

Information for women

Fetal Monitoring

How will my baby's heartbeat be monitored in labour?

Various checks will be offered to you and your baby in labour. This will include listening to, or monitoring your baby's heartbeat.

What are the benefits of monitoring my baby's heartbeat in labour?

Most babies come through labour without problems but there are a few who do not cope so well. During contractions blood cannot get through the placenta (afterbirth) so easily. This is normal and most babies cope without having any problems. If your baby is not coping well this can be reflected in the heartbeat pattern.

One of the best ways of finding out if your baby is having difficulties is to listen to his/her heartbeat regularly throughout labour. This is known as Fetal Heart rate monitoring.

What are the ways in which my baby's heart beat can be monitored?

There are two ways we can monitor your baby's heartbeat:

- At regular intervals (known as 'intermittent auscultation').
or
- Continuously (known as electronic fetal monitoring). If you have chosen to have your baby at home or at Crowborough Birthing Centre continuous monitoring is not available to you.

What are the risks of not monitoring my baby's heartbeat in labour?

You can choose not to have your baby's heartbeat monitored however this would mean that we would not be able to tell whether or not your baby is coping with labour. The risk of this is that if your baby was having any problems we would not know about it. Some of these problems could affect your baby's health or even be life threatening for your baby.

Intermittent auscultation

Before starting any monitoring your midwife will record your heartbeat (by taking your pulse) as well as your baby's to make sure they can tell them apart.

A pinard (trumpet shaped stethoscope), a hand held doppler (an ultrasound device which looks like a microphone) or sometimes the monitor from the cardiotocograph (CTG) machine. Any of these instruments will enable your midwife to hear your baby's heartbeat through your tummy.

Your baby's heartbeat will be listened to approximately every 15 minutes during the first stage of labour and then increased to every five minutes for the second stage of labour.

What are the benefits of intermittent auscultation?

The benefits of intermittent auscultation include being able to move around freely and not being attached to a machine. Your movement is only limited while the heartbeat is being listened to. Some women feel that intermittent monitoring is more 'natural'.

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What are the risks of intermittent monitoring?

If you are healthy and have had a trouble free pregnancy this is the usual method of monitoring. This is because it achieves a balance between detecting babies that are not coping well with labour whilst reducing the risk of unnecessary interventions (such as caesarean section). No research studies compare the effectiveness of intermittent versus continuous monitoring in babies for whom there were pregnancy complications. A baby whose mother has complications in pregnancy may be at greater risk of developing problems in labour. For this reason we recommend continuous monitoring in labour for women with complicated pregnancies.

Continuous electronic fetal monitoring

Continuous monitoring records your baby's heartbeat for the whole of labour. The equipment used for continuous monitoring is called a cardiotocograph (CTG.'). With this monitor you have two sensors against your abdomen (tummy) held by belts. These sensors detect your baby's heartbeat and frequency of contractions and are connected to the machine. The monitor records the baby's heartbeat pattern (and contractions) on a strip of paper. This is called a 'trace' or 'CTG.'

Your midwife or doctor will then read or interpret the pattern, gaining information as to your baby's well being in labour. You can ask to have this trace explained to you and your partner.

What are the benefits of continuous monitoring?

If the need arises during pregnancy or labour that suggests the need to continuously monitor your baby, your midwife or doctor will then be able to observe your baby's heartbeat during the whole of labour which will give them key information to how your baby is coping with the labour.

Reasons why continuous electronic monitoring may be suggested to you and your partner	
If you have a health issue such as:	Current pregnancy
<ul style="list-style-type: none"> Diabetes. Infection. Pre-eclampsia (raised blood pressure / protein in the urine etc.) 	<ul style="list-style-type: none"> Multiple pregnancy i.e. twins. Small baby. You are having an epidural. Using the syntocinon Hormone drip to improve the strength and frequency of your contractions Baby has opened his/her bowels in the waters (meconium stained liquor). Your baby is going to be born bottom first (breech).
Previous History <ul style="list-style-type: none"> You have had a previous caesarean section. 	<ul style="list-style-type: none"> Under 37 weeks or over 42 weeks when in labour Not enough or too much water around your baby inside the womb. Any bleeding antenatally or in labour
Other concerns discovered	
<ul style="list-style-type: none"> A possible heartbeat problem has been picked up using intermittent auscultation which requires further investigation (this does not always lead to continuous monitoring and may only require a trace of limited time to be carried out). 	

The trace can sometimes be interpreted by the midwife/doctor to suspect that your baby is not coping well. If this occurs, further action can be taken. This may include carrying out further tests such as Fetal Blood Sampling (FBS) or immediate delivery of your baby (most frequently by caesarean section). Fetal blood sampling involves taking one or two drops of blood from your

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baby's scalp (through your vagina). This blood is then tested for oxygen levels to show whether or not your baby is coping. There may be reasons why an FBS may not be possible, e.g. if your cervix is not well dilated - your midwife or doctor will discuss this with you.

What are the disadvantages of continuous monitoring?

Being attached to the monitor can limit your mobility. It should be possible to stand up or sit down, use the birthing ball, bean bags and mats even while attached to the monitor as the leads are reasonably long. Also Eastbourne and Conquest Delivery Suites have one set of telemetry monitoring equipment, if available your midwife will be able to use this to monitor your baby and you will be able to be more mobile as there are no leads to attach to the monitor.

There are a number of technical issues that can affect the interpretation of a fetal heart rate tracing which can on rare occasions lead to errors in interpretation (this is true of both forms of monitoring). Very rarely the trace can reassure your midwife or doctor that your baby is coping when it is not. Also, occasionally the trace can make your midwife or doctor suspect that your baby is not coping well when in fact he/she is fine. This could lead to you having a caesarean section when it may not have been needed. Fetal blood sampling can clarify this and may avoid you having an unnecessary caesarean section.

Sources of information

www.nice.org.uk and search intrapartum care www.infochoice.org

This leaflet was put together by the Guidelines Implementation Group and the Women's Focus group and is based on the NICE Intrapartum care: Care of a Healthy Women and their babies during childbirth September 2007

Sources of information

E.g. specialist nurse, ward, consultant secretary, self-help group, national bodies or Web site addresses.

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments please contact our Patient Advice and Liaison Service (PALS) – details below.

Hand hygiene

The trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

This information is available in alternative formats such as large print or electronically on request. Interpreters can also be booked. Please

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contact the Patient Advice and Liaison Service (PALS) offices, found in the main reception areas:

Conquest Hospital

Email: **palsh@esht.nhs.uk** - Telephone: **01424 758090**

Eastbourne District General Hospital

Email: **palse@esht.nhs.uk** - Telephone: **01323 435886**

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

Reference

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