. British Journal of Obstetrics and Gynaecology 1996;103:968-972.

7. Tuckey JP1, Prout RE, Wee MY Prescribing intramuscular opioids for labour analgesia in consultant-led maternity units: a survey of UK practice. Int J Obstet Anesth. 2008 Jan;17(1):3-8. Epub 2007 Nov 5.

8. Wee MYK, Tuckley JP, Thomas P, Bernard S and Jackson D. The IDvIP trial: A two centre double blind randomised controlled tril comparing i.m. diamorphine and i.m. pethidine for labour. International Journal of Obstetric Anaesthesia. 2012;21(S1) S15.

Q: What side effects do opioids (morphine/diamorphine/pethidine) have?

- They may make you feel sleepy.
- They may make you feel sick, but you will usually be given anti-sickness medication to stop this.
- They delay your stomach emptying, which might be a problem if you need a general anaesthetic.
- They may slow down your breathing. If this happens, you may be given oxygen through a face mask and have your oxygen levels monitored.
- They may make your baby slow to take their first breath, but your baby can be given an injection to help with this.
- They may make your baby drowsy, and this may mean that they cannot feed as well as normal (especially if you are given pethidine).
- If you are given opioids just before you give birth to the baby, the effect on your baby is very small.

Q: What is Patient-controlled intravenous analgesia (PCIA)?

Opioids can also be given direct into a vein for a faster effect, using a pump that you control yourself by pressing a button attached to the pump. PCIA is available in some hospitals if an epidural (an injection into your back to numb the lower half of your body) is not possible or you do not want one.

PCIA allows you to give yourself small doses of opioids when you feel that you need them. You have control over the amount of opioid you use. For safety reasons, the PCIA limits how quickly you can take the opioid. However, if you use the PCIA for a long time, some opioids may build up in your body which may increase the side effects of the opioid on you and your baby.

In a few maternity units, you may be offered PCIA using an opioid called remifentanil.[9,10] Your body breaks down remifentanil very quickly, so the effects of each dose do not last long. This opioid has a strong effect on pain but it is also more likely to slow down your breathing, so your breathing needs to be checked carefully. About one in a hundred women using remifentanil PCIA, may have to stop using it because their breathing is slowed down too much.[11] It is rare for breathing to be slowed down so much that it becomes a serious problem.[12]

Remifentanil PCIA has very little effect on your baby.

9 Volmanen P, Akural E, Raudaskoski T, Ohtonen P, Alahuhta S. Comparison of remifentanil and nitrous oxide in labour analgesia. Acta Anaesthesiologica Scandinavica 2005; 49: 453-458.

10 Volikas I, Butwick A. Maternal and neonatal side effects of remifentanil PCA. British Journal of Anaesthesia 2005; 95: 504-509.

11. Lavand'homme P, Roelants F. Patient-controlled intravenous analgesia as an alternative to epidural analgesia during labor: questioning the use of the short-acting opioid remifentanil. Survey in the French part of Belgium (Wallonia and Brussels). Acta Anaesthesiologica Belgica 2009; 60: 75–82

12. Muchatuta NA, Kinsella M. Remifentanil for labour analgesia: time to draw breath? Anaesthesia 2013;

Q: What are epidurals?

Epidurals are the most complicated method of pain relief and are put in by an anaesthetist. An anaesthetist is a doctor who is specially trained to provide pain relief and drugs that make you go to sleep. Pain relief during operations can be provided using general anaesthesia, epidurals or spinals.

A few facts about epidurals:

- Epidurals are the most effective method of pain relief.
- For an epidural, the anaesthetist inserts a needle into the lower part of your back and uses it to place an epidural catheter (a very thin tube) near the nerves in your spine. The epidural catheter is left in place when the needle is taken out so you can be given painkillers during your labour. The painkillers may be a local anaesthetic to numb your nerves, small doses of opioids, or a mixture of both.
- An epidural may take 40 minutes to give pain relief (including the time it takes to put in the epidural catheter and for the painkillers to start working).
- An epidural should not make you feel drowsy or sick.
- Having an epidural increases the chance that your obstetrician will need to use a ventouse (a suction cap on your baby's head) or forceps to deliver your baby.
- An epidural can usually be topped up to provide pain relief if you need a ventouse, forceps or a Caesarean section.
- An epidural will have hardly any effect on your baby.

Q: What are spinals and combined spinal epidurals (CSE)?

Epidurals are rather slow to act, especially if you have one late in labour. If the painkillers are given direct into the bag of fluid surrounding the nerves in your back, they work much faster. This is called a spinal. Unlike an epidural, it is given as a one-off injection without a catheter. If an epidural catheter is put in at the same time, this is called a combined spinal-epidural.

In some hospitals, a combined spinal-epidural is given to almost all women who want strong pain relief instead of an epidural. In others, a combined spinal-epidural is only used for a small number of women.

Q: Can everyone have an epidural?

Most people can have an epidural, but certain medical problems (such as spina bifida, a previous operation on your back or problems with blood clotting) may mean that it is not suitable for you. The best time to find out about this is before you are in labour. If you have a complicated or long labour, your midwife or obstetrician may suggest that you have an epidural as it may help you or your baby.

If you are overweight, an epidural may be more difficult and take longer to put in place. Once it is in and working, you can have all the benefits.

Q: What is the procedure for putting in an epidural?

First, a cannula (a fine plastic tube) will be put in a vein in your hand or arm, and you will usually have a drip (intravenous fluid) running as well (you may also need a drip in labour for other reasons, such as to give you medication to speed up your labour or if you are being sick). Your midwife will ask you to curl up on your side or sit bending forwards, and your anaesthetist will clean your back with an antiseptic. Your anaesthetist will inject local anaesthetic into your skin, so that putting in the epidural does not usually hurt much. The epidural catheter is put into your back near your nerves in the spine. Your anaesthetist has to be careful to avoid puncturing the bag of fluid that surrounds your spinal cord, as this may give you a headache afterwards. It is important to keep still while the anaesthetist is putting in the epidural, but after the epidural catheter is fixed in place with tape you will be free to move. Once the epidural catheter is in place, you will be given painkillers through it.

Q: How long does an epidural take to work?

It usually takes about 20 minutes to set up the epidural and 20 minutes for it to give pain relief. While the epidural is starting to work, your midwife will take your blood pressure regularly. Your anaesthetist will usually check that the epidural painkillers are working on the right nerves by putting an ice cube or cold spray on your tummy and legs and asking you how cold it feels. Sometimes, the epidural doesn't work well at first and your anaesthetist needs to adjust it, or even take the epidural catheter out and put it in again.

Q: What can be done to keep the epidural working after it has been put in?

During labour, you can have extra doses of painkillers through the epidural catheter either as a quick injection (a top-up), a slow, steady flow using a pump, or with a patient-controlled epidural analgesia (PCEA) pump. With patient-controlled epidural analgesia, you can give yourself doses of the painkiller when you need them by pressing a button attached to the pump.
In each hospital there will usually only be one, or possibly two, of these methods for keeping the epidural pain relief going.

After each epidural top-up, the midwife will take your blood pressure regularly in the same way as when the epidural was started.

Q: What is a mobile epidural?

A mobile epidural is where the pain of labour is reduced without making the lower part of your body very numb or making your legs feel weak. The epidural cannot be adjusted exactly, so if you want to have some feeling when your baby is delivered, there is more chance that you may have an uncomfortable sensation during labour as well.

Q: How will having an epidural affect my baby?

Having an epidural should not affect the condition of your baby when it is born,[13] in fact newborns are less likely to have acid in their blood.[14] Having an epidural does not make it any harder to breastfeed.[15]

13. Anim-Somuah M, Smyth R, Howell C. Epidural versus non-epidural or no analgesia in labour. Cochrane Database of Systematic Reviews 2005, Issue 4. Article number: CD000331. Date of issue: 10.1002/14651858.CD000331.pub2.

14 Reynolds F, Sharma S, Seed PT. Analgesia in labour and funic acid-base balance: a meta-analysis comparing epidural with systemic opioid analgesia. British Journal of Obstetrics and Gynaecology 2002; 109: 1344-1353.

15. Wilson MJA, MacArthur C, Cooper, GM, Bick D, Moore PAS, Shennan A. Epidural Analgesia and breastfeeding: a randomised controlled trial of epidural techniques with and without fentanyl and a non-epidural comparison group. Anaesthesia 2010 65: 145-153.

Q: How could an epidural be used for keeping me comfortable during an operation?

If you need a Caesarean section, the epidural is often used instead of a general anaesthetic. A strong local anaesthetic is injected into your epidural catheter to make the lower half of your body very numb for the operation. This is safer than a general anaesthetic for you and your baby. Occasionally the epidural may not work well enough to be used for a Caesarean section. This can happen in 1 in 20 people. If this happens to you, you may also need another anaesthetic such as a spinal or general anaesthetic.

Q: Will having an epidural make it more likely for me to need a caesarean section or to have backache afterwards?

With an epidural, you do not have a higher chance of needing a Caesarean section.
There is no greater chance of long-term backache. Backache is common during pregnancy and often continues afterwards. You may have a tender spot in your back after an epidural which, rarely, may last for months, there is no increased chance of long-term backache.[13,16]

13. Anim-Somuah M, Smyth R, Howell C. Epidural versus non-epidural or no analgesia in labour. Cochrane Database of Systematic Reviews 2005, Issue 4. Article number: CD000331. Date of issue: 10.1002/14651858.CD000331.pub2.

16 Russell R, Dundas R, Reynolds F. Long term backache after childbirth: prospective search for causative factors. British Medical Journal 1996; 312: 1384-1388.

Q: What are the risks of having an epidural?

- Between one in a hundred and one in two hundred women who have an epidural may get a headache. You can read more about this here.
- Permanent nerve damage is very rare with an epidural about 1:24,000 - You can find more information here.
- The epidural might not work well enough to reduce labour pain so you need to use other ways of reducing the pain, about 1 in 8.
- Strong solutions of local anaesthetic in your epidural can increase the risk of instrumental delivery but there is no evidence that this is the case for most commonly used “low dose” epidurals
- With an epidural, the second stage of labour (when your cervix is fully dilated) is longer and you are more likely to need medication (oxytocin) to make your contractions stronger.
- You have more chance of having low blood pressure.
- Your legs may feel weak while the epidural is working.
- You will find it difficult to urinate. You will probably need to have a tube passed into your bladder (a bladder catheter) to drain the urine.
- You may feel itchy.
- You may develop a slight fever.

Q: How can having an epidural give me a headache?

In about one in every 100 women who have an epidural the bag of fluid which surrounds their spinal cord is punctured by the epidural needle (this is called a ‘dural puncture’). If this happens to you, you could get a severe headache that could last for days or weeks if it is not treated. If you do develop a severe headache, your anaesthetist should talk to you and give you advice about the treatment you could have.

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