AIMS For a better birth...

Ways of managing your labour

Many things can affect how you will experience the sensations of labour and there are various options to help you cope and manage your labour. Some of the things that can affect your experience include the kind of surroundings and support you have, whether you are being encouraged and assisted to move about and use helpful positions, whether your labour starts and progresses unaided or whether it is being artificially induced or speeded up, your own state of mind, and whether there are any factors that could affect the progress of your labour.

It is up to you to decide which type of approach - whether non-medical or drug-based - you would prefer to use, and which of the available methods to try. You can also change your mind during labour depending on how you are coping and how your labour is progressing.

If your labour is progressing well, you are well supported, feel confident in your ability to give birth, and positive about using the sensations to guide you, you may find that you are able to manage your contractions using a combination of self-help, comfort methods and complementary therapies, or by being in a birthing pool. Alternatively, if your labour is not progressing well, or lasts for a very long time, drug-based pain relief may help to make it a more positive experience. If your labour is induced or speeded up by having your waters broken or with a hormone (oxytocin) drip you may find that your contractions are more painful than they would be in a spontaneous labour[1], so in this situation you may need stronger pain relief, such as an epidural.

It's important to be aware that whatever method or methods you choose to help you manage your contractions there may be unwanted consequences as well as benefits, and there is a tendency for stronger forms of pain relief to have more significant side effects. You may find it helpful to consider how you feel about the following options, and in what circumstances (if any) you might want to use them, then make sure that your partner and/or other birth supporters as well as your midwife are aware of your preferences. There is no right or wrong decision. Go with what feels right for you, remembering that you can always change your mind about declining or accepting any form of pain relief.

What methods are effective?

Unfortunately, the research evidence for many of the methods is limited, however, a large-scale analysis of the available research[2] looking at different methods of pain management, concluded that:

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There was good evidence that epidural analgesia and inhaled drugs like Entonox ("Gas & Air") are effective in the relief of pain but that they may give rise to unwanted side-effects.

- There was some evidence to suggest that being in water, using relaxation techniques, massage and acupuncture/acupressure are helpful, and these methods have few, if any, negative side-effects.
- There was not enough research evidence to say whether hypnosis, sterile water injection, aromatherapy, TENS, or injected opiate drugs (like Pethidine and Meptid) are effective. This only means that not enough clinical research has been done to show how these methods compare with the others, not that they are ineffective, so you may find them useful.

There is also good evidence that having continuous support during labour both improves the chances of a spontaneous vaginal birth and reduces the need for pain medication.[3] This support could come from a midwife, a trained and experienced person (such as a Doula) who is there purely to provide support, or a family member or friend.

For an explanation of the different types of research evidence, their strengths and limitations, see our Birth Information page 'Understanding quantitative research evidence.'

This table created by the Obstetric Anaesthetists' Association gives a quick comparison of a number of drug and non-drug methods.

Non-medical approaches

Self-help and comfort methods

This includes things that you can do yourself or with the help of your partner/birth supporter(s), which help you to feel relaxed and encourage the labour hormone oxytocin to flow. The oxytocin which is naturally produced during labour both stimulates effective contractions and creates a sense of well-being, making it easier to deal with the pain.[4] The research evidence on these methods is in most cases limited, but what there is appears to be positive.

- Labouring in comfortable surroundings where you feel safe and private, so that you can let go and work with your body.
- Relaxation techniques such as focusing on breathing, visualisation, affirmations, yoga or music. A recent review[5] found some evidence that these methods "may possibly be helpful with reducing the intensity of pain, and in helping women feel more in control and satisfied with their labours."

- Massage – which means any kind of soothing touch from your partner/birth supporter(s) - can reduce tension, and there is some evidence[6] that "massage and thermal packs, in comparison to usual care..., may help women manage labour pain intensity during the first stage when the cervix is dilating."
- Cuddles with someone you love, nipple and/or clitoral stimulation can also be effective – oxytocin is "the love hormone" and its production is stimulated by loving words and physical contact.
- Finding comfortable, upright positions. A recent review[7] concluded that, "There is clear and important evidence that walking and upright positions in the first stage of labour reduces the duration of labour, the risk of caesarean birth [and] the need for epidural." It may be helpful to move around or even go for a gentle walk, but make sure you rest (preferably in an upright position) when you need to.
- Supporter(s) giving you lots of encouragement and reassurance, as well as caring for your practical comfort (providing food and drink, hot or cold packs, helping you to change position, controlling the temperature, running you a bath, etc.)

Benefits

- These methods can sometimes be highly effective, and you may find that you can cope with labour without any other form of pain relief.
- They can help both you and your partner/supporter(s) to feel calm and in control, which in turn can help your labour to progress.
- They are available anywhere and little or no special equipment is needed (though a birth-ball, beanbag, massage oil and rollers may be useful.)
- There are no side-effects for you or your baby.

Possible downsides

- You may not find them effective for the whole of your labour, especially if it is long or there are complicating factors.

Complementary therapies

Most of these techniques have been in use for many years, if not centuries, however, with one or two exceptions noted below, there has been little or no clinical research into either their effectiveness or their safety. Again, this does not mean that they are *not* effective, just that there have not been many – or in some cases any - scientific studies to look at whether they are or not.

Most of these methods require some specialist training and/or equipment, but there are some that you or your birth partner can learn to use. Also, some midwives have been trained to deliver complementary therapies, and some birth centres and hospitals are starting to offer options such as hypnobirthing, aromatherapy and acupuncture. If your hospital/birth centre allows you to have two birth partners you could consider having a therapist as one of them, though that is likely to be expensive.

- Hypnobirthing is an approach designed to empower you by reducing your fear and anxiety through a simple programme of self-hypnosis and education. It is intended to help you to give birth confidently and as calmly, safely, and gently as possible, wherever your choice of birth place. There are many programmes available online or in person, in classes or 1:1, plus many NHS maternity services offer courses antenatally. You can also try teaching yourself by reading books or listening to CDs, though it's not clear how effective that is in comparison with attending classes. There is some research evidence[8] that shows that women who use hypnosis are less likely to use pain relief medication though not less likely to have an epidural; one trial[9] showed that women felt less fear and anxiety during labour than they had expected.

- Acupuncture uses fine needles or electrodes to stimulate specific points on the skin, and acupressure involves applying pressure to the same points. It is thought that this may help to stimulate the release of endorphins, the body's 'natural pain-killers'. There is evidence[10] of 'moderate quality' that women who have acupuncture were more satisfied with their pain relief and less likely to use pain-relieving drugs than those given 'sham' acupuncture; and that acupressure reduced the pain they felt. Birth partners can be taught to provide acupressure, or there are some methods that you can apply yourself, but acupuncture would require a trained midwife or other practitioner to be present during your labour.

- Aromatherapy is the use of concentrated plant oils as an aid to relaxation. You can use them diluted in oil and massaged into your skin, add them to a bath, or inhale the vapour. Although "natural," the oils are powerful, and some can be harmful in pregnancy, so consult a trained aromatherapist before using any of them. What little research there has been did not find clear evidence of benefit[2], but you may find aromatherapy soothing.

- Homeopathic remedies are said by some to stimulate the body's own systems and consist of

extremely low doses of substances that would produce the symptoms that the remedy aims to cure. A homoeopath can prescribe for you specifically or you can buy "Labour Packs" from some health shops from which you or your supporters select remedies depending on how you are feeling and how your labour is going. There hasn't been any clinical research on the effectiveness of homeopathy for managing labour, but some people say that they found it helpful.

- Reflexology involves the gentle manipulation of areas of the foot. Stimulation of certain areas is said to help to relieve labour pain, but there haven't been any clinical studies on this[6].

Benefits

- Using these methods may help you to feel more relaxed and in control of your labour, which is likely to help it to progress more efficiently as well as helping you to cope with your contractions.
- Apart from the need to be careful about which aromatherapy oils to use, there are no known risks to you or your baby.

Possible downsides

- In most cases you or your birth partner will need training or guidance from a qualified practitioner, who can explain how to use the techniques during labour. You may also need to buy some materials.
- These approaches do not work for everyone, which can lead to disappointment if you were relying on them to manage your contractions.

Water

Water can be used in various ways during labour. This can include immersion in water, ideally in a large and deep custom-made birth pool, but using an ordinary bath or a shower can also be comforting.

Birth pools are increasingly available in hospital maternity units. Birth centres will usually have them in all rooms, and if you are planning a homebirth you can hire, borrow or buy your own.

Benefits

- Being in water has been shown to reduce the need for epidural analgesia[11].
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You may find being in water very relaxing

- Getting into the pool often significantly reduces pain levels but if it's not right for you, you can just get out.
- In a birth pool, you can readily move between positions that maximise your comfort and the efficiency of your labour.
- There are no known side-effects for you or your baby[11], provided the water is not too hot and you bring your baby to the surface straight after birth.

Possible downsides

- Birth pools are not always available in hospitals although they are becoming more common, and some hospitals are now providing inflatable pools in case the fixed pools are all in use. It may be worth checking what the facilities in your chosen birthplace are, and how often the pools are used.
- Hospitals sometimes have strict guidelines on the use of birth pools and may not want to let you use one if you are classed as "high risk" for any reason, or if your labour is being induced. However, it may still be possible to negotiate to use a birth pool. Many hospitals now have telemetry equipment available which allows for continuous monitoring of your baby's heart rate (if you want this) whilst you are in the pool. If you are using a hormone drip to speed up your labour, you should still be able to labour in a pool if you make sure you keep your hand out of the water.

TENS (Transcutaneous Electronic Nerve Stimulation)

A TENS machine is a small, battery-powered device that delivers mild electric pulses through pads stuck onto your back. You control the timing and strength of the pulses with a hand-held device. It's believed to work by blocking pain signals from reaching the brain.

There is little clinical evidence to say whether or not TENS is effective[12] though it may help you to cope, at least in early labour. No research has been done on how effective TENS is when used at home in the early stages (which is probably its most common use).

TENS machines are often available in hospitals and birth centres, but you may want to hire or buy one so that you can use it at home in early labour, and for pain relief after the birth.

Benefits

- It can give you a sense of being in control and may act as a distraction from your contractions, allowing you to be more relaxed.
- It may help you stay at home until you are in active (strong) labour, making it less likely that you will be sent home again from your birth centre or hospital.
- There are no known side-effects for you or your baby.
- If you don't like it or find it unhelpful you can simply take it off.

Possible downsides

- It may not be effective, or only useful in early stages of labour.
- You can't use it in a birth pool, bath or shower.
- If your baby's heart rate is being monitored electronically, a TENS machine might interfere with this, but it is not usually a problem.
- TENS is not recommended if you suffer from certain medical conditions such as epilepsy, or if you have a pacemaker.

Drug-based methods

Entonox ("Gas and Air")

- This is a half-and-half mixture of nitrous oxide ("laughing gas") and oxygen that you can breathe through a mask or mouthpiece.
- It is not a painkiller as such, but alters your sense of the pain, which may make it easier to manage.
- It's available in hospital labour rooms and birth centres, and for a planned homebirth the midwife can bring it in a cylinder.

Benefits

- There is good evidence that it provides effective pain relief[13] although the level of effectiveness seems to vary.
- The drug is very quick acting (within seconds of breathing it in) and it also wears off very quickly. This means that if you experience side-effects or decide you don't like how it makes you feel, you can simply stop breathing it.
- There are very few known risks to you or your baby. Most of these are short-term and go away soon after you stop breathing the gas.
- Entonox provides extra oxygen, which may help your muscles to work effectively and help your baby's well-being through labour.

Possible downsides

- It may make you feel lightheaded, drowsy or nauseous.
- It can make you feel disorientated or detached from the birth experience if you breathe it too much. However, the drug will clear from your body very quickly as soon as you stop using it.
- If used for a long period of time, e.g. over 24 hours, which might happen in a long labour, it can deplete the body's stores of vitamin B12, especially if you are already prone to B12 deficiency problems.[14]

Injected Opiate drugs

- Opiate drugs include Pethidine, Meptid and Diamorphine. They are related to morphine and are usually given by injection into the muscle of the thigh.
- They are not painkillers but mood-altering drugs that affect the *sense* of pain.
- It seems that their effectiveness as a way of managing labour varies a lot from person to person. You may love the feeling, find them of little or no use, or even actively dislike how they make you feel.
- They are generally available in a birth centre or hospital and can be given by a midwife. However,

as they are controlled drugs, they are often not carried by midwives attending a homebirth.

- It may take up to 30 minutes before you start feeling the effect. The effect lasts for 2 – 4 hours but a repeat dose can be given.

Benefits

- There is evidence[15] that these drugs provide "some" pain relief but "substantial proportions of women still reported moderate or severe pain." Also, the women expressed only 'moderate' satisfaction with the amount of pain relief. However, there is insufficient evidence to show how effective they are compared with other methods.[2]
- The drugs can give a feeling of euphoria.
- If your labour is slow to get going (for example, in the early stages of induction) they may help you to sleep, or at least to rest and save your energy for later.
- By aiding relaxation, they may help a slow labour to progress.

Possible downsides

- If you find you are suffering side-effects or just don't like how the drug makes you feel it will be some hours before it wears off.
- Opiates can cause drowsiness[15]. Because of this most hospitals will not want you to use a birth pool while under the influence of an opiate and you may be encouraged to remain seated or on the bed.
- Opiates may also cause nausea or vomiting[15], but a second drug can be given to reduce the risk of this.
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These drugs cross the placenta and so might affect your baby[1], depending on the timing of the dose in relation to the birth. The effect is usually small but if a baby is born with a lot of the drug in their bloodstream, they may be slow to breathe, in which case an antidote may need to be given. They may also be sleepy and unresponsive at first, and then fretful and unsettled for several days after the birth. The suckling reflex may be affected making it more difficult to establish breastfeeding.

- If you have had experience of drug addiction there may be specific risks to you of taking opiate drugs. You may want to discuss this with your midwife or doctor.

Patient Controlled Analgesia

- Some hospitals now offer "Patient Controlled Analgesia" (PCA) in which an opiate drug is given directly into the bloodstream by a small pump that you control yourself[16]
- This may be one of the opiate drugs listed above, or a different one called Remifentanil.
- The evidence for the risks and benefits is still quite limited.[16]

Benefits

- These are similar to the benefits of injected opiates.
- Remifentanil may provide better satisfaction with pain relief compared to other opiates, though less than an epidural.[16].
- You can decide when you want another dose of the drug. There is a control to make sure you don't take too much.
- The drug takes effect more quickly than if it was injected into the muscles, and more quickly than an epidural does.
- Remifentanil is broken down by the body more quickly than other opiates, so is less likely to affect your baby. This also means that you can stop it more quickly than other opiates if you experience any side-effects or do not like how it makes you feel.

Possible downsides

- These are similar to the risks with injected opiates.
- In addition, Remifentanil may make your breathing slow down or even stop, so someone needs to keep an eye on you in case this happens.
- PCA and Remifentanil are not available in all hospitals.

Epidural Analgesia

- This is a highly skilled procedure that must be carried out by an anaesthetist. It is therefore not available in a birth centre or at home, and even in hospital it may be necessary to wait some time for an anaesthetist to become available.
- It takes 15 - 20 minutes to set up and another 15 – 20 minutes to take effect.
- A fine needle is inserted into the space around the spinal cord and a tube is passed through this. The needle is taken out, and drugs are given through the tube to numb the pain nerves. The drugs are usually a mixture of a local anaesthetic and an opiate drug.
- After the initial dose has been injected, more of the medication can be given either as a 'bolus' (a large dose given in one go, which can be repeated as necessary) or a continuous, lower dose infusion controlled by a pump. Some hospitals offer patient-controlled epidurals (see below.)
- There are certain medical conditions (such as problems with your spine or blood-clotting disorders) that mean that you cannot have an epidural.
- Almost all studies of the benefits and risks of having an epidural have compared it with injected opiates. This means that we do not know how well epidurals compare with other methods of managing pain in labour because almost no clinical studies have looked at this[16].

Benefits

- The most recent review[17] found evidence (rated as 'low quality') that epidurals provide more effective pain relief and better satisfaction than injected opiate drugs do. In the studies included in the review the mothers' ratings of how well the two methods reduced their pain varied a lot.

However, a lot of people say that an epidural enabled them to cope with a previously difficult and painful labour.

- If your blood pressure is too high, an epidural can help to bring it down.
- In the event of an unplanned caesarean birth the epidural can often be topped-up to provide stronger pain relief for this.

Possible downsides

- In some cases, the epidural is not effective, works only in patches or only on one side. If so, it may be possible for the anaesthetist to reposition it, so do ask for them to come back.
- Having an epidural may make it harder to use upright labour positions or to move freely between positions, though it is usually possible to do things like kneeling over a pile of pillows or a beanbag or leaning on a support bar on the bed. You may need to ask your midwife for help to do this. There is some evidence that if you have a low-dose epidural then birthing your baby lying on your side may increase your chances of a straightforward vaginal birth, compared to using an upright position [18].
- An epidural can cause a sudden drop in your blood pressure so it's usual to have your blood pressure monitored and an intravenous drip set up so that you can be given fluids to correct this if necessary. You may also need a catheter (a fine tube inserted into your bladder) to help empty it if you can't feel the need to pee.
- Depending on how the drugs affect you, you may find that you do not experience the "urge to push" which would normally guide you to work with your body to birth your baby. This could mean that you need to be coached to push, and you may feel that you have not experienced the birth.
- Epidural use may increase the likelihood that forceps or ventouse are used to assist the birth. However, this does not appear to be a problem in more recent studies, where lower doses of drugs were used.[17]
- There is some evidence that labour is slightly longer with an epidural than with injected opiates, and there is a greater chance of an oxytocin drip being used to speed up the birth, but the chance of needing an unplanned caesarean is the same. We don't know how these risks compare with other ways of managing our laboour.[17]

- If it is in place for a long time the drugs in an epidural will eventually enter your bloodstream and cross the placenta, which could affect your baby in the same way as injected opiates. However, the dose reaching the baby will be much less and an epidural appears less likely to result in a baby having breathing difficulties at birth compared with injected opiates.[17]
- Around one in every 100 mothers who have an epidural suffer a puncture in the membrane around the spinal cord leading to a severe headache that can last for several days or even weeks. If it is very bad, or lasting for more than a few days, it can be treated by injecting a small amount of your own blood to clot and seal the hole[1].
- It's common to experience itching or a fever with an epidural, and you may find your ability to walk is limited for some time after the birth, but there is no evidence that epidurals increase the chances of developing backache.[1],[17]
- Other, more serious complications are possible but rare.[1]

Patient controlled epidural analgesia

- A patient-controlled epidural (PCEA, sometimes misleadingly called a "walking" or "mobile" epidural) is designed to provide some, but not complete, pain relief while leaving you with some ability to move around and adopt upright positions.
- As with PCA, you can control the timing of top-up doses yourself with a hand-held device.
- This should, if it works, give you enough pain relief while still letting you use upright positions and have some sensation of when to push.
- The amount of mobility that this allows varies. You may be able to walk around, perhaps using a walking-frame for support, but that isn't always the case. Also, the effect of the drugs tends to build up and reduce mobility over time.

Benefits

- You should have sufficient pain relief while still being able to move and use helpful upright positions for labour and birth. You may or may not be able to walk or support yourself but will usually be able to use a variety of supported positions.

- It can help you to feel more in control.

Possible downsides

- Most of the risks associated with a traditional epidural will still apply.
- It is not yet known whether PCEA has less impact on the length of labour, need for drugs to speed up the labour, or use of forceps or ventouse compared to a traditional epidural.
- As people react differently to drugs you might find that you have good pain relief but limited or no mobility, or good mobility but insufficient pain relief. Your mobility may reduce as time goes on.
- It is not available in all hospitals.

Sterile Water Injection

This is a method of pain relief that is intended specifically to relieve the continuous low backache that is sometimes experienced during labour. This is different from the pain of labour contractions, which tends to come and go.

Small amounts of sterile water are injected at four points just under the skin of the lower back. This is thought to block pain signals in a similar way to TENS, by causing mild irritation.

The method has been widely used in Scandinavia for many years and is gaining in popularity in the UK. Several small studies have reported a reduction in back pain, however the clinical evidence of benefit remains inconclusive.[19],[20]

Benefits

- There have been reports that this method can bring very rapid relief from low back pain in labour, which lasts for up to 90 minutes.[19]
- The injections can be repeated as needed and used alongside any other form of pain relief.
- It is a drug-free method and there are no known risks for you or your baby.

Possible downsides

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The initial injections produce an intense stinging sensation similar to a bee sting, but this usually wears off very quickly.

- It does not affect the pain of labour contractions, so some other form of pain relief might be needed in addition.
- It is not available in all areas yet.

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