Methods of pain relief in labour

This leaflet has been designed to give you a brief overview of how you can use your own natural methods to help relieve labour pains and what options are available if you choose to use drugs for pain relief.

If you have further questions about the methods presented here then ask your midwife.

Natural methods

Movement

Women in labour often find they experience less pain in certain positions rather than in others. This is very individual so women are encouraged to find what is most comfortable for them. It has been found that upright positions work for most women such as sitting, standing, leaning forward and walking or rocking their pelvic area during contractions. Some women, particularly when the baby is ‘back-to-back’, find that being on all fours or sitting facing the back of a dining type chair is the most comfortable position.

All sitting positions can be supported by a combination of partner, ‘birth ball’, beanbag and pillows. During standing, walls can also be used for support. If lying down when tired, women often feel more comfortable lying on their sides supported by beanbags and pillows. It is very rare that a woman will feel comfortable in a semi-reclined position with her back flat on the bed. It is also common to change positions frequently often with each contraction.

During the second stage of labour or birth many women find that being upright feels more natural. Your midwife will be able to assist you with different positions.

Advantages:

- Being upright seems to improve the way contractions work and may shorten the length of time it takes for the neck of the womb to open and may also shorten the pushing stage.
- Movement may increase the amount of natural painkillers called endorphins in your nervous system.
- There may be less chance of tearing the vaginal opening.
• Upright positions, squatting or semi-squatting, help the pelvis to widen during the birth giving the baby more room to come through the birth canal: gravity is another force that helps the womb expel the baby.

When movement is restricted:

• There may be a need for electronic monitoring of your baby, if so your movements may be restricted, but not stopped all together. If there is a problem your midwife should explain the reasons for any limitations on your movements.
• Some positions can be tiring for your supporters during labour, so be considerate to them.
• If labour is long then you too may become tired when using upright positions.

Breathing

Breathing techniques used to be taught to help as a distraction during contractions. Nowadays women are encouraged to find their own patterns. If breathing is slow, deep and rhythmical, it may help you feel more in control and less panicky about the experiences you are having.

Outward breathing can be used to ‘release’ tension, helping to deal with high stress levels and pain and can be accompanied by sounds that may channel your feelings, such as sighing, singing, groaning, laughing, swearing or crying. Your midwife or support in labour will be able to help you regulate your breathing if you become tired or begin to feel out of control at any time.

Advantages:

• Slow, deep, rhythmical breathing can enhance any other technique of pain relief
• You are in control of it

Disadvantages:

• If done incorrectly, can lead to over-breathing or hyperventilation which may make you feel panicky or faint
• The outward breathing technique may cause distress in your supporters unless they are aware of what you are doing

Relaxation

This is something you may learn at antenatal classes. It helps to reduce the muscle tension between contractions and can help to counteract fatigue.
It is possible to teach yourself simple methods of relaxation in everyday life. There are tapes available and also hypnobirthing tapes and courses that could be useful.

Advantages:

- Useful in the early stages of labour and useful when trying to get some rest

Disadvantages:

- Can be difficult to achieve in a busy labour ward environment or when contractions are close together

**Massage**

During labour many women appreciate being touched, stroked or massaged. Gentle touch is a sensation that is associated with caring and can make women feel supported and cared for.

There are different kinds of touch or massage from simply holding hands with your partner or lightly stroking or rubbing your ‘bump’, to firm circular massage of the sacrum and centre of back with the heel of your partners hand to counter the back pain felt when the baby is in a ‘back-to-back’ position.

Advantages:

- Easy to do and often instinctive
- Often gives a feeling of being cared for, and a way for your partner to communicate this to you
- Easily discontinued

Disadvantages:

- Can become annoying when in very strong labour
- Unless the areas of massage and techniques are varied then the skin may become painful in the area being touched

**Water**

Our Maternity Unit has one permanent birthing pool that is used on a first come first serve basis.

One of the most popular ways to relieve pain in labour is to use water. This is usually in the early stages when women like to take a warm bath especially if they have deep backache. It also helps relieve the ‘heaviness’ of being pregnant if the water is reasonably deep.
Some women like to give birth in water, sometimes using a pool which is deep enough to cover them during labour and allow them mobility during the labour – a normal bath is not usually big or deep enough for this.

Water seems to enhance muscle relaxation, relieving tension and may accelerate labour through this mechanism because the woman is often fairly upright whilst in the water.

Some women like to be in a warm bath and use the handheld shower attachment to direct water across the back or tummy. Another option is to stand in a shower with the spray directed on to the lower back.

Advantages:

- In the early stages it is a quick way to get relief from persistent backache
- It can be combined with other forms of pain relief including use of nitrous oxide
- When using a birth pool it may accelerate labour and encourage an upright position
- It is thought to prevent stress and tearing of the birth canal during birth and possibly intervention at delivery
- It increases your control over the surroundings for the birth

Disadvantages:

- Not all maternity units have a birth pool
- There may be difficulties with the birth or labour process, which require the midwife to have more access to you or the baby
- Not all midwives are experienced in assisting at water births but there will always be a midwife on shift who can assist with a water birth

**Acupuncture / acupressure / shiatsu**

These are therapies that use pressure points on the body to enhance contractions, and to relieve pain and stress. Acupuncture uses needles inserted into these pressure points and requires a qualified therapist to position them. Otherwise both shiatsu and acupressure can be learnt and carried out by a non-professional partner during labour.

Advantages:

- Once learnt, the techniques of acupressure and shiatsu are easy to administer and easy to discontinue

Disadvantages:

- Acupuncture can be “fiddly” and time consuming to place the required needles, and can therefore immobilise the woman during her labour
Aromatherapy

This therapy utilises our sense of smell, and the brain’s response to these smells, to help in the labour process. The oils are administered either as drops in a bath, in oils during massage or on a handkerchief or flannel applied to the forehead during labour. The oils used are said to have varying specific properties that enhance the body’s response to labour, and should be recommended by a qualified aromatherapist who can prepare the oil required.

Advantages:

- Easy to administer
- You need to provide you own supply
- May have stress relieving benefits for all present at the birth

Disadvantages:

- Some women may be allergic to the oils and essences used
- Can cause increased nausea, vomiting and headache
- Unknown effect when combined with the drugs used in labour

Support

All women like to feel that they are supported and cared for throughout the labour process. Surveys suggest that ‘continuous close support’ reduces a woman’s chances of having interventions, decreases her use of drugs in labour, and increases her satisfaction with her birth experience.

We provide a one to one midwifery service once you are in established labour. If one of the midwives from your team is on duty she will provide this care.

Some women prefer to be supported by their partners only, whilst others wish for family members or a close friend to be present at the birth. Anyone who is with you at the birth should be aware of what you want from the experience and be someone who is unlikely to panic and get flustered, particularly when you appear to be distressed or when events occur which require some kind of midwifery intervention or examination. They should also appreciate that there are times when you may want not to talk and you need the room to be quiet; they should be there for you, to support you.
Transcutaneous electrical nerve stimulation (TENS)

This is an easy to use, non-invasive method of pain relief. It is a portable hand-held box containing a battery-powered generator of electrical impulses. These impulses are transmitted to the nerves via the skin, using electrodes taped to the skin.

There is a ‘buzzing’ or tingling sensation with the impulses, and the ‘user’ is in control of the frequency and intensity of the sensations as she wishes. It is thought that the nerve stimulation causes the release of natural painkillers called endorphins, and it may have a part in closing a ‘pain gate’, as the brain can only respond to so many nerve messages at one time.

If the skin is sending its quick messages all the time there is less opportunity for the deeper slower messages that relate to womb muscle pain to get through, and these slower messages are ‘ignored’ to a certain degree.

It should not be offered to women in established labour as there is no evidence that it will be effective at this stage.

To ensure that you have access to a machine and are able to start using it early in labour, we recommend that you rent or buy your own.

Advantages:

- Easy to use and discontinue if required
- Can be used in combination with other methods of pain relief

Disadvantages:

- Needs to be started in early labour to boost the supply of endorphins sufficiently
- Some women do not like the sensation of the tingling
- Cannot be used whilst in the bath
- Some electronic fetal monitoring is sensitive to the TENS signals and TENS may need to be discontinued during monitoring
Drugs used in Pain Relief

Nitrous Oxide

This is a gas, which may be supplied from a point on the wall of your room or from a mobile blue cylinder. You may have heard it called ‘Entonox’ after the equipment used to inhale it. It can be breathed in via a facemask or a mouthpiece, and is usually fitted with a special valve so that you do not have to remove it from your face/mouth to breathe out. Once breathed in, it enters the blood stream and is effective in about 15 seconds. It causes the pain sensation to be lessened rather than taken away and has a side effect of sedation or sleepiness. The side effects may make you feel dizzy, ‘drunk’ or disorientated, and there may be nausea or vomiting. These effects will disappear once you stop breathing the gas.

Advantages:

- Easy to use and quick to work
- Can be combined with methods of pain relief
- No lasting side effects on mother or baby
- Some women find it effective to help them control their breathing, especially during the last part of labour before pushing has started

Disadvantages:

- Some women find that they do not like the sensation of being ‘removed’ or ‘drunk’ that nitrous oxide causes
- Can cause the feeling of nausea
- It becomes ineffective with long-term use as it induces sleepiness. It may also interfere with your ability to stay upright during contractions

Pethidine

This drug belongs to a group of powerful pain relievers called opiates. It is given via injection into a large muscle. The largest muscle in your body is in the cheeks of your bottom so it is often given there but it can be given in the thigh and very rarely in the upper arm. It takes 15-20 minutes to start working and its effects peak within 1-2 hours and are ineffective within 4 hours.

It works by fooling the body into thinking it is a natural painkiller or endorphin, acting to block the pain messages sent by nerves. However, it is non-specific and blocks the actions of other nerves not sending pain messages, leading to the side effects of dizziness, nausea, vomiting, drop in blood pressure and sedation or sleepiness. To counteract the nausea, Pethidine is often given with an anti-sickness drug.
Pethidine crosses the placenta and may make the baby sleepy. This may cause a problem especially if birth is expected soon, and the baby may need help to begin breathing. Later, the baby may not suck very well causing problems with feeding in the first day or so. There is a drug that can be given to counteract the effects of pethidine should there be a problem with the baby’s breathing. It can often spoil a baby’s natural instinct to start feeding. It may take a day or two for the sedative effects to fully wear off.

Advantages:

- Easily administered
- If well timed, can give good pain relief to women helping them relax during labour, especially if they are tense and nervous or have deep muscle tension
- Does not interfere with contractions or the progress of labour if given during strong labour

Disadvantages:

- Can cause confusion, dizziness, sedation, nausea and vomiting
- Some women hate its side effects and being ‘out of control’
- Unsuitable for use in certain cases where there is likely to be a problem with the baby e.g. premature labour, or monitoring shows the baby is already having difficulties in labour

Epidural

This is given into a very small tube in your back. It is the most complicated method and potentially the most effective. It is performed by an Anaesthetist. A small dose of local anaesthetic is injected into the space around your spinal cord called the epidural space. This aims to numb sensation from your womb muscles and vaginal area completely so there should be no pain or discomfort. You may be able to feel a sensation like ‘pins and needles’ in your feet and lower legs.

You will need to have a drip sited so that extra fluid can be given to you, stopping your blood pressure falling too much after the anaesthetic is given. To have the procedure you will be required to sit, or lie curled up and very still whilst the anaesthetist places a very thin tube in your back through which the anaesthetic is given. After the initial dose of local anaesthetic is given it will then be given either continuously through a pump, or intermittently (topped up) when the pain returns.

After the anaesthetic you will be unable to mobilise around the room, feel the sensation to pass urine and sometimes there is no sensation of the urge to push.
The side effects of epidurals are nausea, vomiting, a drop in blood pressure, shivering (depending on what is added to your anaesthetic) and localised short-term tenderness at the epidural site. There is a small increase in the chances of you having a ventouse, forceps or caesarean birth, and very rarely a chance of getting a headache. If you develop a headache afterwards it can be treated. Occasionally the epidural is not effective and you can still feel pain, and the anaesthetist who administered the epidural will be called by the midwife to try to deal with this. Sometimes epidurals simply do not work.

Advantages:

- Can potentially provide the most effective pain relief
- It is not associated with long-term backache
- Useful if the baby is ‘back-to-back’ to relieve excruciating backache
- Useful in prolonged and difficult labours
- Useful where birth using ventouse, forceps or caesarean section may be likely
- Should not make you feel drowsy

Disadvantages:

- It can be uncomfortable and difficult to put the epidural in
- Unable to move around on bed especially during pushing
- The effect can be patchy. About 1 in 10 epidurals are not perfect
- After an epidural, you and the baby will need to be monitored closely. This often means increasing the amount of machinery around you, and this may or may not reassure you
- You may suffer all or one of the side effects
- It is not associated with a longer first stage of labour or an increased chance of caesarean birth, but is associated with a longer second stage of labour and increased chance of vaginal instrumental birth
- Modern epidural solutions contain opioids and may cause short-term respiratory depression in the baby, make the baby drowsy and delay the baby’s natural feeding instincts
Further information

If you need any further information please contact the Maternity Unit on 01305 254267.

If you need this information in large print, easy read, on audiotape or in another language please call 0800 7838058 or e-mail pals@dchft.nhs.uk

If you wish to obtain a list of the sources used to develop this information leaflet please call 0800 7838058 or e-mail patient.info@dchft.nhs.uk

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